

**JUNE 1998  
VOLUME 40  
NUMBER 6**

# STORM DATA

**AND UNUSUAL WEATHER PHENOMENA  
WITH LATE REPORTS AND CORRECTIONS**



**noaa** NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE  
DATA, AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER  
ASHEVILLE, N.C.

**Cover:** Wind gusts of 93 mph destroyed or severely damaged several airplanes and hangars at the Austin Municipal Airport, in Austin, Minnesota. Damage to the airport is estimated at over 1.5 million dollars. High wind gusts downed several thousand trees and utility poles. No deaths or injuries were reported. *(Photograph courtesy of Todd Shea, Warning Coordination Meteorologist, National Weather Service Forecast Office, La Crosse, Wisconsin)*

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**STORM DATA**  
(ISSN 0039-1972)  
National Climatic Data Center  
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The **STORM DATA** Publication can be accessed in PDF format via the WWW at:  
[www.ncdc.noaa.gov/ol/climate/climateproductsstormdata.html](http://www.ncdc.noaa.gov/ol/climate/climateproductsstormdata.html)

**STORM DATA** is prepared, funded, and distributed by the National Oceanic and Atmospheric Administration (NOAA). The Outstanding Storms of the Month section is prepared by the Data Operations Branch of the National Climatic Data Center.

The Storm Data and Unusual Weather Phenomena narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the Storm Prediction Center.

**STORM DATA** contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

Maps of the National Weather Service County Warning Areas which are used in the Storm Data and Unusual Weather Phenomena section will be printed in all editions.

Except for limited editing to correct grammatical errors, materials submitted are generally published as received.

Note: "None Reported" means that no severe weather occurred and "Not Received" means that no reports were received for this region at the time of printing.

Subscription, pricing, and ordering information is available from:  
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151 Patton Avenue  
Asheville, NC 28801  
(828)271-4800 or (828) CLIMATE

The editors of **STORM DATA** solicits your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" or "Et Cetera" sections of **STORM DATA**. We request our subscribers or other interested persons to mail such items to:

Stuart Hinson  
National Climatic Data Center  
151 Patton Avenue  
Asheville, NC 28801

Any such items received by the editor will be for use in **STORM DATA** only. Any other use will be with the permission of the owner of said items. Materials submitted will be returned if requested in the original submission.

"I certify that this is an official publication of the National Oceanic and Atmospheric Administration and is compiled from information received at the National Climatic Data Center Asheville, North Carolina 28801-2733."

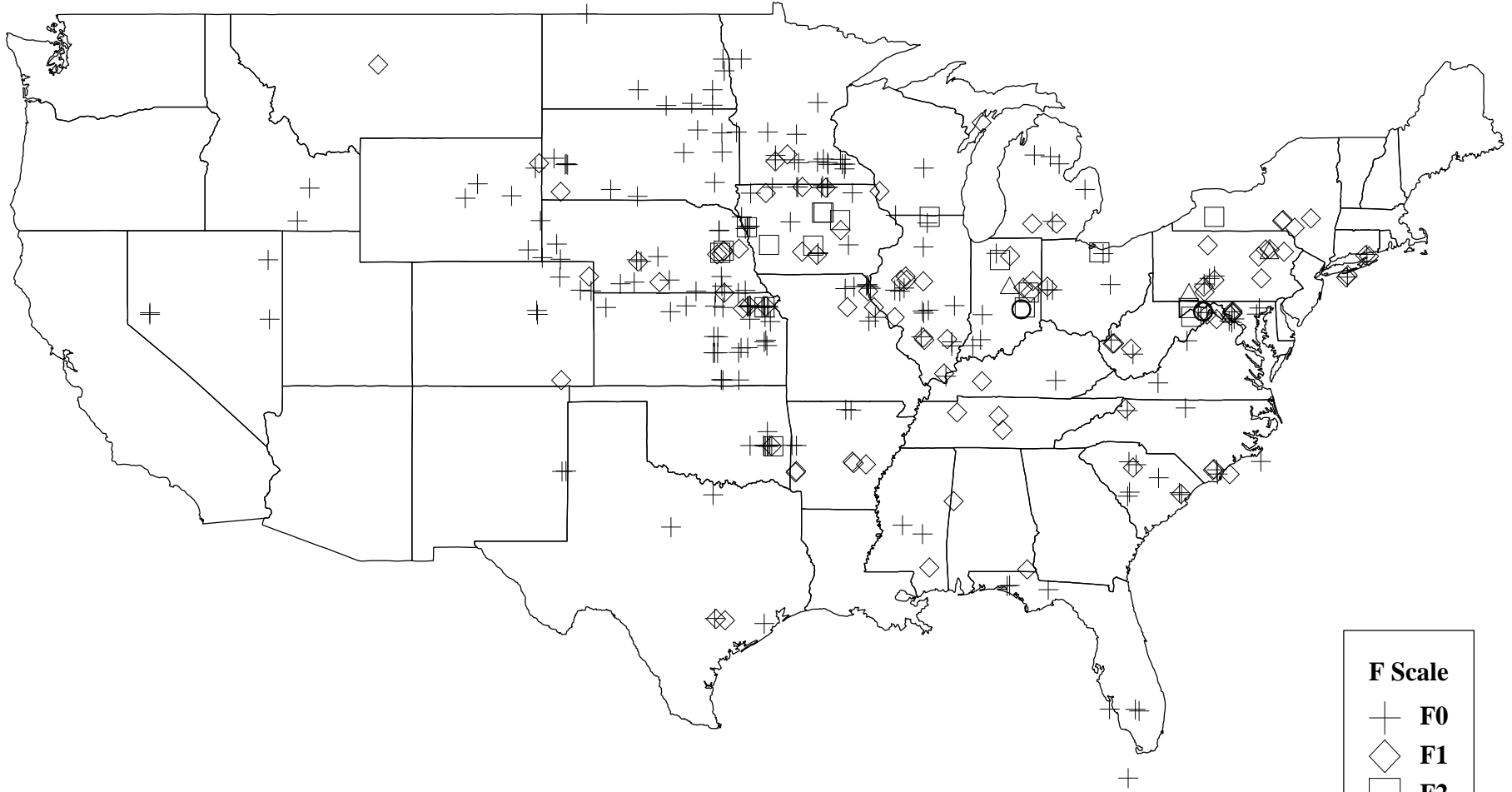


Thomas R. Karl  
Director,  
National Climatic Data Center

The Cyclone Track Map which usually appears on this page is not available for June 1998.

Should the data become available in the future, a cyclone track map will be produced and printed in a subsequent issue.

# June 1998 Confirmed Tornadoes



4

F Scale	F0	F1	F2	F3	F4	F5	Total
Number	214	93	18	3	2	0	330

**F Scale**

- + F0
- ◇ F1
- F2
- △ F3
- F4
- ★ F5



## OUTSTANDING STORMS OF THE MONTH

### 1. STRONG STORMS CAUSE WIND DAMAGE IN MINNESOTA AND WISCONSIN

During the late afternoon and evening of June 27, 1998, a line of intense thunderstorms (called a squall line) developed over parts of central and southern Minnesota, producing tremendous wind damage as they moved across southeast Minnesota and western Wisconsin. A warm front stretched from extreme southern Minnesota into southwest Wisconsin. Surface temperatures were in the 90s with dewpoints in the upper 70's. Strong thunderstorm winds and downbursts contributed to \$9.2 million in property damage and more than \$1 million in crop damage in southeast Minnesota. Wisconsin suffered similar damage. The strong wind gusts downed thousands of trees and power lines, blocking roads and causing widespread power outages. No injuries or fatalities were reported.

*(Photographs and story courtesy of Todd Shea, Warning Coordination Meteorologist, NWS, La Crosse, Wisconsin)*

**Top Left:** Wind gusts of more than 100 mph toppled trees in northwest Monroe County, Wisconsin.

**Bottom Left:** One of the several campers blown over at the Goose Island Campground, south of La Crosse, Wisconsin.

**Right:** Thunderstorm wind gusts caused severe damage to buildings in northern Vernon County.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
<b>Blount County</b> Blountsville	04	1230CST			0	0	5K	0	Thunderstorm Wind (G50)
			A few trees were knocked down in Blountsville, in the northern part of the county.						
<b>Cherokee County</b> Centre	04	1550CST			0	0	5K	0	Thunderstorm Wind (G50)
			Several trees were down, east of Centre along US 411.						
<b>Shelby County</b> Helena	04	1715CST			0	1	0	0	Lightning
			A man was struck by lightning while standing in a church parking lot, across from the Helena post office. He was taken to the Shelby County Medical Center and was in good condition.						
<b>Shelby County</b> 8 S Columbiana	04	2015CST			0	0	0	0	Hail (0.75)
			Dime size hail was reported along SR 145, one mile north of the Chilton county line.						
<b>Colbert County</b> Countywide	05	0315CST 0340CST			0	0	45K	10K	Thunderstorm Wind (G57)
			Numerous trees and power lines were down across the county. A few trees fell on homes. A gust to 66 mph was reported at the Muscle Shoals ASOS.						
<b>Lauderdale County</b> Countywide	05	0320CST 0350CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. A few trees fell on homes and cars. Numerous trees were down in the city of Florence.						
<b>Marion County</b> Countywide	05	0320CST 0345CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. Some trees were down on homes and cars. In Hamilton, along U S 43, several trees fell, including two on cars						
<b>Franklin County</b> Countywide	05	0325CST 0355CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. There were several car accidents due to downed trees. Some communities that had damage included Phil Campbell, where much of the community was without power; Hodges where power was out for several hours; and Russellville where a large tree fell on the courthouse in downtown.						
<b>Lamar County</b> Countywide	05	0330CST 0350CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. On SR 17, between Vernon and Sulligent, there were several accidents due to a tree falling on the road and cars running into the tree.						
<b>Lawrence County</b> Countywide	05	0350CST 0415CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. Most of the trees and power lines downed were from Moulton north. Large trees were blocking at least seven roads, mainly in Courtland, Wheeler, Red Bank and Mallard Creek.						
<b>Limestone County</b> Countywide	05	0355CST 0410CST			0	0	55K	15K	Thunderstorm Wind (G60)
			Numerous trees and power lines were down across the county. A gust to 69 mph was reported at a TV station's school net site in Athens. Elkmont had several trees down. Many trees were down on homes in Athens. Over 18,500 homes were without power in Limestone County.						
<b>Madison County</b> Countywide	05	0410CST 0425CST			0	0	45K	10K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. About 20,000 residents were without power in Madison county. Downed trees closed about a dozen roads in the county. Huntsville, Monrovia and New Market all had trees down.						
<b>Walker County</b> Countywide	05	0420CST 0440CST			0	0	45K	12K	Thunderstorm Wind (G55)
			Numerous trees and power lines were down across the county. There were several trees down in Jasper.						

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
<b>Winston County Countywide</b>	<b>05</b>	<b>0420CST 0440CST</b>			<b>0</b>	<b>0</b>	<b>45K</b>	<b>15K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county.						
<b>Morgan County Countywide</b>	<b>05</b>	<b>0425CST 0440CST</b>			<b>0</b>	<b>0</b>	<b>65K</b>	<b>12K</b>	<b>Thunderstorm Wind (G60)</b>
			Numerous trees and power lines were down across the county. About 15,000 people were without power in Morgan County. Numerous trees were uprooted on the Calhoun Community College campus in Decatur. A roof of a building in the Priceville shopping center, just east of Decatur, was blown off.						
<b>Fayette County Countywide</b>	<b>05</b>	<b>0425CST 0440CST</b>			<b>0</b>	<b>0</b>	<b>45K</b>	<b>10K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county.						
<b>Cullman County County Line</b>	<b>05</b>	<b>0430CST 0450CST</b>			<b>0</b>	<b>0</b>	<b>48K</b>	<b>10K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county. A trailer was damaged in Vinemount due to the thunderstorm.						
<b>Blount County County Line</b>	<b>05</b>	<b>0435CST 0455CST</b>			<b>0</b>	<b>0</b>	<b>48K</b>	<b>10K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county. A barn was destroyed north of Blountsville.						
<b>Marshall County Countywide</b>	<b>05</b>	<b>0440CST 0455CST</b>			<b>0</b>	<b>0</b>	<b>45K</b>	<b>10K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county. In Union Grove, a barn was destroyed. There were reports of trees down from Guntersville to the Etowah county line.						
<b>Jackson County Countywide</b>	<b>05</b>	<b>0440CST 0500CST</b>			<b>0</b>	<b>0</b>	<b>40K</b>	<b>12K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county.						
<b>Jefferson County Birmingham</b>	<b>05</b>	<b>0450CST 0500CST</b>			<b>0</b>	<b>0</b>	<b>45K</b>	<b>0</b>	<b>Thunderstorm Wind (G55)</b>
			Trees and power lines were down in numerous area in Birmingham. About 13,000 homes were without power, in the western part of the city.						
<b>Dekalb County Countywide</b>	<b>05</b>	<b>0455CST 0515CST</b>			<b>0</b>	<b>0</b>	<b>42K</b>	<b>10K</b>	<b>Thunderstorm Wind (G55)</b>
			Numerous trees and power lines were down across the county. Some communities that were affected by the thunderstorm include d Fort Payne where people were without power for several hours and a woman was injured when a tree fell on her home. Grove Oak, Tenbroeck, Fyffe and Collinsville all had power outages.						
<b>Etowah County Countywide</b>	<b>05</b>	<b>0510CST 0530CST</b>			<b>0</b>	<b>0</b>	<b>45K</b>	<b>10K</b>	<b>Thunderstorm Wind (G53)</b>
			Numerous trees and power lines were down across the northern part of the county. A gust to 61 mph was reported in Gadsden.						
<b>St. Clair County Springville</b>	<b>05</b>	<b>0523CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>	<b>10K</b>	<b>Thunderstorm Wind (G50)</b>
			Power lines were down in Springville.						
<b>Calhoun County Piedmont</b>	<b>05</b>	<b>0535CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>	<b>10K</b>	<b>Thunderstorm Wind (G50)</b>
			Trees and power lines were down in Piedmont.						
<b>Cherokee County Centre</b>	<b>05</b>	<b>0535CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>	<b>10K</b>	<b>Thunderstorm Wind (G50)</b>
			Trees were down along SR 9 in Centre.						
<b>Tuscaloosa County Countywide</b>	<b>05</b>	<b>1345CST 1400CST</b>			<b>0</b>	<b>2</b>	<b>45K</b>	<b>10K</b>	<b>Thunderstorm Wind (G60)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
Numerous trees and power lines were down across the county. Two women were injured in separate incidents. One was injured when a large tree limb crashed through her windshield and hit her in the chest; the other was injured when a tree fell on her home. Some communities that received damage were Tuscaloosa, Coker, Northport, Buhl, Friendship, Heritage Hills, Biscayne Hills. In all of these communities trees were down, several on homes and cars.									
<b>Fayette County</b> 10 S Fayette	05	1355CST			0	0	5K	0	Thunderstorm Wind (G50)
									Numerous trees were down south of Newtonville on SR 171.
<b>Bibb County</b> Countywide	05	1400CST 1415CST			0	0	25K	5K	Thunderstorm Wind (G55)
									Trees and power lines were down across the county.
<b>Greene County</b> Boligee	05	1400CST			0	0	10K	0	Thunderstorm Wind (G50)
									Numerous trees and power lines were down in the Boligee community. About 3000 people were without power for over 5 hours.
<b>Pickens County</b> Aliceville	05	1410CST			0	0	10K	5K	Thunderstorm Wind (G50)
									Numerous trees were down in Aliceville.
<b>Marengo County</b> 3 S Linden	05	1415CST			0	0	5K	0	Thunderstorm Wind (G50)
									A few trees fell just south of Linden along US 43, some blocked the road.
<b>Jefferson County</b> Fairfield	05	1430CST			0	0	30K	0	Thunderstorm Wind (G50)
<b>Jefferson County</b> Hoover	05	1440CST			0	0	5K	0	Thunderstorm Wind (G50)
<b>Jefferson County</b> Huffman	05	1445CST			0	0	5K	0	Thunderstorm Wind (G50)
<b>Jefferson County</b> Roebuck Plaza	05	1450CST			0	0	5K	0	Thunderstorm Wind (G50)
									Trees and power lines were down in many locations in Jefferson County. More than 132,000 customers were without power. A NAPA auto parts store in Fairfield had its front wall collapse, and it crushed two cars.
<b>Shelby County</b> Pelham	05	1441CST			0	0	5K	0	Thunderstorm Wind (G50)
<b>Shelby County</b> Vandiver	05	1445CST			0	0	5K	0	Thunderstorm Wind (G50)
<b>Shelby County</b> Alabaster	05	1446CST			0	0	5K	0	Thunderstorm Wind (G50)
									Trees and power lines were down in many locations across northern Shelby County.
<b>Elmore County</b> 6 NE Eclectic	05	1504CST			0	0	2K	0	Hail (1.00)
<b>Elmore County</b> Wetumpka	05	1515CST			0	0	5K	0	Thunderstorm Wind (G50)
									Quarter size hail was reported along Lake Martin and numerous trees and power lines were down in Wetumpka.
<b>Autauga County</b> 5 NW Prattville	05	1510CST			0	0	30K	5K	Thunderstorm Wind (G50)
									Several trees were down and some cars were damaged along CR 57, in the Posey Crossroads community.
<b>Talladega County</b> Sylacauga	05	1515CST			0	0	10K	0	Thunderstorm Wind (G50)
									Trees were down in Sylacauga.
<b>Macon County</b> Tuskegee	05	1520CST			0	0	10K	5K	Thunderstorm Wind (G55)
									Lots of trees were snapped and blown over in the Tuskegee area. About 5000 people were without power for several hours.
<b>Montgomery County</b> Maxwell Afb	05	1530CST			0	0	5K	0	Thunderstorm Wind (G50)
<b>Montgomery County</b> Montgomery	05	1530CST			0	5	10K	0	Thunderstorm Wind (G50)



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June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
<b>Montgomery County</b>									
Mt Meigs	05	1535CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down in Mount Meigs and near Maxwell AFB. Five people were injured when a canopy collapsed on top of them in Montgomery. At least 12,000 people were without power in the Montgomery area.									
<b>Lee County</b>									
Auburn	05	1550CST			1	0	10K	0	Thunderstorm Wind (G55)
M21OU									
<b>Lee County</b>									
2 S Opelika	05	1555CST			0	0	0	0	Hail (0.75)
Dime size hail was reported just south of Opelika. An Auburn University student was critically injured when he was blown under his car during the thunderstorm. He later died in the hospital. Several trees were down in the Auburn area.									
<b>Pike County</b>									
Troy	05	1600CST			0	0	15K	5K	Thunderstorm Wind (G50)
Trees and power lines were down in Troy and a trailer was cut in two by a falling tree.									
<b>Etowah County</b>									
Countywide	05	1610CST 1630CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down county wide. Nocalula Road was closed due to trees on the road and in Attalla there was no power. Gadsden had several trees down.									
<b>Russell County</b>									
Phenix City	05	1615CST			0	0	10K	0	Thunderstorm Wind (G50)
In Phenix City there were several trees and power lines down.									
<b>Russell County</b>									
Hurtsboro	05	1615CST			0	2	25K	0	Thunderstorm Wind (G60)
Two people sustained minor injuries in the storm in Hurtsboro when they lost the roof to their home. Trees and power lines were down across the city.									
<b>Barbour County</b>									
Eufaula	05	1630CST			0	0	5K	0	Thunderstorm Wind (G50)
Numerous trees were blown down in Eufaula.									
<b>Autauga County</b>									
Prattville	08	1445CST			0	0	20K	0	Thunderstorm Wind (G55)
A mobile home was destroyed when a tree fell on it. There were several power lines down and there was minor damage to the baseball field.									
<b>Limestone County</b>									
5 E Elkmont	09	1150CST			0	0	25K	0	Thunderstorm Wind (G50)
A trailer was destroyed, a van was damaged, and two satellite dishes were damaged in Thach. A few trees were uprooted also.									
<b>DeKalb County</b>									
7 NE Ft Payne	09	1645CST			0	0	15K	10K	Thunderstorm Wind (G50)
Numerous trees were down in Desoto State Park and northern Ft. Payne.									
<b>Jackson County</b>									
Scottsboro	10	1305CST			0	0	0	0	Hail (0.88)
Nickel size hail was reported in Scottsboro by spotters.									
<b>Lauderdale County</b>									
Florence	13	0235CST			0	0	20K	0	Thunderstorm Wind (G50)
A number of trees were downed. One tree fell on a home in downtown Florence.									
<b>Franklin County</b>									
3 NW Phil Campbell	13	0300CST			0	0	20K	0	Thunderstorm Wind (G55)
Numerous trees were down in the Spruce Pine community.									
<b>Marion County</b>									
4 NE Whitehouse	13	0400CST			0	0	20K	0	Thunderstorm Wind (G50)
Numerous trees were down northeast of Whitehouse.									
<b>Lamar County</b>									
Vernon	13	0415CST			0	0	20K	0	Thunderstorm Wind (G50)
Numerous trees were down in Vernon and south of Vernon.									
<b>Walker County</b>									
Jasper	13	0500CST			0	0	10K	0	Thunderstorm Wind (G50)
Several trees were down along US 78 in Jasper.									

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					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
<b>Fayette County</b> Fayette	13	0500CST			0	0	10K	0	Thunderstorm Wind (G50)
			Trees were down in Fayette, blocking roads.						
<b>Bibb County</b> 2 W Brent	15	0500CST			0	0	0	0	Hail (0.75)
			Dime size hail was reported just west of Brent by storm spotters.						
<b>Sumter County</b> Cuba	15	1830CST			0	0	4K	0	Hail (1.00)
<b>Sumter County</b> Cuba	15	1830CST			0	0	10K	0	Thunderstorm Wind (G50)
			Trees were down in Cuba. Quarter size hail was also reported by spotters in Cuba.						
<b>Marengo County</b> Demopolis	15	1855CST			0	0	10K	0	Thunderstorm Wind (G50)
			Trees were down in Demopolis.						
<b>Greene County</b> Mt Hebron	15	1900CST			0	0	5K	0	Thunderstorm Wind (G50)
			Several trees and power lines were down in the Mount Hebron area.						
<b>Hale County</b> Greensboro	15	1920CST			0	0	30K	0	Thunderstorm Wind (G50)
			Trees and power lines were down in Greensboro.						
<b>Tuscaloosa County</b> Tuscaloosa	15	1925CST			0	0	0	0	Hail (0.75)
			Dime size hail was reported in Tuscaloosa.						
<b>Dallas County</b> 4 E Selma	15	2002CST			0	0	10K	0	Thunderstorm Wind (G50)
			Power lines were down at Old Orrville Rd and AL 219.						
<b>Dallas County</b> Plantersville	15	2015CST			0	0	10K	0	Thunderstorm Wind (G50)
			Trees and power lines were down in Plantersville along CR 63.						
<b>Jefferson County</b> Birmingham Arpt	15	2021CST			0	0	0	0	Thunderstorm Wind (G52)
<b>Jefferson County</b> Mountain Brook	15	2034CST			0	0	10K	0	Thunderstorm Wind (G50)
<b>Jefferson County</b> Birmingham	15	2040CST			0	0	40K	0	Thunderstorm Wind (G55)
			A wind gust to 52 knots was reported at the Birmingham airport. There were a few trees blocking the roadway in Mountain Brook. About 53,000 people lost power in the Birmingham area due to trees on power lines.						
<b>Autauga County</b> White City	15	2022CST			0	0	15K	4K	Thunderstorm Wind (G50)
			Emergency management reported numerous trees and power lines down in northern Autauga County in the vicinity of White City.						
<b>Chilton County</b> Clanton	15	2025CST			0	0	10K	0	Thunderstorm Wind (G50)
			Several trees and power lines were down in Clanton, leaving about 5000 people without power for several hours.						
<b>Cullman County</b> 5 S Holly Pond	15	2050CST			0	0	2K	0	Hail (1.00)
			Hail the size of quarters was reported south of Holly Pond.						
<b>Etowah County</b> Gadsden	15	2051CST			0	0	0	0	Hail (0.75)
			Dime size hail was reported in Gadsden.						
<b>Elmore County</b> 19 NE Wetumpka	15	2057CST			0	0	45K	0	Thunderstorm Wind (G50)
			Trees were down and part of a roof was blown off at the Jordan Lake Marina.						
<b>Coosa County</b> 7 SW Rockford	15	2100CST			0	3	40K	0	Thunderstorm Wind (G55)
			Trees and power lines were down in the Richland community. Three people received minor injuries when a tree fell on their car as they were driving along SR 22.						

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Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
<b>Marshall County</b> 4 SE Arab	15	2100CST			0	0	20K	5K	Thunderstorm Wind (G50) Several trees and power lines were down in the Fry Gap area. A trailer was destroyed when a tree fell on it. There were a few tree s that landed on homes, causing minor damage.
<b>Tallapoosa County</b> Alexander City	15	2114CST			0	0	0	0	Hail (0.75)
<b>Tallapoosa County</b> Alexander City	15	2114CST			0	0	50K	0	Thunderstorm Wind (G50) Dime size hail was reported as well as numerous trees and power lines down. A few of the trees fell on cars in Alexander City.
<b>Randolph County</b> Roanoke	15	2130CST			0	0	20K	0	Thunderstorm Wind (G60) Trees and power lines were down and major damage was done to a barn in Roanoke.
<b>Calhoun County</b> Anniston	15	2145CST			0	0	20K	0	Thunderstorm Wind (G50)
<b>Calhoun County</b> Oxford	15	2145CST			0	0	15K	0	Thunderstorm Wind (G50) Trees and power lines were knocked down in Anniston and Oxford, leaving about 5000 residents without power.
<b>Chambers County</b> Lanett	15	2145CST			0	0	10K	0	Thunderstorm Wind (G50) Trees and power lines were down in Lanett.
<b>Dallas County</b> Selma	16	1340CST			0	0	0	0	Hail (0.88)
<b>Dallas County</b> Selma	16	1345CST			0	0	2K	0	Hail (1.00)
<b>Dallas County</b> Selma	16	1350CST			0	0	15K	0	Thunderstorm Wind (G55) Nickel to quarter sized hail was reported in Selma. There were numerous power outages in Selma with winds estimated at 70 mph.
<b>Marengo County</b> Sweet Water	16	1401CST			0	0	0	0	Hail (0.75) Dime size hail was reported covering the ground in Sweet Water according to the Fire Department.
<b>Dekalb County</b> Rainsville	19	0829CST			0	0	0	0	Hail (0.88) Nickel size hail was reported in Rainsville.
<b>Lauderdale County</b> 4 N Florence	19	0838CST			0	0	0	0	Hail (0.75) Dime size hail was reported in Underwood.
<b>Morgan County</b> Hartselle	19	0937CST			0	0	5K	0	Thunderstorm Wind (G50) Trees were down on the road in Hartselle.
<b>Randolph County</b> Roanoke	19	1210CST			0	0	5K	0	Thunderstorm Wind (G50) Trees were down in Roanoke and Wadley.
<b>Chambers County</b> Lafayette	19	1229CST			0	0	2K	0	Hail (1.00) Quarter size hail was reported in Lafayette.
<b>Chilton County</b> Jemison	19	1330CST			0	0	0	0	Hail (0.88) Nickel size hail was reported in Jemison.
<b>Barbour County</b> Eufaula	19	1330CST			0	0	5K	0	Thunderstorm Wind (G50) A few large limbs were down in the Eufaula area.
<b>Lee County</b> Auburn	19	1335CST			0	0	15K	0	Thunderstorm Wind (G50) Trees were down in Auburn, including one on a trailer.
<b>Jefferson County</b> 5 SW Bessemer	19	1340CST			0	0	0	0	Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, North Central</b>									
Nickel size hail was reported on I-459 at mile marker 4.									
<b>Chilton County</b> Clanton	19	1415CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees were down along Hwy 145, north of Clanton.									
<b>Elmore County</b> 13 NW Wetumpka	19	1435CST			0	0	0	0	Hail (0.75)
Dime size hail was reported in Titus, in northern Elmore County.									
<b>Chilton County</b> 11 SE Clanton	19	1440CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees were down along Hwy 22, near the Coosa county line.									
<b>Chilton County</b> Maplesville	19	1515CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees were down in Maplesville.									
<b>Jefferson County</b> Cahaba Hgts	20	1407CST			0	0	0	0	Hail (0.88)
Dime to nickel size hail was reported at I-459 and US 280.									
<b>Shelby County</b> 7 NW Chelsea	20	1409CST			0	0	0	0	Hail (0.88)
Dime to nickel size hail was reported at Inverness on US 280.									
<b>Limestone County</b> Elkmont	20	1435CST			0	0	2K	0	Hail (1.00)
Nickel to quarter size hail was reported in Elkmont.									
<b>Tuscaloosa County</b> Northport	20	1446CST			0	0	2K	0	Hail (1.00)
<b>Tuscaloosa County</b> Tuscaloosa	20	1450CST			0	0	5K	0	Hail (1.75)
Quarter size hail was reported in Northport and golf ball size hail was reported in the northwest part of Tuscaloosa.									
<b>Elmore County</b> Wetumpka	20	1500CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees were down in Wetumpka.									
<b>Montgomery County</b> Montgomery	20	1537CST			0	0	0	0	Hail (0.75)
Dime size hail was reported in Montgomery.									
<b>Lowndes County</b> Hayneville	20	1544CST			0	0	5K	0	Thunderstorm Wind (G50)
Power lines were down in Hayneville.									
<b>Dekalb County</b> Ft Payne	20	1605CST			0	0	0	0	Hail (0.75)
Dime size hail was reported in Fort Payne.									
<b>Franklin County</b> 6 E Russellville	23	1625CST			0	0	25K	0	Thunderstorm Wind (G50)
Several trees were down, including one on a barn and one on a car, in the Tharptown community.									
<b>Montgomery County</b> Maxwell Afb	24	1727CST			0	0	10K	0	Thunderstorm Wind (G53)
A downburst struck Maxwell AFB with a gust to 61 mph. Several trees were down and a trailer was damaged. All of the damage was confined to the base.									
<b>Lee County</b> Auburn	25	1248CST			0	0	0	0	Hail (0.75)
Dime size hail was reported in Auburn.									
<b>Barbour County</b> Eufaula	25	1545CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down in Eufaula.									
<b>Marshall County</b> Albertville	25	1555CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down in Albertville.									
<b>Marshall County</b> 8 NE Albertville	30	1630CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down in the Asbury community.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>ALABAMA, North Central</u></b>									
<b>Dekalb County</b> 2 E Ft Payne	30	1631CST			0	0	5K	0	Thunderstorm Wind (G50)
Trees and power lines were down just east of Fort Payne.									
<b><u>ALABAMA, Southeast</u></b>									
<b>ALZ065</b>	<b>Coffee</b> 05	1700EST 1715EST			0	0	10K		High Wind
Numerous downed trees and power lines countywide.									
<b>ALZ066&gt;067-069</b>	<b>Dale - Henry - Houston</b> 05	1715EST 1830EST			0	1	55K		High Wind
Estimated 50 to 60 mph straight-line winds downed numerous trees and power lines. A barn was blown over Alabama Highway 27 north of Echo. A person was seriously injured when a tree fell on a vehicle. Nine grass fires were sparked by fallen power lines in Ozark. One business' glass window was blown out in Abbeville. Numerous power outages reported.									
<b>Houston County</b> Dothan	19	1745EST			0	0			Hail (1.75)
Dime to golfball sized hail.									
<b>Geneva County</b> Ganer	20	1640EST 1655EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds caused roof damage to a barn and residence. A tree was blown down along CR 16.									
<b>Houston County</b> Cottonwood	22	1845EST			0	0	20K		Thunderstorm Wind
Downed trees and roof damage just east of Cottonwood.									
<b>Geneva County</b> Slocomb	23	1500EST 1545EST	2.5	.2	0	0	150K		Tornado (F1)
Just east of CR 9 about 3.5 miles north of Slocomb, sheet metal off a hay barn was blown 1/4 mile to the ENE. One neighboring property sustained tree and roof damage, a destroyed shed and a damaged hay barn. One nearby mobile home lost its roof with tree limb damage within a one mile radius. Dime sized hail accompanied the storm. South of Slocomb, damage was more severe. Spotty tree damage began about 2 miles south along CR 85. The most damage occurred 1/4 mile east of the New Teamon Baptist Church. Several large oak trees were uprooted, extensive tree limb damage, a mobile home roof damaged, and a barn sustained roof and door damage. Two structures on CR 91 were damaged by fallen trees. One witness observed the tornado as 100 yards wide, moving from NW to SE. Hail fell prior to the tornado passage.									
<b>Dale County</b> Ariton	24	1650EST			0	0	2K		Thunderstorm Wind
Downed trees and power lines in Ariton.									
<b><u>ALABAMA, Southwest</u></b>									
<b>Choctaw County</b> Butler	05	1410CST 1412CST			0	0	15K		Thunderstorm Wind (G52)
Thunderstorm wind gusts to 60 MPH downed trees and power lines in the community.									
<b>Choctaw County</b> Countywide	05	2215CST 2245CST			0	0	300K		Thunderstorm Wind (G70)
A line of severe thunderstorms moved across the county from west to east between 1015 pm and 1045 pm. Trees and power lines were blown down throughout the county. The worst damage was in the south part of the county along County Road 3 near the small community of Aquilla. Trees blocked the county road for several hours and some of the trees fell on homes. No injuries were reported.									
<b>Washington County</b> Countywide	05	2225CST 2310CST			0	0	1.5M		Thunderstorm Wind (G80)
A line of severe thunderstorms moved through the county between 1025 pm and 1110 pm. Trees and power lines were blown down throughout the county. The hardest hit area was Millry. County Road 34 leading into Millry from the west had trees down all along it as did most of the city of Millry. A spokesman for the local electric utility company said it was one of the worst storms in years in terms of damage and outages. Many of the trees fell onto houses and businesses causing extensive damage to the structures. It took more than a week for the county to get the trees off the highways and homes. No one was seriously injured during the storm.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ALABAMA, Southwest</b>									
<b>Clarke County Countywide</b>	<b>05</b>	<b>2245CST</b>			<b>0</b>	<b>0</b>	<b>500K</b>		<b>Thunderstorm Wind (G70)</b>
		<b>2340CST</b>							
		A line of severe thunderstorms moved through the county from west to east between 1045 pm and 1140 pm. Trees and power lines were blown down throughout the county. Some of the trees fell onto homes and businesses in the Jackson area where nine buildings were damaged. Electricity was out across much of the county because of downed power lines. Around 200 am near Toddtown (between Jackson and Grove Hill) a family was using candles to light their home. Tragically the candle started a fire in the home and a wheelchair bound female was killed in the fire.							
<b>Mobile County Countywide</b>	<b>05</b>	<b>2250CST</b>			<b>0</b>	<b>0</b>	<b>200K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>0005CST</b>							
		A line of severe thunderstorms moved across the county between 1050 pm and 1205 am. Trees and power lines were blown down throughout the county. Most of the damage was in the north part of the county and around the regional airport. The National Weather Service office reported a wind gust of 58 mph. No major injuries were reported.							
<b>Baldwin County Countywide</b>	<b>05</b>	<b>2325CST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>0015CST</b>							
		A line of severe thunderstorms moved through the county between 1125 pm and 1215 am. Trees and power lines were blown down throughout the county. The north and west part of the county had the most damage. Some of the trees fell on a couple of homes causing minor damage in the Bay Minette area. No major injuries were reported.							
<b>Wilcox County Countywide</b>	<b>05</b>	<b>2330CST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>0025CST</b>							
		A line of severe thunderstorms moved through the county between 1130 pm and 1225 am. Trees and power lines were blown down throughout the county. No major injuries were reported.							
<b>Monroe County Countywide</b>	<b>05</b>	<b>2330CST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>1220CST</b>							
		A line of severe thunderstorms moved through the county between 1130 pm and 1220 am. Trees and power lines were blown down throughout the county. No major injuries were reported.							
<b>Conecuh County Countywide</b>	<b>05</b>	<b>2340CST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>0030CST</b>							
		A line of severe thunderstorms moved through the county between 1140 pm and 1230 am. Trees and power lines were blown down throughout the county. The most damage was in the west part of the county. No injuries were reported.							
<b>Escambia County Countywide</b>	<b>05</b>	<b>2345CST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind (G60)</b>
	<b>06</b>	<b>1230CST</b>							
		A line of severe thunderstorms moved across the county between 1145 pm and 1230 am. Trees and power lines were blown down throughout the county. No injuries were reported.							
<b>Covington County Andalusia to River Falls</b>	<b>06</b>	<b>0030CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G50)</b>
		<b>0045CST</b>							
		Trees and power lines were blown down between Andalusia and River Falls.							
<b>Butler County Georgiana to Greenville</b>	<b>06</b>	<b>0040CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind (G50)</b>
		<b>0050CST</b>							
		Trees and power lines were blown down between Georgiana and Greenville. Wind speeds in the Georgiana area were estimated above 50 mph.							
<b>Crenshaw County Luverne</b>	<b>06</b>	<b>0100CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>		<b>Thunderstorm Wind (G50)</b>
		<b>0105CST</b>							
		Trees and power lines were blown down near Luverne.							
<b>Crenshaw County Highland Home to Glenwood</b>	<b>19</b>	<b>1655CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G50)</b>
		<b>1657CST</b>							
		Trees were blown down between Highland Home and Glenwood.							
<b>Covington County Gantt</b>	<b>19</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>		<b>Thunderstorm Wind (G50)</b>
		<b>1805CST</b>							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed   Injured		Estimated Damage Property   Crops		Character of Storm
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## ALABAMA, Southwest

High winds blew trees down at County Road 61 north of the Gantt community.

### **Monroe County** **Monroeville**

20	1410CST 1411CST		0	0		<b>Hail (1.00)</b>
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Quarter size hail was reported near Monroeville.

### **Covington County** **Red Level**

20	1422CST 1423CST		0	0		<b>Hail (1.75)</b>
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Golfball size hail was reported in the community.

### **Clarke County** **Allen**

20	1515CST 1517CST		0	0	3K	<b>Thunderstorm Wind (G50)</b>
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High winds blew trees down in the community.

### **Escambia County** **Atmore**

21	1630CST 1631CST		0	0	6K	<b>Hail (1.75)</b>
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State police reported golfball size hail in the community. High winds of around 50 mph also damaged a roof on a home.

### **ALZ061**

#### **Upper Mobile**

22	1600CST 1700CST		1	0		<b>Excessive Heat</b>
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A three year old boy in Mobile was left inside a van at a day care center all day. He was not discovered until the late afternoon and had been dead for a few hours. He died of heat stroke. The outside temperatures in the Mobile area were in the low to middle 90 s during the day with a heat index of around 105 degrees. Temperatures inside the closed van were estimated to be hotter than 160 degrees.

M3VE

### **ALZ059**

#### **Escambia**

29	1500CST		1	0		<b>Excessive Heat</b>
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A 68 year old female in Atmore was found dead in a closed up house with no air conditioner. It is unknown what time she died. Relatives found her body on a couch. The house was extremely hot. Autopsy reports indicated that one of the causes of her death was hypothermia. She also had heart trouble. The temperature across the area during that time was in the low to middle 90s with the heat index reaching around 100 degrees.

F68PH

## ALASKA, Northern

### **AKZ004**

#### **Koyukuk-Upper Kobuk Valleys**

01	0000AST 1200AST		0	0		<b>Flood</b>
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Continuation of event from May. Two periods of rain over the northern Koyukuk Valley caused flooding on the Koyukuk River effecting the Dalton highway at MP 231.5 (Snowden Creek), Bettles, Allakaket, and Huslia.

### **AKZ007**

#### **Tanana Valley**

08	0600AST 1600AST		0	0		<b>High Wind (G44)</b>
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A weather front from a Bering Sea low pressure center moved north over the Alaska Range resulting in strong winds for a period of time at Delta Junction. Maximum winds at Delta Junction were 37 mph sustained, gust to 51 mph.

## ALASKA, Southeast

NONE REPORTED.

## ALASKA, Southern

### **AKZ020**

#### **Aleutian Islands**

01	0000AST		0	0		<b>High Wind (G40)</b>
02	0300AST					

A moderate weather front moving through the area was preceded by brisk southeasterly winds, gusting locally near 50 mph.

### **AKZ020**

#### **Aleutian Islands**

02	0000AST		0	0		<b>High Wind (G40)</b>
03	0600AST					

Another, in a series, of vigorous fronts brought brisk southeasterly wind gusts near 50 mph to much of the Aleutian Chain. The associated low, deepened to 988mbs and moved to near Attu where it slowly weakened.

### **AKZ015>016-019**

#### **Cook Inlet - Bristol Bay Coastal - Western Alaska Peninsula**

04	0000AST		0	0		<b>High Wind (G41)</b>
05	2300AST					

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Time Date	Path Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

**ALASKA, Southern**

Prefrontal winds gusted from 40 to 50 mph at a few "channelled" wind sites along the Alaska Peninsula, extreme northwestern Bristol Bay and Turnagain Arm and the Upper Anchorage hillside.

**AKZ015>016-018>020 Cook Inlet - Bristol Bay Coastal - Kodiak Island-Eastern Alaska Peninsula - Western Alaska Peninsula - Aleutian Islands**

<b>07</b>	<b>0000AST</b>	<b>0</b>	<b>0</b>	<b>10K</b>	<b>High Wind (G80)</b>
<b>08</b>	<b>1500AST</b>				

A moderate 978mb low moved across the Alaska Peninsula near Cold Bay late Sunday...as the associated weather front continued to elongate north and east into the Gulf of Alaska and through the southwest Alaska mainland. Brisk southeasterly winds preceded the front...gusting near 50 mph in several areas. Strongest winds, however, were along the southeast and south quadrant of the storm. Westerly gusts from 50 to 60 mph were recorded in the eastern Aleutians. Extremely strong southeasterly wind gusts were recorded just east of the center at Port Heiden...where speeds reached 92 mph. Damage to several sheds was reported, smokehouses were blown around and a house under construction had roof damage around Port Heiden due to the strong winds.

**Central Gulf Coast  
West Portion**

<b>07</b>	<b>0000AST</b>	<b>0</b>	<b>0</b>	<b>1K</b>	<b>Flood</b>
<b>08</b>	<b>2359AST</b>				

**Cook Inlet  
Countywide**

<b>07</b>	<b>0000AST</b>	<b>0</b>	<b>0</b>	<b>10K</b>	<b>Flood</b>
<b>08</b>	<b>2359AST</b>				

An unusually strong low pressure system moving north out of the central Pacific ocean brought high freezing levels and moderate amounts of rainfall to much of south central Alaska. With above normal snow pack at higher elevations the stage was set to raise water levels on south central Alaska rivers and streams to bank full conditions and in some instances with minor flooding. The affected areas included the Susitna, Kenai, and Resurrection river basins, as well as smaller streams in the Anchorage bowl area.

An important precursor to this event was above normal snow pack conditions in the higher elevations of south central Alaska. The mountains along the Gulf of Alaska coast had received near normal snowfall through April, but a cool and very wet month of May, brought more snow to the mountains than any other month this past winter. Since April, freezing levels across the region had only topped 5000 ft a few times and for very brief periods. This allowed the higher elevation snow pack to ripen during May without contributing very much melt to the streams and rivers. In fact, some of the local meteorburst sites showed a loss of close to 3 inches of water equivalent from the snow pack in a 3 day period.

A developing low pressure system on Friday, June 5th, in the central Pacific, near 35 north/175 west intensified rapidly and moved to near Cold Bay as a 975 millibar low by 4 p.m. Sunday afternoon. A long fetch of warm, moist air from subtropical regions was established to the east of the storm, due to a strong ridge of high pressure extending from the eastern Gulf of Alaska southward to the eastern Pacific Ocean. By Sunday morning, freezing levels across southern Alaska were in the 9-11 thousand foot range, allowing snow melt to take place across the entire Chugach and coastal mountain ranges.

Anchorage bowl flooding was limited to some over bank flow along portions of Ship and Campbell Creeks. Minor flooding was taking place at the "Local Burgerman" restaurant, just D.S. of Old Seward Highway bridge over Campbell Creek, where overflow from the creek was entering the edge of the patio area for outside dining.

On Monday, June 8th, the threat of flooding was further south over portions of the Kenai Peninsula. Indian Creek, just south of Anchorage, was flooding the wooded area surrounding the creek near the Seward Highway. Granite Creek was flooding low lying areas, but the campground parking sites were just above the water level. The East Fork of Sixmile Creek was causing some minor flooding of the woods and an access road just upstream of the Seward highway around 7 a.m....cresting later Monday afternoon.

No flooding was apparent in the Seward basin, which includes Grouse Creek and Glacier Creek.

**AKZ019 Western Alaska Peninsula**

<b>16</b>	<b>1200AST</b>	<b>0</b>	<b>0</b>		<b>High Wind (G40)</b>
<b>17</b>	<b>1200AST</b>				

A moderate front approaching the Alaska Peninsula from the west, brought southeasterly wind gusts up to 46 mph to Cold Bay and other local areas along the western Alaska Peninsula.

**AKZ017 Central Gulf Coast**

<b>20</b>	<b>0000AST</b>	<b>0</b>	<b>0</b>		<b>High Wind (G37)</b>
	<b>2359AST</b>				

A moderate front, approaching the area from the southwest, was preceded by brisk southeasterly winds gusting up to 43 mph to Middleton Island (just south of Prince William Sound) late Saturday.

**AKZ019 Western Alaska Peninsula**

<b>25</b>	<b>0000AST</b>	<b>0</b>	<b>0</b>		<b>High Wind (G39)</b>
	<b>0600AST</b>				

A moderate front approaching the area produced brisk southeasterly winds along the western Alaska Peninsula. Wind gusts up to 45 mph were recorded at Cold Bay between 3 and 4am Thursday.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons	Estimated Damage	Character of Storm
					Killed	Injured	Property Crops

## AMERICAN SAMOA

NOT RECEIVED.

## ARIZONA, Central and Northeast

NONE REPORTED.

## ARIZONA, Northwest

### **Mohave County**

<b>Beaver Dam</b>	16	1745MST			0	0	<b>Thunderstorm Wind (G62)</b>
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A thunderstorm outflow was enhanced by a fast moving cold front to produce a recorded wind gust to 71 mph.

## ARIZONA, South

### **Cochise County**

10 N Elfrida	10	1703MST 1705MST			0	0	<b>Hail (0.75)</b>
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## ARIZONA, Southwest

NONE REPORTED.

## ARKANSAS, Central and North Central

### **Johnson County**

Coal Hill	04	1815CST			0	0	<b>Thunderstorm Wind (G61)</b>
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### **Johnson County**

Coal Hill	04	1815CST			0	0	<b>Hail (0.75)</b>
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### **Johnson County**

Hunt	04	1823CST			0	0	<b>Hail (1.75)</b>
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### **Johnson County**

Coal Hill	04	1823CST			0	0	<b>Thunderstorm Wind (G74)</b>
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### **Johnson County**

3 N Clarksville	04	1835CST			0	0	<b>Hail (1.75)</b>
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### **Johnson County**

6 N Clarksville	04	1835CST			0	0	<b>Hail (0.75)</b>
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### **Johnson County**

Clarksville	04	1847CST			0	0	<b>Hail (1.00)</b>
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### **Johnson County**

Clarksville	04	1847CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS KNOCKED DOWN SOME TREES.

### **Logan County**

Scranton	04	1855CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS DOWNED A FEW TREES.

### **Pope County**

London	04	1905CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS DOWNED SOME TREES.

### **Pope County**

Hector	04	1925CST			0	0	<b>Thunderstorm Wind (G50)</b>
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A FEW TREES WERE BLOWN DOWN.

### **Van Buren County**

Scotland	04	1940CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS KNOCKED DOWN SOME LARGE TREE LIMBS.

### **Conway County**

Cleveland	04	1945CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS KNOCKED DOWN LARGE TREE LIMBS AND KNOCKED OUT A FEW TREE TOPS.

### **Van Buren County**

Morganton	04	2015CST			0	0	<b>Lightning</b>
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LIGHTNING STRUCK A BARN, SETTING IT ON FIRE. THE BARN WAS DESTROYED. NO INJURIES WERE REPORTED.

### **Johnson County**

Oark	04	2050CST			0	0	<b>Thunderstorm Wind (G50)</b>
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THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
<b>Newton County</b> Fallsville	04	2100CST			0	0			Hail (0.88)
<b>Newton County</b> Fallsville	04	2100CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES. NICKEL SIZE HAIL WAS PRODUCED.
<b>Newton County</b> Deer	04	2115CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED DOWN LARGE TREE LIMBS.
<b>Polk County</b> 2 SW Cove to 1 SW Mena	04	2115CST 2140CST	15.5	250	0	0	100K		Tornado (F1) A WEAK TORNADO WAS SPAWNED ABOUT 2 MILES SOUTHWEST OF COVE. THE TORNADO CAUSED MOSTLY TREE, POWER LINE AND POWER POLE DAMAGE AS IT MOVED NORTHEAST. A FEW BUILDINGS SUSTAINED ROOF AND STRUCTURAL DAMAGE AS THEY WERE STRUCK BY FALLING LARGE TREE LIMBS AND DEBRIS. AS THE TORNADO APPROACHED MENA, IT REMOVED MOST OF A ROOF FROM A BOWLING ALLEY. WITH THE ROOF MOSTLY GONE, HEAVY RAIN CAUSED WATER DAMAGE INSIDE THE BUILDING. THE TORNADO DISSIPATED 1 MILE SOUTHWEST OF MENA.
<b>Polk County</b> 5.5 WSW Vandervoort to 1 SW Nunley	04	2115CST 2155CST	21	250	0	0			Tornado (F1) A WEAK TORNADO WAS SPAWNED TO THE SOUTHWEST OF VANDERVOORT AND MOVED NORTHEAST THROUGH THE OUACHITA NATIONAL FOREST. THE TORNADO CAUSED MOSTLY TREE AND POWER LINE DAMAGE, WITH A FEW HOMES AND BUSINESSES SUSTAINING DAMAGE FROM FALLEN TREE DEBRIS. THE TORNADO EVENTUALLY DISSIPATED JUST TO THE SOUTHWEST OF NUNLEY.
<b>Montgomery County</b> Black Spgs	04	2140CST			0	0			Thunderstorm Wind (G50)
<b>Montgomery County</b> Norman	04	2145CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED TREES DOWN IN PARTS OF MONTGOMERY COUNTY, INCLUDING NORMAN AND BLACK SPRINGS.
<b>Pike County</b> Nathan	04	2145CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED TREES DOWN.
<b>Pike County</b> Glenwood	04	2150CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES.
<b>Stone County</b> Fox	04	2215CST			0	0			Thunderstorm Wind (G50)
<b>Stone County</b> Timbo	04	2215CST			0	0			Thunderstorm Wind (G50)
<b>Stone County</b> Mountain View	04	2220CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED TREES DOWN IN PARTS OF STONE COUNTY INCLUDING FOX, TIMBO AND MOUNTAIN VIEW.
<b>Pope County</b> London	04	2215CST			0	0			Hail (1.00) THUNDERSTORM PRODUCED QUARTER SIZE HAIL.
<b>Yell County</b> Rover	04	2230CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES.
<b>Garland County</b> Hot Spgs	04	2235CST			0	0			Thunderstorm Wind (G50) THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER POLES.
<b>Hot Spring County</b> 5 N Bismarck	04	2235CST			0	0			Thunderstorm Wind (G50)
<b>Hot Spring County</b> Malvern	04	2235CST			0	0			Thunderstorm Wind (G50)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
			THUNDERSTORM WINDS DAMAGED SEVERAL HOUSES AND MOBILE HOMES ABOUT 1 MILE SOUTH OF THE HOT SPRING/GARLAND COUNTY LINE. FARTHER TO THE EAST, WINDS CAUSED SOME ROOF DAMAGE IN MALVERN.						
<b>Cleburne County</b> Drasco	04	2250CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Cleburne County</b> 3 NE Greers Ferry	04	2250CST			0	0			<b>Thunderstorm Wind (G50)</b>
			THUNDERSTORM WINDS KNOCKED TREES DOWN IN PARTS OF CLEBURNE COUNTY, INCLUDING AREAS NEAR GREERS FERRY AND AT DRASCO.						
<b>Grant County</b> Prattsville	04	2255CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Grant County</b> Leola	04	2257CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Grant County</b> Sheridan	04	2301CST			0	0			<b>Thunderstorm Wind (G55)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES IN PARTS OF GRANT COUNTY, INCLUDING PRATTSVILLE, LEOLA AND SHERIDAN. A TREE FELL ON A BUILDING AT LEOLA. POWER LINES WERE ALSO DOWNED IN PRATTSVILLE.						
<b>Conway County</b> Morrilton	04	2255CST			0	0			<b>Thunderstorm Wind (G50)</b>
			THUNDERSTORM WINDS KNOCKED DOWN SOME TREES AND DESTROYED A BUSINESS SIGN.						
<b>Faulkner County</b> Conway	04	2305CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Faulkner County</b> Conway	04	2320CST			0	0			<b>Thunderstorm Wind (G55)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES WITH ONE TREE FALLING ON A HOUSE.						
<b>Saline County</b> Benton	04	2310CST			0	2			<b>Thunderstorm Wind (G50)</b>
<b>Saline County</b> Bryant	04	2313CST			0	0			<b>Thunderstorm Wind (G50)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES, POWER LINES AND HIGHWAY SIGNS FROM BENTON TO BRYANT. A MOBILE HOME WAS ALSO DESTROYED IN THE BENTON AREA WITH 2 PEOPLE INJURED.						
<b>Pulaski County</b> Little Rock	04	2320CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Pulaski County</b> North Little Rock	04	2325CST			0	1			<b>Thunderstorm Wind (G55)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES IN PARTS OF LITTLE ROCK AND NORTH LITTLE ROCK. ONE INJURY WAS REPORTED.						
<b>Dallas County</b> Fordyce	04	2325CST			0	0			<b>Thunderstorm Wind (G50)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES.						
<b>Jefferson County</b> 5 W Pine Bluff	04	2330CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Jefferson County</b> Pine Bluff	04	2335CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Jefferson County</b> (Pbf)Pine Bluff Arpt	04	2337CST			0	0			<b>Thunderstorm Wind (G55)</b>
			THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES FROM WESTERN JEFFERSON COUNTY INTO THE PINE BLUFF AREA. IN ADDITION, ROOFS WERE REMOVED FROM A FEW HOMES AND SOME CARPORTS WERE DESTROYED. A 55 KNOT GUST WAS REPORTED AT THE PINE BLUFF AIRPORT.						
<b>Cleburne County</b> Heber Spgs	04	2330CST			0	0			<b>Flash Flood</b>
			THUNDERSTORMS BROUGHT BETWEEN 2 AND 3 INCHES OF RAIN TO PARTS OF CLEBURNE COUNTY IN LESS THAN AN HOUR. SEVERAL STREETS IN HEBER SPRINGS WERE UNDER WATER. THE WATER FLOODED SOME LOCAL BUSINESSES, INCLUDING A BARBER SHOP.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ARKANSAS, Central and North Central

### **Pulaski County**

**Little Rock Afb to  
4 NNE Jacksonville**

**04      2332CST      5      100      0      0      Tornado (F1)**  
**2340CST**

A WEAK TORNADO WAS SPAWNED ON THE WEST SIDE OF THE LITTLE ROCK AIR FORCE BASE. THE TORNADO MOVED THROUGH BASE HOUSING, CAUSING ROOF AND STRUCTURAL DAMAGE TO SEVERAL HOMES. FARTHER NORTHEAST, THE TORNADO HIT NEIGHBORHOODS ON THE NORTH SIDE OF JACKSONVILLE, DOWNING MANY LARGE TREES AND POWER LINES. SEVERAL TREES AND LARGE TREE LIMBS FELL ON HOUSES CAUSING MOSTLY ROOF DAMAGE. SOME STRUCTURAL DAMAGE WAS ALSO NOTED. THE TORNADO CONTINUED INTO EXTREME WESTERN LONOKE COUNTY.

### **Lonoke County**

**5 W Furlow to  
1 N Furlow**

**04      2332CST      5      250      0      0      Tornado (F1)**  
**2340CST**

A WEAK TORNADO WAS SPAWNED TO THE SOUTHWEST OF THE SOUTH BEND COMMUNITY, AND MOVED NORTHEAST. EXTENSIVE TREE, POWER LINE AND POWER POLE DAMAGE WAS NOTED IN SOUTH BEND. TREES AND LARGE TREE LIMBS FELL ON A FEW HOUSES, CAUSING MOSTLY ROOF DAMAGE. SOME STRUCTURAL DAMAGE WAS ALSO NOTED. ONE MOBILE HOME WAS DESTROYED IN SOUTH BEND. A TRAMPOLINE WAS THROWN INTO A TREE. A FEW TREES WERE DOWNED NORTH AND EAST OF SOUTH BEND BEFORE THE TORNADO DISSIPATED JUST NORTH OF FURLOW.

### **Lonoke County**

**1 SW Lonoke to  
2.5 E Lonoke**

**04      2336CST      3.5      250      0      0      Tornado (F1)**  
**2342CST**

A WEAK TORNADO WAS SPAWNED TO THE SOUTHWEST OF LONOKE, AND MOVED THROUGH TOWN. EXTENSIVE TREE, POWER LINE AND POWER POLE DAMAGE WAS NOTED. SEVERAL TREES AND LARGE TREE LIMBS FELL ON HOUSES, CAUSING MOSTLY ROOF DAMAGE. SOME STRUCTURAL DAMAGE WAS ALSO NOTED. EAST OF TOWN, THE TORNADO DAMAGED A FENCE AROUND A BASEBALL FIELD. SOME ROOF DAMAGE WAS ALSO NOTED AT THE NATIONAL ARMORY NEXT TO THE PARK. THE TORNADO KNOCKED OUT A FEW TREE TOPS AND TREE LIMBS FARTHER EAST BEFORE DISSIPATING.

### **Lonoke County**

**5 SW Cabot**

**04      2340CST      0.2      100      0      0      Tornado (F1)**  
**2341CST**

THE WEAK TORNADO THAT MOVED THROUGH THE LITTLE ROCK AIR FORCE BASE AND THE NORTH SIDE OF JACKSONVILLE EVENTUALLY HEADED INTO EXTREME WESTERN LONOKE COUNTY. THE TORNADO DID NOT LAST LONG, DISSIPATING LESS THAN A HALF MILE INTO THE COUNTY. ONLY A FEW LARGE TREE LIMBS WERE DOWNED WITH NO STRUCTURAL DAMAGE NOTED FROM THIS TORNADO.

### **Cleveland County**

**Countywide**

**04      2352CST      0      0      Thunderstorm Wind (G55)**

### **Cleveland County**

**Rison**

**04      2352CST      0      0      Thunderstorm Wind (G55)**

THUNDERSTORM WINDS KNOCKED DOWN TREES IN MUCH OF CLEVELAND COUNTY. A LARGE LIMB FELL ON A HOUSE AT RISON CAUSING SOME ROOF DAMAGE.

### **Prairie County**

**3 W Hazen**

**05      0000CST      0      0      Thunderstorm Wind (G55)**

### **Prairie County**

**Tollville**

**05      0005CST      0      0      Thunderstorm Wind (G55)**

THUNDERSTORM WINDS DESTROYED A STORAGE BUILDING WEST OF HAZEN, WITH A PORCH DESTROYED BY WINDS AT TOLLVILLE.

### **Arkansas County**

**Stuttgart**

**05      0005CST      0      0      Thunderstorm Wind (G70)**

### **Arkansas County**

**De Witt**

**05      0010CST      0      0      Thunderstorm Wind (G55)**

WINDS ESTIMATED UP TO 80 MPH KNOCKED DOWN TREES AND POWER LINES AND DAMAGED A SHED AT STUTTGART. TREES WERE ALSO BLOWN DOWN IN DE WITT.

### **Lincoln County**

**3 S Grady**

**05      0935CST      0      0      Hail (1.00)**

### **Arkansas County**

**2 S Gillett**

**05      0945CST      0      0      Hail (1.00)**

QUARTER SIZE HAIL CAUSED SOME CROP DAMAGE 2 MILES SOUTH OF GILLETT.

### **Newton County**

**Fallsville**

**08      1328CST      0      0      Hail (0.88)**

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
<b>Newton County</b> Fallsville	08	1328CST			0	0			<b>Thunderstorm Wind (G50)</b> Thunderstorm winds knocked down several trees at Fallsville. Nickel size hail was also produced.
<b>Logan County</b> Sugar Grove	08	2300CST			0	0			<b>Hail (1.00)</b>
<b>Johnson County</b> 10 E Clarksville	08	2300CST			0	0			<b>Lightning</b> A HELICOPTER WAS STRUCK BY LIGHTNING EAST OF CLARKSVILLE, AND HAD TO MAKE A PRECAUTIONARY LANDING AT THE CLARKSVILLE MUNICIPAL AIRPORT. THE HELICOPTER NORMALLY TRANSPORTED PATIENTS FOR A HOSPITAL IN LITTLE ROCK, AND WAS ON ITS WAY TO FORT SMITH. NO INJURIES WERE REPORTED.
<b>Conway County</b> Morrilton	09	0158CST			0	0			<b>Hail (0.75)</b>
<b>Perry County</b> 3 E Casa	09	0215CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED SEVERAL TREES DOWN.
<b>Pope County</b> Russellville	09	0230CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Pope County</b> Hector	09	0235CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES IN PARTS OF POPE COUNTY, INCLUDING RUSSELLVILLE AND HECTOR.
<b>Polk County</b> Cove	09	2145CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES AT COVE. ONE TREE FELL ON A HOUSE.
<b>Polk County</b> Mena	09	2205CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS REMOVED ROOFING MATERIAL FROM A RESTAURANT IN MENA.
<b>Scott County</b> 10 W Waldron	10	0255CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.
<b>Polk County</b> Ink	10	1931CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.
<b>Logan County</b> Booneville	10	2010CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.
<b>Scott County</b> Waldron	12	2255CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES.
<b>Montgomery County</b> 12 NE Mt Ida	12	2322CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS BLEW DOWN TREES AT BIG FIR AND LITTLE FIR CAMPGROUNDS. A BOAT WAS ALSO BLOWN AWAY.
<b>Montgomery County</b> 1 N Joplin	12	2324CST			0	2			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES, OVERTURNED RECREATIONAL VEHICLES AND TENTS, AND DAMAGED TWO DOCKS AT THE JOPLIN CAMPGROUND. 2 PEOPLE WERE INJURED.
<b>Pulaski County</b> North Little Rock	13	0100CST			0	0	40K		<b>Lightning</b> LIGHTNING STRUCK THE EAST CAMPUS AUDITORIUM IN NORTH LITTLE ROCK, WITH BRICKS TOWARD THE TOP OF THE BUILDING REMOVED AND SOME ROOF DAMAGE NOTED.
<b>Jefferson County</b> Watson Chapel	13	0145CST			0	0			<b>Hail (0.88)</b>
<b>Hot Spring County</b> De Roche	13	0257CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Hot Spring County</b> Friendship	13	0257CST			0	0			<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
<b>Hot Spring County</b>									
Point Cedar	13	0257CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES AND BLEW WINDOWS OUT FROM POINT CEDAR TO FRIENDSHIP IN WESTERN AND SOUTHERN HOT SPRING COUNTY. A FEW TREES WERE BLOWN ONTO HOUSES.
<b>Marion County</b>									
5 S Oakland	13	1848CST	0.1	50	0	0			<b>Tornado (F0)</b> A WEAK TORNADO WAS SPAWNED NEAR OAKLAND IN NORTHEAST MARION COUNTY. THE TORNADO WAS VERY BRIEF, AND CAUSED LITTLE IF ANY DAMAGE.
<b>Baxter County</b>									
Henderson	13	2000CST	0.1	50	0	0			<b>Tornado (F0)</b> A WEAK TORNADO WAS SPAWNED NEAR HENDERSON, AND WAS ON THE GROUND VERY BRIEFLY. SOME DAMAGE WAS REPORTED, INCLUDING A DAMAGED HOUSEBOAT AND MARINA DOCK.
<b>Fulton County</b>									
8 W Salem	13	2020CST			0	0			<b>Hail (0.75)</b>
<b>Fulton County</b>									
Salem	13	2035CST			0	0			<b>Hail (0.75)</b> THUNDERSTORMS PRODUCED LARGE HAIL IN PARTS OF FULTON COUNTY, INCLUDING AREAS WEST OF SALEM AND IN SALEM.
<b>Fulton County</b>									
Salem	13	2037CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES.
<b>Izard County</b>									
Franklin	13	2055CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Izard County</b>									
Horseshoe Bend Arpt	13	2055CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Izard County</b>									
Oxford	13	2055CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES IN PARTS OF IZARD COUNTY, INCLUDING OXFORD, FRANKLIN AND HORSESHOE BEND.
<b>Sharp County</b>									
Poughkeepsie	13	2120CST			0	0			<b>Hail (0.75)</b>
<b>Prairie County</b>									
De Valls Bluff	14	1655CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Prairie County</b>									
Biscoe	14	1700CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN LARGE LIMBS AND POWER LINES IN PARTS OF PRAIRIE COUNTY, INCLUDING DE VALLS BLUFF AND BISCOE.
<b>Grant County</b>									
8 NE Sheridan	14	1655CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.
<b>Jefferson County</b>									
Whitehall	14	1705CST			0	1			<b>Lightning</b> A 14 YEAR OLD BOY WAS INJURED WHEN LIGHTNING STRUCK THE FENCE HE WAS TOUCHING.
<b>Monroe County</b>									
5 NE Clarendon	14	1710CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN TREES, POWER LINES AND ROAD SIGNS.
<b>Jefferson County</b>									
Arsenal	14	1711CST			0	0			<b>Hail (0.75)</b>
<b>Jefferson County</b>									
Cornerstone	14	1740CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.
<b>Arkansas County</b>									
2 W De Witt	14	1845CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Arkansas County</b>									
De Witt	14	1850CST			0	0			<b>Thunderstorm Wind (G50)</b> THUNDERSTORM WINDS KNOCKED DOWN A POWER POLE WEST OF DE WITT AND DESTROYED A SHED IN DE

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
WITT.									
<b>Scott County</b> Abbott	18	2130CST			0	0			Thunderstorm Wind (G50)
<b>Scott County</b> Hon	18	2145CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS SNAPPED A POWER POLE AT ABBOTT AND DOWNED A FEW TREES AND POWER LINES AT HON.									
<b>Logan County</b> 2 S Booneville	18	2145CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN A TREE.									
<b>Scott County</b> Boles	18	2245CST			0	0			Thunderstorm Wind (G55)
<b>Scott County</b> Y City	18	2245CST			0	0			Thunderstorm Wind (G55)
THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES ACROSS MUCH OF SOUTHERN SCOTT COUNTY, INCLUDING Y CITY AND BOLES.									
<b>Polk County</b> Ink	18	2245CST			0	0			Thunderstorm Wind (G55)
THUNDERSTORM WINDS KNOCKED DOWN TREES IN PARTS OF NORTHEAST POLK COUNTY, INCLUDING AREAS NEAR INK.									
<b>Yell County</b> Aly	18	2320CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNCKED DOWN LARGE LIMBS.									
<b>Yell County</b> Aly	18	2320CST			0	0			Hail (0.75)
<b>Yell County</b> Aly	18	2320CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN LARGE LIMBS.									
<b>Montgomery County</b> 10 E Mt Ida	18	2330CST			0	0			Thunderstorm Wind (G55)
THUNDERSTORM WINDS KNOCKED DOWN TREES AND BLEW A BOAT DOCK LOOSE AT THE MOUNTAIN HARBOR RESORT.									
<b>Garland County</b> Pearcy	18	2345CST			0	0			Thunderstorm Wind (G55)
THUNDERSTORM WINDS KNOCKED DOWN SEVERAL TREES.									
<b>Hot Spring County</b> Bismarck	19	0000CST			0	0			Thunderstorm Wind (G50)
<b>Hot Spring County</b> 5 W Oak Grove	19	0010CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN SEVERAL TREES AT BISMARCK AND BLEW LARGE LIMBS ONTO HIGHWAY 84 WEST OF OAK GROVE.									
<b>Pulaski County</b> North Little Rock	19	0030CST			0	0			Hail (0.75)
<b>Pulaski County</b> North Little Rock	19	0030CST			0	0			Hail (1.00)
<b>Saline County</b> Benton	19	0030CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS SNAPPED A LARGE TREE LIMB ONTO A HOUSE CAUSING SOME ROOF DAMAGE.									
<b>Grant County</b> Sheridan	19	0050CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS CAUSED SOME ROOF DAMAGE.									
<b>Lonoke County</b> Woodlawn	19	0050CST			0	0			Hail (0.75)
<b>Polk County</b> Mena	19	0125CST			0	0			Hail (1.75)
<b>Jefferson County</b> Pine Bluff	19	0130CST			0	0			Thunderstorm Wind (G50)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Central and North Central</b>									
THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.									
<b>Montgomery County</b>									
Pine Ridge	19	0155CST			0	0			Hail (1.75)
<b>Pike County</b>									
Murfreeboro	19	0230CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN A FEW TREES.									
<b>Pope County</b>									
Scottsville	21	1400CST			0	0			Hail (0.75)
<b>Yell County</b>									
2 S Centerville	21	1400CST			0	0			Hail (0.88)
<b>White County</b>									
Bradford	21	1415CST			0	0			Hail (0.75)
DIME SIZE HAIL COVERED THE GROUND.									
<b>Perry County</b>									
9 ENE Houston	21	1455CST			0	0			Hail (1.00)
<b>Faulkner County</b>									
Conway	21	1508CST			0	0			Hail (1.75)
<b>Lonoke County</b>									
Ward	21	1540CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS SNAPPED A LARGE TREE LIMB WHICH FELL AND HEAVILY DAMAGED A PICKUP TRUCK.									
<b>Lonoke County</b>									
Cabot	21	1600CST			0	0			Thunderstorm Wind (G50)
<b>Lonoke County</b>									
Cabot	21	1615CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES AND CAUSED SOME ROOF DAMAGE AT CABOT.									
<b>Pulaski County</b>									
(Lrf) Little Rock Afb	21	1611CST			0	0			Hail (0.75)
<b>Pulaski County</b>									
Jacksonville	21	1620CST			0	0			Thunderstorm Wind (G50)
THUNDERSTORM WINDS KNOCKED DOWN TREES AND POWER LINES IN JACKSONVILLE WITH DIME SIZE HAIL PRODUCED NORTH OF TOWN AT THE LITTLE ROCK AIR FORCE BASE.									
<b>ARKANSAS, East</b>									
<b>Poinsett County</b>									
Marked Tree	05	0020CST 0025CST			0	0	5K		Thunderstorm Wind
Several trees were knocked down in the eastern part of Poinsett county.									
<b>St. Francis County</b>									
1 E Forrest City	05	0030CST 0035CST			0	0	5K		Thunderstorm Wind
Some trees were blown down just east of Forrest City.									
<b>Lee County</b>									
Marianna to Aubrey	05	0035CST 0045CST			0	0	20K		Thunderstorm Wind
Trees and power lines were knocked down in both Marianna and Aubrey.									
<b>Mississippi County</b>									
3 W Blytheville	05	0045CST 0050CST			0	0	10K		Thunderstorm Wind
Several trees and power lines were blown down.									
<b>Phillips County</b>									
Marvell	05	0045CST 0050CST			0	0	25K		Thunderstorm Wind
The roof of the Boys, Girls, Adult Community Development Center was blown off. Several trees were blown down.									
<b>Clay County</b>									
Corning	14	1510CST 1515CST			0	0	15K		Thunderstorm Wind
A building lost its roof. Several trees and power lines were knocked down.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>ARKANSAS, East</u></b>									
<b>Mississippi County</b> Yarbro	15	2235CST 2240CST			0	0	10K		Thunderstorm Wind
									Several cars were blown off Interstate 55 near the Arkansas-Missouri border.
<b>Mississippi County</b> Gosnell to 10 NE Blytheville	15	2240CST 2255CST			0	0	50K		Thunderstorm Wind
									One home near Gosnell was destroyed by a blown down tree. Some highway equipment was also damaged. Trees and interstate highway signs were also knocked down. A tree also fell on a house 10 miles northeast of Blytheville producing major damage to the house.
<b>Mississippi County</b> Blytheville to Huffman	15	2243CST 2255CST			0	0	0.10K	50K	Hail (1.00)
									Nearly all crops grown between Yarbro and Huffman were totally destroyed by the hail.
<b>Clay County</b> St Francis	20	0020CST 0025CST			0	0	5K		Thunderstorm Wind
									Several large trees were knocked down.
<b>Mississippi County</b> Blytheville	20	0500CST 0700CST			0	0	1K		Urban/Sml Stream Fld
									Several streets were flooded after nearly 4 inches of rain fell in the area.
<b>Mississippi County</b> Osceola	21	1510CST 1515CST			0	0	0.15K		Hail (1.00)
									Hail ranging from nickel to quarter size fell in Osceola.
<b>Mississippi County</b> Blytheville	21	1542CST 1550CST			0	0	0.01K		Hail (0.75)
<b><u>ARKANSAS, Northwest</u></b>									
<b>Crawford County</b> Mountainburg	04	1730CST			0	0			Hail (0.75)
<b>Crawford County</b> Mountainburg	04	1730CST			0	0			Thunderstorm Wind (G52)
<b>Franklin County</b> 5 NW Ozark	04	1740CST			0	0			Thunderstorm Wind (G61)
<b>Franklin County</b> Ozark	04	1745CST			0	0	25K		Lightning
									Lightning destroyed the big motor that operates Ozark's water system at City Lake. City workers had to operate the pump manually for several days to provide residents with their water supply.
<b>Franklin County</b> Cass	04	1750CST			0	0	5K		Thunderstorm Wind
									Trees and power lines were blown down in Cass. There was some structural damage to buildings in the area.
<b>Franklin County</b> Ozark	04	1750CST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds knocked down trees and tree limbs all over the city of Ozark. The winds shattered windows in the Faith Addition on North 25th and 26th Streets, the city's second-largest subdivision. The Franklin County OES Director reported numerous trees blown down countywide with numerous reports of dime to nickel-sized hail.
<b>Franklin County</b> Ozark	04	1755CST			0	0	5K		Hail (2.75)
									Baseball-sized hail damaged a house and its awnings.
<b>Franklin County</b> Altus	04	1805CST			0	0	0.50K		Thunderstorm Wind
									Several trees (3 ft. diameter) were blown down in Altus. One tree was blown onto a street, blocking the roadway.
<b>Franklin County</b> Ozark	04	1813CST			0	0			Hail (1.75)
<b>Madison County</b> St Paul	04	2040CST			0	0	0.10K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS, Northwest</b>									
Tree limbs (8 to 10-inch diameter) blown down									
<b>Crawford County</b> Mulberry	04	2045CST			0	0	0.10K		Thunderstorm Wind
Several 6-8" diameter tree limbs blown down in town									
Summary of events for June 4 1998:									
Two severe thunderstorms moved across northwest Arkansas on the evening of June 4. The first was the worse of the two, developing along an unseasonably strong cold front in Sequoyah County Oklahoma in extremely unstable air with strong mid-level winds. As this storms entered Arkansas west of Mountainburg, it began to grow in both size and strength as it moved across Crawford County. By the time it reached Franklin County, it had developed a large bow echo and became a prolific wind and hail producer. There were numerous reports of widespread damaging thunderstorm winds and hail as large as baseballs in Franklin County. The second of the two storms formed in Crawford County and moved northeast across southern Madison County, producing reports of marginally severe thunderstrom winds.									
<b>Sebastian County</b> Dayton	08	2233CST			0	0	0.30K		Thunderstorm Wind
Several trees were blown down									
<b>Sebastian County</b> Midland	08	2233CST			0	0	0.10K		Thunderstorm Wind
Several large tree limbs were blown down									
<b>Sebastian County</b> 1 N Mansfield	08	2250CST			0	0			Funnel Cloud
Report from Sebastian S.O.									
<b>Sebastian County</b> Greenwood	08	2252CST			0	0	2K		Thunderstorm Wind
Business signs were blown down in Greenwood									
<b>Sebastian County</b> South Portion	08	2252CST 2330CST			0	0			Flash Flood
About 2 inches of rain in a short amount of time caused street flooding in Greenwood.									
<b>Sebastian County</b> 2 NW Midland to 2 NNW Midland	08	2301CST 2302CST	1	50	0	0			Tornado (F0)
<b>Franklin County</b> 4 SW Cass	09	0050CST			0	0			Hail (1.00)
Summary of events for late night/early morning of June 8-9 1998:									
A long-track supercell thunderstorm with a history of producing numerous tornadoes along its path in southeast Oklahoma moved across southern Sebastian County before midnight on the night of June 8. This storm produced damaging thunderstorm winds, torrential flooding rainfall, and a funnel cloud. A second supercell thunderstorm formed over northern Le Flore County Oklahoma and followed immediately behind the first supercell thunderstorm. The second storm spawned a tornado 2 miles northwest of Midland and added to the flooding problem in southern Sebastian County.									
Other thunderstorms moved into western Arkansas north of the Arkansas River after midnight CDT, causing a report of large hail in northern Franklin County.									
<b>Franklin County</b> 5 N Ozark	09	2145CST			0	0			Hail (1.00)
<b>Sebastian County</b> Ft Smith	10	0200CST			0	0	3K		Thunderstorm Wind
Several trees and power lines were blown down across town between 300 and 315 AM CDT.									
<b>Crawford County</b> Van Buren	10	0220CST			0	0	0.10K		Thunderstorm Wind
A large tree limb was knocked down by thunderstorm winds.									
<b>ARZ010&gt;011-020</b> Washington - Madison - Franklin	10	0230CST 0330CST			0	0	3.1K		High Wind (G44)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ARKANSAS, Northwest

Locally high winds developed from the Oklahoma state line eastward along the Boston Mountains as a result of rapidly sinking air to the north of a thunderstorm complex along the Arkansas River valley. Winds gusted to 51 mph at Drake Field in Fayetteville (KFYV) at 353 AM CDT. Trees and power lines were blown down in Ozark (Franklin County) between 345 and 415 AM CDT.

Summary of events for June 9 PM-June 10 AM 1998:

An isolated severe thunderstorm developed over Franklin County on the evening of June 9 around 1030 PM CDT, dropping hail to the size of quarters between Ozark and Cass.

Later during the early morning of June 10, a line of thunderstorms moving across southeast Oklahoma strengthened as it entered western Arkansas along the Arkansas River valley. These storms brought marginally severe wind gusts to the Fort Smith-Van Buren area. Well to the north of these storms, rapidly sinking air brought locally strong winds generally along and north of the Boston Mountains between 330 and 430 AM CDT.

<b>Sebastian County Hackett</b>	<b>10</b>	<b>1945CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Crawford County Van Buren</b>	<b>10</b>	<b>2005CST</b>			<b>0</b>	<b>0</b>	<b>0.50K</b>		<b>Thunderstorm Wind</b>
Trees were blown down along SH 59 in Van Buren									
<b>Sebastian County Greenwood</b>	<b>10</b>	<b>2009CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
A tree was blown down in Greenwood									
<b>Crawford County Rudy</b>	<b>10</b>	<b>2010CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
Several large tree limbs were blown down									
<b>Franklin County 4 S Branch</b>	<b>10</b>	<b>2012CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Madison County Delaney</b>	<b>10</b>	<b>2030CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
A tree was blown down on SH 16									
<b>Franklin County 5 NW Cass</b>	<b>10</b>	<b>2035CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
A tree was blown down along SH 295									
<b>Madison County 2 W Huntsville</b>	<b>10</b>	<b>2108CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
A tree was blown down on SH 74									
<b>Madison County 2 N Huntsville</b>	<b>10</b>	<b>2120CST</b>			<b>0</b>	<b>0</b>	<b>0.20K</b>		<b>Thunderstorm Wind</b>
Trees were blown down on SH 23									

Summary of events for June 10 1998:

An area of severe showers and thunderstorms moved from southeast Oklahoma into western Arkansas on the evening of June 10. These thunderstorms contained little in the way of rain and hail, but they produced copious amounts of wind.

<b>Sebastian County Dayton</b>	<b>12</b>	<b>2215CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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Summary for June 12 1998:

An isolated severe thunderstorm developed on the evening of June 12 over southern Sebastian County, causing a report of marginally severe hail.

<b>Sebastian County Greenwood</b>	<b>14</b>	<b>0235CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>		<b>Thunderstorm Wind</b>
A tree was blown down, blocking a road near Greenwood									

Summary for June 14 1998:

An area of developing showers and thunderstorms moved across western Arkansas during the early morning of June 14. One of these thunderstorms became severe over southern Sebastian County, producing damaging thunderstorm winds.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ARKANSAS, Northwest

<b>Sebastian County Greenwood</b>	<b>18</b>	<b>2055CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Sebastian County (Fsm)Ft Smith Muni A</b>	<b>18</b>	<b>2103CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Sebastian County Hackett</b>	<b>18</b>	<b>2118CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>

Summary of events for June 18 1998:

An approaching cold front and a vigorous upper level low moving into the southern plains helped ignite an outbreak of severe thunderstorms over eastern Oklahoma on the evening of June 18. One severe storm moved east into Sebastian County between 745 and 830 PM CDT, dropping hail as large as nickels and causing a severe wind report.

## **Madison County Huntsville**

<b>21</b>	<b>0420CST</b>			<b>0</b>	<b>0</b>	<b>0.30K</b>			<b>Thunderstorm Wind</b>
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Several trees were blown down.

Summary for June 21 1998:

An isolated cluster of severe thunderstorms developed over Madison County during the early morning of June 21. These thunderstorms produced a report of wind damage before moving east of Madison County.

## **Benton County Gravette**

<b>30</b>	<b>0330CST</b>			<b>0</b>	<b>0</b>	<b>15K</b>			<b>Thunderstorm Wind</b>
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A large oak tree was blown into the front of a residence on Third Avenue SW in Gravette. Luckily, the family residing in the house was out of town, and there were no injuries. In Gravette, several trees and limbs were blown down, blocking traffic on several streets. TV antennae were also blown down by the strong thunderstorm winds, and electrical service was disrupted for about two hours.

## **Benton County Sulphur Spgs**

<b>30</b>	<b>0330CST</b>			<b>0</b>	<b>0</b>	<b>0.50K</b>			<b>Thunderstorm Wind</b>
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Several trees were blown down in Sulphur Springs, and several streets were blocked by downed trees and limbs. SH 59 south of Sulphur Springs was blocked for about 30 minutes by a fallen tree.

Summary for June 30 1998:

A complex of thunderstorms associated with a slowly southward-moving cold front moved out of southeast Kansas early on the morning of June 30, clipping extreme northwest Arkansas. One of these storms produced severe thunderstorm winds.

## ARKANSAS, Southeast

### **Ashley County Hamburg**

<b>05</b>	<b>0053CST</b>			<b>0</b>	<b>0</b>	<b>4K</b>			<b>Thunderstorm Wind</b>
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Several trees and power lines were blown down.

## ARKANSAS, Southwest

### **Sevier County**

<b>De Queen</b>	<b>04</b>	<b>2115CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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Numerous trees down.

### **Little River County**

<b>3 NW Foreman</b>	<b>04</b>	<b>2130CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G56)</b>
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### **Howard County**

<b>Nashville</b>	<b>04</b>	<b>2145CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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### **Hempstead County**

<b>Hope</b>	<b>04</b>	<b>2209CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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### **Nevada County**

<b>5 SW Prescott</b>	<b>04</b>	<b>2210CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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### **Little River County**

<b>3 NW Foreman</b>	<b>05</b>	<b>2130CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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### **Union County**

<b>El Dorado</b>	<b>06</b>	<b>0010CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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## CALIFORNIA, Extreme Southeast

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## CALIFORNIA, Extreme Southeast

NONE REPORTED.

## CALIFORNIA, North Central

**CAZ014**

**Burney Basin/Eastern Shasta County**

11	1800PST								
12	0000PST			0	0	0	0		Flood

Slow moving thunderstorms produced heavy rainfall which caused minor street flooding in the town of Burney. Observed maximum rainfall rate was 0.75 inches in 15 minutes.

**CAZ016>019**

**Central Sacramento Valley - Southern Sacramento Valley - Carquinez Strait And Delta - Northern San Joaquin Valley**

16	0800PST								
	1900PST			0	2	25K			High Wind (G48)

Strong gradient winds in the Sacramento Valley and northern San Joaquin Valley caused 38,000 customers to lose power in Yuba, Sutter, Sacramento, and San Joaquin Counties. Many customers lost power for more than 24 hours. This included a number of traffic light systems, which led to numerous accidents. The strongest winds reported were at the Sacramento International Airport of 31 mph gusting to 48 mph. The winds brought down dozens of trees, with the only significant damage reported done to a house in Stockton. The two injuries also occurred to two men in Stockton when a portion of a building's stone ledge fell on them. The downed power lines and high winds also generated more than a dozen small grass fires.

## CALIFORNIA, Northeast

NONE REPORTED.

## CALIFORNIA, Northwest

**Trinity County**

2 W Hayfork

06	1737PST								
	1810PST			0	0				Hail (1.00)

Hail accumulated to a depth of 2 inches.

**Trinity County**

6 SW Trinity Center

12	1710PST								
				0	0				Hail (0.75)

## CALIFORNIA, South Central

**CAZ021**

**Southern San Joaquin Valley**

01	0001PST								
30	2359PST			0	0	400K	100M		Flood

The above normal snowpack in the Southern Sierra Nevada led to an excellent water year for the Central and Southern San Joaquin Valley agricultural areas, generally. The above normal water runoff filled reservoirs and the delay in the annual snowmelt usually occurring in late April and Early May occurred in mid-June. Unfortunately, the Kings, Kaweah, and Tule Rivers ran strong and limitations on water pumping and diversion capabilities was exceeded thereby leading to the reformation of old Tulare Lake. Over 32,000 acres of bottom land used for farming primarily south of Corcoran have been reclaimed by the waters with an estimated loss to production agriculture and some structures in Kings County. A \$1M office complex near El Rico is under 5' of water. (The recent total ag output for Kings County averages \$800M per annum and damage figures for agriculture have been revised upward to \$100M from the previous quoted figure of \$73.6M in the May report).

**Tulare County**

10 N Springville

03	0130PST								
	0723PST			0	0				Heavy Rain

**Kern County**

Glennville

03	0200PST								
	0800PST			0	0				Heavy Rain

At an elevation of 2400 feet, a weather spotter reported 1.17" of rain in a 6-hour period in the Springville area of Tulare County. Seasonal rainfall total at this point 48.63". In the Kern County community of Glennville, another spotter reported 1.02" on 6/3/98 with a storm total by 0625 on the 4th of 1.10".

**Fresno County**

Parlier

06	1645PST								
				0	0	50K			Lightning

Lightning struck a house causing damage...but no injuries. The thunderstorm activity...between gusty wind and torrential rain... led to the disruption of power to over 25,000 residents in Central Fresno County.

**Fresno County**

Reedley

06	1645PST								
	1800PST			0	0	17.1M			Hail (1.00)

As reported by Fresno County Ag Commissioner that large amounts of hail with some reaching 1" in diameter occurred in the Reedley area. Other damage areas in Fresno County were around Kerman, Riverdale, Orange Cove, and Kingsburg.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## CALIFORNIA, South Central

### **Fresno County**

2 W Orange Cove

**06 1650PST 0 0 5K Thunderstorm Wind**

Thunderstorm wind blew down trees and powerlines near Orange Cove in Fresno County. Further damage was caused by small hail (less than 3/4" diameter) on crops from Fresno to Visalia including the communities of Reedley...Dinuba...Orosi...Exeter...Kingsburg...and Farmersville. Fresno County estimated \$16.4M damage with \$14.8M occurring in the Reedley area alone. The following were estimated as being damaged: 4000 acres citrus...152 acres apples...127 acres grapes...and a number of other stone fruit crops.

### **Tulare County**

Sultana to  
5 E Visalia

**06 1700PST 0 0 10.5M Hail (1.00)**  
**1730PST**

The Ag Commissioner's Office reported the Sultana area of Northwest Tulare County was especially hard hit by this spring storm with hail a "quarter" in size. Moderate to severe damage occurred on 3478 acres of citrus and stone fruit...splitting the young fruit...with another 1000 acres light damage and scarring. In Visalia, a spotter reported hail generally at 3/4" but reaching up to 1" in size.

### **Madera County**

Chowchilla

**06 1835PST 0 0 Urban/Sml Stream Fld**  
**2000PST**

By 1835PST 0.75" of rain had fallen from a thunderstorm in the previous 50 minutes in Chowchilla ...streets were flooded with standing water. Total rain in the period ending by 2000 PST was 1.46".

### **Merced County**

Merced

**06 1905PST 0 0 Lightning**

Lightning strike on a tree in south Merced reported by a spotter.

### **Fresno County**

Laton to  
Fresno

**06 2000PST 0 0 50K Urban/Sml Stream Fld**  
**2230PST**

A Thunderstorm deluge caused the roof of a car wash to collapse in southeast Fresno City. As measured by ASOS at FAT 1.23" of rain fell between 1900-2000PST (0.72" between 1856-1927PST) with a storm total of 1.80". This rain and additional rainy days combined to establish a new June rainfall record for Fresno, CA, at 1.93" (the old record was 1.66" in 1939). There were numerous instances of flooded streets all over Fresno from the storm system swinging from south to north through the area. The thunderstorm activity...between gusty wind and torrential rain... led to the disruption of power to over 25,000 residents in Central Fresno County. The rainfall season total stands at 20.31"... the third wettest on record behind 1982-83 and 1968-69. Agricultural losses continue to mount. As the unusual amount of rain from June adds disease to area strawberries and vineyards. Most crops continue to be 3-6 weeks behind a normal season growth.

### **Mariposa County**

4 W Yosemite Vlg

**07 0100PST 0 0 Urban/Sml Stream Fld**  
**0700PST**

Thunderstorm activity brought sustained heavy rain up to the 8500-foot level of the Southern Sierra Nevada causing a subsequent spike in the height of the Merced River through Yosemite Valley. As measured at Pohono Bridge the height of the river climbed to 9.3 feet (up from 8.0 feet 24 hours previous) by 0400PST 6/7/98 just below the warning stage of 9.5 feet.

Fresno and neighboring counties of Kings and Tulare received widespread convective activity during the late afternoon and early evening of Saturday, June 6th. Unofficial reports of golfball sized hail occurred in the Tulare County town of Dinuba. The damage in Fresno County occurred in the west toward Kerman and areas around Orange Cove and Reedley southeast of Fresno City. Moderate to heavy hail damaged trees, vines, and tomatoes by stripping off fruit and foliage. Vegetable plants were damaged by heavy rains and mud...and some cotton by hail and heavy rain. Fungal and viral diseases were increased. The total extent of damage to citrus will not be known until the harvest.

### **Mariposa County**

Yosemite Lodge

**16 0200PST 0 0 100K Urban/Sml Stream Fld**  
**1400PST**

After the much delayed spring warming, snowmelt runoff finally began in earnest with the Merced River reaching a height of 10.5 feet in the wee hours of the morning of Monday, June 16th, with a flow of 7111CFS at the Pohono Bridge Gauge in lower Yosemite Valley. The warning stage is 9.5 feet with flood stage at 12.0 feet. Per WSOM definition the flow was contained pretty much within the Merced riverbanks with some low-lying meadows flooded near the river and precautionary evacuations of 20 campsites right on the river by the Park Service. No damage reported on the Yosemite Valley floor from the flooding although a repair in State Highway 140 just downstream of the Pohono Bridge from the January 1997 floods again failed due to the increase in water pressure from the rise in the river.

## CALIFORNIA, Southeast

NONE REPORTED.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## CALIFORNIA, Southwest

<b>Orange County</b> 6 W Dana Pt	06	1730PST 1734PST			0	0			Funnel Cloud
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<b>Orange County</b> 1 W Dana Pt	06	1805PST 1808PST			0	0			Funnel Cloud
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Cooling aloft, associated with an area of low pressure moving over the southern California coastal waters, resulted in unstable conditions during the late afternoon hours. Lifeguards spotted two funnel clouds off of Dana Point. It was estimated that the funnels remained 2000 feet above the surface of the water.

## CALIFORNIA, Upper

<b>Siskiyou County</b> Yreka	07	1745PST			0	0			Flash Flood
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Scattered heavy thunderstorms developed in the late afternoon of June 7th, mainly in eastern Siskiyou County. Rainfall ranged up to nearly two inches in just two hours. In downtown Yreka, rapid runoff flooded Main Street with three feet of water, threatening businesses and the firehouse.

<b>Modoc County</b> Newell	12	1500PST 1600PST			0	0			Urban/Sml Stream Fld
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Thunderstorms with heavy rain and small hail developed early in the afternoon across much of Modoc County. Rainfall rates exceeded an inch and a half per hour in northern Modoc County near Newell. Many cases of small stream flooding with water covering roads were reported county-wide. One house was sand-bagged for rising water.

## CALIFORNIA, West South Central

NONE REPORTED.

## CALIFORNIA, Western

NONE REPORTED.

## COLORADO, Central and Northeast

<b>Washington County</b> 6 SW Lindon	02	2351MST			0	0			Thunderstorm Wind (G52)
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<b>Lincoln County</b> 19 NNE Arriba	03	0001MST			0	0			Hail (0.75)
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**COZ035>036 Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin**

	04	2300MST			0	0	0	0	Heavy Snow
	05	1100MST							

A late season snowstorm brought heavy snow to portions of the Front Range Foothills. Allenspark, Coal Creek Canyon and Hourglass Lake picked of 5 inches of snow while Silver Spruce Ranch registered 4 inches.

<b>Lincoln County</b> 6 NE Karval	07	1440MST			0	0			Hail (1.00)
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<b>Lincoln County</b> 16 SW Hugo	07	1525MST			0	0			Hail (1.00)
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<b>Logan County</b> 5 N Sterling	07	1750MST			0	0			Hail (0.75)
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<b>Logan County</b> Iiff	07	1800MST 1807MST			0	0			Hail (1.75)
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<b>Jefferson County</b> Arvada	08	1601MST			0	0			Hail (0.88)
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<b>Jefferson County</b> .5 N Columbine	08	1657MST			0	0			Hail (1.75)
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<b>Adams County</b> Aurora	08	1658MST			0	0			Hail (1.00)
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<b>Jefferson County</b> 1 N Columbine	08	1658MST			0	0			Hail (1.00)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>COLORADO, Central and Northeast</b>									
<b>Arapahoe County</b> Littleton	08	1705MST			0	0			Hail (1.00)
<b>Arapahoe County</b> (Apa)Englwood Arapah	08	1720MST			0	0			Hail (0.75)
<b>Arapahoe County</b> 3 SE Greenwood Vlg	08	1720MST			0	0			Hail (0.75)
<b>Arapahoe County</b> 9 SW Byers	08	1735MST			0	0			Hail (0.75)
<b>Douglas County</b> Parker	08	1736MST			0	0			Hail (0.75)
<b>Elbert County</b> 2 N Elbert	08	1828MST			0	0			Hail (1.75)
<b>Weld County</b> 24 NNE New Raymer	09	1536MST 1539MST	0.1	25	0	0	0	0	Tornado (F0)
			A small landspout briefly touched down.						
<b>Sedgwick County</b> Sedgwick	09	1725MST			0	0			Thunderstorm Wind (G61)
<b>Sedgwick County</b> Sedgwick	09	1743MST			0	0			Hail (0.75)
<b>Sedgwick County</b> 5 S Ovid to 6 S Julesburg	09	1750MST 1800MST	4	100	0	0			Tornado (F1)
			A tornado touched down and snapped off power poles 5 miles south of Ovid. As the tornado moved east it damaged a farm office, flattened a small wooded garage and shifted a 30,000 bushel capacity grain bin off its foundation. The path length and width of the storm was approximated.						
<b>Washington County</b> Otis	09	1845MST	0.1	25	0	0	0	0	Tornado (F0)
			A small landspout briefly touched down.						
<b>COZ035&gt;036-038-040</b>	<b>Northern Front Range Foothills/Upper Laramie And Cache La Poudre River Basins - Southern Front Range Foothills/Clear Creek Basin - Eastern Larimer And Northwestern Weld Counties - Denver Metropolitan Area</b>								
	13	1345MST 1450MST			0	0		0	High Wind (G70)
			A strong mountain wave spawned a brief period of high winds along the Front Range. A small building was blown down atop Squaw Pass. In addition, several tree limbs were downed in and around the Denver area.						
			Peak wind gusts included: 80 mph (70 kts) atop Squaw Pass, 78 mph (68 kts) at Carter Lake, 70 mph (61 kts) 6 miles north of Masonville, 69 mph (60 kts) at Jefferson County Airport and 60 mph (52 kts) in Westminster.						
<b>Boulder County</b> Boulder	17	1445MST			0	0			Hail (0.75)
<b>Washington County</b> 17 N Anton	17	1846MST			0	0			Hail (1.00)
<b>Elbert County</b> 13 NNE Kiowa	21	1408MST	0.1	25	0	0	0	0	Tornado (F0)
<b>Arapahoe County</b> 11 W Byers	21	1414MST	0.1	25	0	0	0	0	Tornado (F0)
			Two landspouts touched down briefly.						
<b>Weld County</b> 5 WSW Hudson	22	1514MST			0	0			Hail (0.75)
<b>Weld County</b> 11 E Prospect	22	1622MST			0	0			Hail (0.75)
<b>Morgan County</b> 11 S Ft Morgan	22	1751MST			0	0			Hail (0.75)
<b>Morgan County</b> Wiggins	22	1827MST			0	0			Thunderstorm Wind (G58)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>COLORADO, Central and Northeast</u></b>									
<b>Morgan County</b> 15 SE Ft Morgan	22	1830MST			0	0			Hail (0.75)
<b>Weld County</b> 3 N Prospect	22	1856MST			0	0			Hail (1.50)
<b>Washington County</b> Otis	22	2036MST			0	0			Hail (1.75)
<b>Morgan County</b> 3 NW Orchard	22	2235MST			0	0			Hail (1.00)
<b>Weld County</b> 3 E Masters	22	2300MST			0	0			Hail (2.75)
					Large hail broke the windshield of a semi-truck. Some crop damage was also reported.				
<b>Morgan County</b> 1 NW Weldona	22	2326MST			0	0			Hail (0.88)
<b>Morgan County</b> 2 NE Weldona	22	2337MST			0	0			Hail (1.00)
<b>Morgan County</b> 2 N Ft Morgan	22	2344MST			0	0			Hail (1.75)
<b>Morgan County</b> 1 NE Hillrose	27	0027MST			0	0			Hail (0.75)
<b>Jefferson County</b> 2 SSE Evergreen	30	1254MST			0	0	0		Hail (1.00)
<b>Washington County</b> 9 NE Akron	30	1450MST			0	0			Hail (0.88)
<b><u>COLORADO, East Central</u></b>									
<b>Kit Carson County</b> 10 N Flagler	03	0017MST			0	1	100K		Thunderstorm Wind (G80)
					Thunderstorm microburst winds estimated around 90 mph rolled and destroyed mobile home with man inside sustaining cuts and bruises. Another home in the vicinity suffered roof damage. Part of a shed wall was ripped apart and another part buckled. An empty grain bin was lifted and tossed into a tree windbreak. There was minor damage to trees and corrals.				
<b>Kit Carson County</b> 7 NE Peconic	03	0115MST			0	0			Thunderstorm Wind (G64)
					Wind accompanied by dime size hail.				
<b>COZ090&gt;092</b>					<b>Yuma County - Kit Carson County - Cheyenne County</b>				
	06	0300MST 0800MST			0	0			Extreme Cold
					Record cold early morning temperatures with lows near or slightly below freezing in most locations. Tender crops and garden suffered unknown damage. It was the coldest for so late in the season at a few locations.				
<b>Yuma County</b> 1 W Clarkville	07	1613MST			0	0			Hail (0.75)
<b>Yuma County</b> 12 E Clarkville	07	1623MST			0	0			Thunderstorm Wind (G70)
					Estimated 80 mph wind. Also, 3/4 inch hail and winds to 50 mph 8 E of Clarkville at 1637 MST.				
<b>Yuma County</b> Clarkville	07	1630MST			0	0	20K		Hail (1.75)
					Golfball hail and strong winds broke house windows and did \$13,000 damage to 2 vehicles.				
<b>Kit Carson County</b> Flagler	07	1635MST			0	0			Hail (0.88)
<b>Kit Carson County</b> 5 W Seibert	07	1641MST			0	0			Hail (1.75)
					Also, observed wall cloud to the south.				
<b>Yuma County</b> 8 E Clarkville	07	1648MST			0	0			Hail (1.75)
					Also, 1.10 inch of rainfall.				
<b>Yuma County</b> 2 NW Clarkville	09	1903MST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b><u>COLORADO, East Central</u></b>									
Brief gustnado observed by spotter.									
<b>Yuma County</b> Yuma	22	2110MST			0	0	1M		Hail (2.75)
Hail up to baseball size damaged windows, windshields, roofs, siding, and vehicles. Hail started as dime size at 2100 MST.									
<b>Yuma County</b> 12 E Yuma	22	2130MST			0	0	50K		Hail (1.75)
At Eckley, golfball to baseball size hail damaged windows, vehicles, and roofs. At 4S of Eckley, a house suffered window and skylight damage and a calf sustained a spinal cord injury due to hail.									
<b>Yuma County</b> 7.5 W Wray	22	2152MST			0	0			Hail (1.50)
Hail grew to golfball size at 2200 MST.									
<b>Yuma County</b> 1 NW Wray	22	2157MST	0.1	20	0	0			Tornado (F0)
Brief tornado in open area observed by off duty NWS employee.									
<b>Yuma County</b> Wray	22	2230MST			0	0	50K		Hail (2.75)
Baseball size hail broke windows and windshields.									
<b>Cheyenne County</b> 13 N Arapahoe	29	1650MST			0	0			Hail (2.00)
<b>Yuma County</b> 5 N Yuma	30	1625MST			0	0			Hail (1.00)
<b>Yuma County</b> 4 W Kirk	30	1646MST			0	0			Hail (1.25)
<b>Yuma County</b> 2 S Kirk	30	1650MST			0	0			Hail (1.00)
<b><u>COLORADO, South Central and Southeast</u></b>									
<b>El Paso County</b> Black Forest	04	1430MST 1435MST			0	0			Hail (0.75)
<b>El Paso County</b> 4 S Yoder	04	1504MST 1509MST			0	0			Hail (1.50)
<b>Prowers County</b> Lamar Arpt	07	1600MST			0	0			Thunderstorm Wind (G54)
<b>Baca County</b> 19 SE Campo	07	2000MST 2005MST			0	0			Hail (1.75)
<b>Las Animas County</b> Ville Green to 3 NE Ville Green	07	2215MST 2220MST	3	200	0	0	30K		Tornado (F1)
A tornado touched down shortly after 11 p.m. on the 7th near Villegreen. It destroyed a barn and outbuildings on the Lester Jackson Ranch. Fences 3 miles northeast of Jackson Ranch through Snake and Cherry Canyons were destroyed.									
<b>El Paso County</b> 4 S Rush	08	1845MST 1850MST			0	0			Hail (0.75)
<b>El Paso County</b> Rush	14	1511MST 1516MST			0	0			Hail (1.00)
<b>Las Animas County</b> 25 NNE Kim	14	1835MST 1840MST			0	0			Hail (0.75)
<b>El Paso County</b> Yoder	20	2130MST 2135MST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>COLORADO, South Central and Southeast</b>									
<b>Teller County</b>									
Florissant	21	1445MST 1450MST			0	0			Hail (0.75)
<b>El Paso County</b>									
Falcon	21	1457MST 1502MST			0	0			Hail (0.75)
<b>El Paso County</b>									
Monument	21	1530MST 1535MST			0	0			Hail (0.75)
<b>El Paso County</b>									
2 S Calhan	21	1535MST 1540MST			0	0			Hail (1.00)
<b>El Paso County</b>									
Cascade	21	1548MST 1553MST			0	0			Hail (0.75)
<b>El Paso County</b>									
6 NNW Colorado Spgs	21	1601MST 1606MST			0	0			Hail (1.00)
<b>El Paso County</b>									
10 E Colorado Spgs	21	1640MST			0	0			Thunderstorm Wind (G52)
<b>Las Animas County</b>									
25 NNE Kim	21	1714MST 1719MST			0	0			Hail (0.75)
<b>Pueblo County</b>									
2 SSW Pueblo	21	1755MST 1800MST			0	0			Hail (1.50)
<b>Baca County</b>									
7 NW Springfield	21	1815MST 1820MST			0	0			Hail (0.75)
<b>Pueblo County</b>									
Boone	21	1827MST 1832MST			0	0			Hail (0.75)
<b>Baca County</b>									
2 NE Springfield	21	1850MST 1855MST			0	0			Hail (1.75)
<b>Crowley County</b>									
5 NW Ordway	21	1920MST 1925MST			0	0			Hail (1.00)
<b>Crowley County</b>									
Sugar City	21	1933MST 1938MST			0	0			Hail (0.75)
<b>COZ071</b>									
		<b>Southern El Paso County/Colorado Springs And Vicinity</b>							
	24	0800MST 0900MST			0	0			High Wind (G84)
<p>A mountain wave set up over the Pikes Peak region, bringing down damaging winds to Manitou Springs and western Colorado Springs. Gusts to 62 knots were reported in Manitou Springs, the Air Force Academy, and in the Broadmoor area of southwest Colorado Springs. A peak gust of 84 knots was reported at the Colorado Springs Country Club, just east of Cheyenne Mountain. Many small trees were uprooted and fences partially blown down in the Broadmoor area. A roof was partially ripped off a house near Fort Carson. In the same area, on Highway 115, a semi trailer truck was blown on its side.</p>									
<b>El Paso County</b>									
6 E Colorado Spgs	29	2045MST 2050MST			0	0			Hail (0.75)
<b>El Paso County</b>									
3 E Colorado Spgs	29	2050MST 2055MST			0	0			Hail (1.00)
<b>El Paso County</b>									
Falcon	29	2055MST 2100MST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>COLORADO, South Central and Southeast</u></b>									
<b>El Paso County</b> 3 E Peyton	29	2105MST 2110MST			0	0			Hail (0.75)
<b>El Paso County</b> 5 NE Peyton	29	2115MST 2120MST			0	0			Hail (1.50)
<b>El Paso County</b> 3 SW Calhan	29	2128MST 2133MST			0	0			Hail (0.75)
<b>El Paso County</b> 3 W Ellicott	29	2129MST 2134MST			0	0			Hail (0.75)
<b>El Paso County</b> 11 SE Calhan	29	2145MST 2150MST			0	0			Hail (0.75)
<b>El Paso County</b> 5 S Ellicott	29	2145MST 2150MST			0	0			Hail (1.00)
<b>El Paso County</b> 5 S Ellicott	29	2155MST 2200MST			0	0			Hail (1.25)
<b>El Paso County</b> Security	29	2155MST 2200MST			0	0			Hail (1.25)
<b>El Paso County</b> 15 S Rush	29	2305MST 2310MST			0	0			Hail (1.75)
<b>Teller County</b> 5 NE Cripple Creek	29	2345MST 2350MST			0	0			Hail (1.00)
<b>El Paso County</b> Fountain	30	0250MST			0	0			Hail (0.75)
<b>El Paso County</b> Fountain	30	0254MST 0259MST			0	0			Hail (0.75)
<b>Pueblo County</b> Pueblo West	30	0309MST 0314MST			0	0			Hail (0.75)
<b>Pueblo County</b> 12 N Pueblo	30	0346MST 0351MST			0	0			Hail (1.00)
<b>Custer County</b> 4 SW Wetmore	30	1410MST 1415MST			0	0			Hail (1.00)
<b>Pueblo County</b> Colorado City	30	1545MST 1550MST			0	0			Hail (0.88)
<b>Pueblo County</b> Colorado City	30	1555MST 1600MST			0	0			Hail (0.88)
<b>Las Animas County</b> 7 ESE Kim	30	1855MST 1900MST			0	0			Hail (0.75)

**COLORADO, West**

**COZ003>004**

**Roan And Tavaputs Plateaus - Elkhead And Park Mountains/Flat Tops/White River Plateau**  
 17 0100MST  
 18 0100MST  
 Heavy Snow

An unseasonably cold upper low produced 4 to 8 inches of snow in the mountains of northwest Colorado between the 8000 and the

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## COLORADO, West

9500 foot level as well as 8 to 12 inches of snow above the 9500 foot level.

**COZ007 Debeque Rifle Glenwood Springs Corridor**  
 17 1300MST 0 0 0.50K High Wind  
 1400MST

Strong post-frontal winds blew down about a dozen trees at the Battlement Mesa golf course.

**COZ021 Four Corners/Upper Dolores River/Cortez And Vicinity**  
 17 1445MST 0 1 200K High Wind

Strong post-frontal winds blew over a tandem tractor-trailer rig hauling a load of computers on U.S. highway 666 about 21 miles south-southwest of Cortez.

## CONNECTICUT, Northeast

### Windham County

**Putnam**  
 14 1330EST 0 0 Flood  
 15 0500EST

### CTZ002

**Hartford**  
 16 1330EST 0 0 Flood  
 20 0130EST

The Five Mile River in Putnam, in Windham County (a small stream), was in flood from 2:30 PM on June 14th through 6 AM on June 15th. The Connecticut River reached flood stage of 16 feet at Hartford at 2:30 PM on June 16th, crested at 17.30 feet at 8 PM on the 18th, then fell below flood stage at 2:30 AM on June 20th.

### Tolland County

**Stafford Spgs**  
 18 1830EST 0 0 Heavy Rain  
 A portion of Route 190 was closed for 30 minutes due to street flooding, common for that location.

### Windham County

**Windham**  
 20 1315EST 0 0 Hail (1.00)  
 A severe thunderstorm produced one inch diameter hail in Windham. A report of nickel size hail was received from the neighboring town of Scotland.

### Hartford County

**Southington**  
 30 1710EST 0 0 Flood  
 2359EST

### Hartford County

**Hartford**  
 30 2045EST 0 0 Flood  
 2359EST

An area of heavy showers and thunderstorms associated with a slow moving warm front brought 2 to 4 inches of rainfall, resulting in urban street, basement, small stream, and river flooding in Hartford County. The Quinnipiac River, a small stream, reached flood stage of 3.5 feet in Southington at 6:10 PM on June 30th, crested at 4.24 feet at 8:39 PM, and continued in flood through midnight. The South Branch of the Park River, a small stream in Hartford, reached flood stage of 9 feet at 9:45 pm on June 30th, crested at 9.85 feet at 10:30 PM, and continued in flood through midnight. Also at 9:45 PM, in West Hartford, the Trout Brook went over its banks flooding nearby areas. Urban street flooding was reported with water four feet deep on Pen Drive and one foot deep in some other areas.

## CONNECTICUT, Northwest

### Litchfield County

**Bridge Water**  
 30 1900EST 0 0 1K Thunderstorm Wind

### Litchfield County

**South Portion**  
 30 1900EST 0 0 15K Flash Flood  
 2000EST

### Litchfield County

**Washington**  
 30 1900EST 0 0 8K Thunderstorm Wind

### Litchfield County

**Woodbury**  
 30 1901EST 0 0 1.5K Thunderstorm Wind

### Litchfield County

**Salisbury**  
 30 1920EST 0 0 1K Thunderstorm Wind

### Litchfield County

**Waterbury Arpt**  
 30 1920EST 0 0 2K Thunderstorm Wind

A cold front triggered several severe thunderstorms across Litchfield County. The thunderstorms blew down trees in several places across the county. At Washington, a downburst blew down several large trees. Torrential rains produced flash flooding at Woodbury and Roxbury.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **CONNECTICUT, Southern**

<b>Middlesex County</b>									
<b>East Haddam</b>	<b>02</b>	<b>2325EST</b>			<b>0</b>	<b>0</b>			<b>Lightning</b>

As thunderstorms moved east across the area, they produced frequent lightning.

Lightning struck near the chimney of a house on Salem Road. It ignited a fire that destroyed about a third of the house's roof and a large portion of its' second story.

<b>Fairfield County</b>									
<b>Countywide</b>	<b>13</b>	<b>1200EST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>14</b>	<b>0300EST</b>							

<b>New Haven County</b>									
<b>Countywide</b>	<b>13</b>	<b>1300EST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>14</b>	<b>0400EST</b>							

<b>Middlesex County</b>									
<b>Countywide</b>	<b>13</b>	<b>1400EST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>14</b>	<b>0500EST</b>							

<b>New London County</b>									
<b>Countywide</b>	<b>13</b>	<b>1500EST</b>			<b>0</b>	<b>0</b>			<b>Heavy Rain</b>
	<b>14</b>	<b>0600EST</b>							

A low pressure system over the Great Lakes on Saturday, June 13th moved southeast and redeveloped just south of New York City Sunday morning, June 14th. It then moved east of the area during Sunday.

Rain began across the area from 3 am to 6 am on June 12th and didn't end until Sunday evening on June 14th. There were at least two bursts of heavy rain during this 3 day period, which saw rainfall amounts from 1 to just over 6 inches across the region. Heavy downpours caused localized flooding of streets, low-lying and poor drainage areas.

Here are selected rainfall amounts for:

- o Fairfield County - At Bridgeport, 3.36 inches of rain was measured.
- o New Haven County - from 1.22 inches at Meriden to 2.33 inches at Madison.
- o New London County - from 2.40 inches at Lebanon to 6.34 inches at Norwich.

<b>New London County</b>									
<b>Taftville</b>	<b>13</b>	<b>1619EST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>

Preceded by a steady light to occasionally moderate rainfall, a line of thunderstorms developed and moved east over the area. Thunderstorms produced torrential rains and frequent lightning.

Torrential rains resulted in widespread small stream flooding. The Shetucket River in Taftville overflowed its' banks and caused flooding. In addition, many crops of strawberries in East Lyme and almost 2000 bales of hay in Pawcatuck were damaged from heavy rainfall.

<b>New London County</b>									
<b>Northeast Portion</b>	<b>18</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>

Slow moving thunderstorms produced heavy rain that caused flooding of small streams in Northeast New London County. In addition, lightning struck a barn in Killingly at Bailey Hill Road. This stroke resulted in the death of 2 horses.

<b>New London County</b>									
<b>Jewett City</b>	<b>19</b>	<b>1730EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **CONNECTICUT, Southern**

<b>New London County Preston</b>	<b>19</b>	<b>1820EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
<b>Middlesex County Portland</b>	<b>19</b>	<b>1830EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>

A cluster of thunderstorms moved slowly southeast over the area. They produced torrential rain which caused extensive street flooding. A spotter from Griswold reported 1.55 inches of rain in 30 minutes.

Thunderstorms also produced strong gusty winds and lightning. A spotter from Colchester reported a wind gust to 56 mph at 4:46 pm EST. A house was struck by lightning in Griswold. The extent of the damage is unknown.

<b>New London County Voluntown</b>	<b>20</b>	<b>1340EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>New London County Franklin</b>	<b>20</b>	<b>1344EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.50)</b>
<b>New Haven County Cheshire</b>	<b>20</b>	<b>1525EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>

Severe thunderstorms moved slowly east over the area. They produced large hail, torrential rain that caused localized flooding, and frequent lightning.

<b>New Haven County Naugatuck</b>	<b>30</b>	<b>0800EST</b>			<b>0</b>	<b>0</b>			<b>Lightning</b>
<b>Middlesex County Middletown</b>	<b>30</b>	<b>0837EST</b>			<b>0</b>	<b>0</b>			<b>Lightning</b>
<b>New Haven County Wallingford</b>	<b>30</b>	<b>1420EST 2359EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
<b>New Haven County Wolcott</b>	<b>30</b>	<b>1830EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>New Haven County Orange to New Haven</b>	<b>30</b>	<b>1847EST 1900EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
<b>Middlesex County Killingworth</b>	<b>30</b>	<b>1848EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
<b>Fairfield County Sherman</b>	<b>30</b>	<b>1900EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
<b>New London County Montville</b>	<b>30</b>	<b>1918EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
<b>Middlesex County Deep River</b>	<b>30</b>	<b>1920EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
<b>New London County Lyme</b>	<b>30</b>	<b>1929EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.25)</b>
<b>Middlesex County Killingworth</b>	<b>30</b>	<b>1930EST</b>	<b>0.1</b>	<b>33</b>	<b>0</b>	<b>0</b>			<b>Tornado (F1)</b>
<b>New London County Lyme</b>	<b>30</b>	<b>1930EST</b>	<b>0.1</b>	<b>17</b>	<b>0</b>	<b>0</b>			<b>Tornado (F1)</b>
<b>New London County Salem</b>	<b>30</b>	<b>1931EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Middlesex County Chester</b>	<b>30</b>	<b>1945EST</b>	<b>0.1</b>	<b>33</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>
<b>New Haven County Milford</b>	<b>30</b>	<b>1945EST</b>			<b>0</b>	<b>0</b>			<b>Lightning</b>



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## CONNECTICUT, Southern

<b>New Haven County</b> Branford to Guilford	30	2015EST			0	0			Thunderstorm Wind (G50)
<b>New London County</b> North Stonington	30	2015EST			0	0			Thunderstorm Wind (G50)

Two rounds of thunderstorms affected the area.

During the morning, thunderstorms produced frequent lightning and heavy rain. Lightning struck:

- o a house at 109 Celetano Drive in the Ridge Subdivision of Naugatuck. Lightning struck the side of the house and damaged a bedroom wall.
- o a house on Saybrook Road in Middletown.

Heavy rain caused the Quinnipiac River at Wallingford to rise above its' flood stage from June 30th at 2:20 pm EST until July 1st at 12:35 pm EST. The crest stage of 7.60 feet occurred at midnight and was 0.60 feet above flood stage.

During the afternoon and evening, severe thunderstorms produced high winds including 3 weak tornadoes, large hail, and frequent lightning as they moved northeast across the area.

In New Haven County, high winds downed many trees in New Haven, Guilford, and Branford. Some trees fell into a house in New Haven. Lightning struck and damaged the bell tower of the Mary Taylor United Methodist Church in Milford.

In Middlesex County, two weak tornadoes were confirmed by NWS Staff. A funnel cloud was observed from North Branford to Montville. The funnel cloud touched down briefly in Chatfield Hollow State Park near Killingworth then lifted briefly before touching down again in Chester near the intersection of Spring and Prospect Streets. Damage consisted primarily of downed trees and power lines. High winds downed other trees across the county.

In New London County, an F1 tornado was confirmed by the NWS at the intersection of Day Hill Road and Rte. 148 in Lyme. This touch down area is in line with the F1 tornado in Chatfield State Park in Killingworth and the F0 tornado in Chester of Middlesex County. Tree tops were twisted near Ferry Road in Hadlyme. Near the intersection of Day Hill Road and Rte. 148, the trees were twisted off a few feet from the ground. This damage pattern continued to the east-northeast through a field to just near Rte. 82. Damage consisted primarily of downed trees and power lines.

## DELAWARE

### **New Castle County** Brandywine

01	0004EST			0	0			Thunderstorm Wind (G56)
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A squall line of severe thunderstorms caused wind damage across northern New Castle County hitting Brandywine Hundred the hardest. About 28,000 homes and businesses lost power. Power was not completely restored until June 3rd. About 50 poles were knocked down along with hundreds of trees. The lack of power forced some schools to cancel classes on the 1st. Downed trees and wires were reported in Pike Creek and Wilmington. The worst damage occurred within Brandywine Hundred. The Talleyville Fire Company responded to seventy calls alone. There were at least four homes damaged by fallen trees. The Forest Hill Park development was cut off as all roads leading in and out were blocked by downed trees. Other hard hit areas within Brandywine included Carrcroft and Sharpley.

### **Kent County** Countywide

01	0030EST 0100EST			0	0			Thunderstorm Wind (G50)
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A squall line of severe thunderstorms produced widely scattered pockets of wind damage throughout the county. A few trees were knocked down.

### **New Castle County** Hockessin to Bellefonte

02	1955EST 2005EST			0	0			Thunderstorm Wind (G50)
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A severe thunderstorm knocked down several trees and wires across the northern part of New Castle County.

### **New Castle County** Greenville

12	0748EST			0	0	0		Tstm Wind/Hail
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A thunderstorm knocked down some branches and small limbs around Greenville in New Castle County. About 1,000 homes and businesses lost power.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>DELAWARE</b>									
<b>New Castle County Newport</b>	12	2230EST			0	0	0		<b>Lightning</b>
	Thunderstorms with frequent lightning moved through New Castle County during the late evening of the 12th. A lightning strike forced the evacuation of 700 General Motors employees at the Newport Plant. The plant suffered minimal damage. Lightning also knocked two of the three channels in the county police's radio system off the air. Delmarva Power and Light reported about 6,300 customers lost power throughout the peninsula that evening.								
<b>Kent County Hartly to Little Creek</b>	13	1633EST 1650EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down several trees in widely scattered pockets mainly in the northern half of Kent County. The Delaware state highway department had to make about three dozen dispatches to clear trees from roadways throughout the state.								
<b>New Castle County 1 N Red Lion</b>	13	1645EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down several trees in and around Bear. The Delaware state highway department had to make about three dozen dispatches to clear trees from roadways throughout the state.								
<b>Sussex County Bethel to Lewes</b>	13	1650EST 1725EST			0	0			<b>Thunderstorm Wind (G71)</b>
<b>Sussex County Dagsboro to Bethany Beach</b>	13	1725EST 1730EST			0	0	0	0	<b>Funnel Cloud</b>
	A severe thunderstorm knocked down trees and power lines, mainly in the southern half of Sussex County. A wind gust to 82 mph was reported by the Pilot Tower at Cape Henlopen. Tents were knocked over at the Delmarva Chicken Festival in Millsboro, but no injuries were reported. About 3,000 homes and businesses lost power mostly in the southwest part of the county. The Delaware state highway department had to make about three dozen dispatches to clear trees from roadways throughout the state. As the thunderstorms approached the shore, funnel clouds were sighted in Bethany Beach and Dagsboro and along the Indian River Inlet. They apparently did not touch down.								
<b>Sussex County Delmar</b>	16	1935EST			0	0			<b>Hail (1.00)</b>
	In addition to the quarter size hail, the SKYWARN spotter estimated wind gusts in excess of 50 mph.								
<b>Kent County Milford</b>	16	1945EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down a few trees and wires in Milford.								
<b>DEZ001 New Castle</b>	25	0900EST			1	0			<b>Excessive Heat</b>
	26	1800EST							
	F84OT								
<b>DEZ002&gt;003 Kent - Inland Sussex</b>	25	0900EST			0	0			<b>Hot Spell</b>
	26	1800EST							
	A two day hot spell brought some of the highest temperatures of the summer to the Delmarva Peninsula and ended abruptly with severe thunderstorms during the late afternoon and early evening of the 26th. The excessive heat caused the death of an 84-year-old Wilmington woman. The highest temperatures occurred on the 26th and included 95 degrees in Greenwood and Georgetown (both Sussex County), 94 degrees in Bridgeville (Sussex County) and Wilmington (New Castle County) and 93 degrees at the New Castle County Airport.								
<b>Kent County Dover</b>	26	1600EST			0	0	1.5M		<b>Thunderstorm Wind (G70)</b>
	A severe thunderstorm blasted the Dover area with hurricane force gusts and caused about \$1.5 million dollars in property damage. No serious injuries were reported. The wind gusted to 80 mph at Dover Air Force Base. Seventeen homes, four apartment buildings, one commercial building and one townhouse were damaged. The northwest section of Dover bore the brunt of the severe thunderstorm. The thunderstorm peeled two-thirds of the roof off the Whatcoat Village Apartments. The families were evacuated and the building condemned. A large part of the roof was also peeled from the Wedgewood Apartments. In nearby West Dover 100-year-old oaks were uprooted and sheared. A multi-story addition was smashed by massive oak and holly trees. At least one vehicle was crushed by a tree. About 15,000 homes and businesses lost power throughout the state. It took until the next morning to get everyone around Dover back on line.								
<b>Kent County Marydel to Milford</b>	26	1725EST 1800EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A second severe thunderstorm took down power lines, tree limbs and trees diagonally across Kent County from Marydel southeast								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## DELAWARE

through Milford. About 15,000 homes and businesses lost power throughout the state.

<b>Sussex County Greenwood</b>	26	1725EST			0	0	0	0	<b>Funnel Cloud</b>
<b>Sussex County Greenwood to Milton</b>	26	1736EST 1800EST			0	0			<b>Thunderstorm Wind (G50)</b>
A severe thunderstorm cut across the northern half of Sussex County from Greenwood east to Milford and knocked over power lines, trees and tree limbs. About 15,000 homes and businesses lost power throughout the state. A funnel cloud was sighted by a meteorologist near Greenwood, but it apparently never touched down.									
<b>Sussex County Greenwood to Dagsboro</b>	26	1910EST 1940EST			0	0			<b>Thunderstorm Wind (G55)</b>

A second severe thunderstorm took down trees, power lines and limbs across southern Sussex County from Greenwood east through Dagsboro. About 15,000 homes and businesses lost power throughout the state with the hardest hit area in Sussex County around Millsboro.

## DISTRICT OF COLUMBIA

<b>District Of Columbia Northwest Portion to Northeast Portion</b>	02	1833EST 1838EST			0	0			<b>Hail (1.00)</b>
<b>District Of Columbia Northeast Portion</b>	02	1835EST			0	0	10K		<b>Thunderstorm Wind</b>
The combination of an upper-level disturbance, increasing atmospheric shear, and ample instability set the stage for scattered severe weather across the District of Columbia during the evening. Individual mini-supercell storms developed over western Maryland, northern Virginia, and eastern West Virginia, and propagated east-southeast towards the metropolitan region. One cell crossed the city, producing hail across the northern half which ranged from 0.5" to 1" in diameter. Peripheral thunderstorm winds gusted in excess of 20 knots at Washington/National Airport (DCA); stronger winds in town caused damage to large tree limbs across some neighborhoods in Northeast.									

<b>District Of Columbia Northwest Portion</b>	13	1440EST			0	0	15K		<b>Thunderstorm Wind</b>
<b>District Of Columbia Northeast Portion</b>	13	1443EST			0	11			<b>Lightning</b>

A vigorous upper-level disturbance acted upon increasingly warm and humid air near the surface to produce a squall line of strong to severe thunderstorms west of the metropolitan region during the early afternoon. This line moved rapidly east, passing through the District of Columbia and surrounding communities before 1500EST. As the line crossed Northwest, numerous trees and large limbs fell, blocking several roads.

The day will be remembered for a devastating lightning strike at RFK stadium, where a crowd of 66,000 had gathered for the Tibetan Freedom Concert. Though ample warning was provided to stadium officials, there was no place for those standing away from the protected portion of the venue to seek shelter. Lightning struck ahead of the storm cell, injuring 11 persons. Four of the injured were taken to DC General Hospital; one was critically injured, another was initially in fair condition, and two other were in good condition. The other seven persons were treated at the scene. The concert was suspended immediately after the lightning strike.

Potomac Electric Power Co. reported over 100 customers were without power during the peak of the storm.

<b>District Of Columbia Northeast Portion</b>	15	1635EST 1640EST			0	0	10K		<b>Thunderstorm Wind</b>
The juxtaposition of a northward-moving cold front, strong surface low pressure over the midwest, and a fast upper-level jet combined to produce a severe thunderstorm which rumbled through the city during the late afternoon. Damage included downed trees and large limbs mainly across Northeast, concentrated near the Maryland line in the Brookland neighborhood. The strong winds may have blown out windows in buildings on Franklin Street, NE. Hail, of unknown size, also fell across portions of town.									
<b>District Of Columbia Northwest Portion</b>	23	2045EST 2130EST			0	0	10K		<b>Flash Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## DISTRICT OF COLUMBIA

A slow-moving line of thunderstorms dumped between 2.4 and 3 inches of rain over Washington and the immediate suburbs. Rock Creek came out of its banks, and a vehicle with two occupants became stuck - requiring emergency rescue operations.

## FLORIDA, East Central

### **FLZ041-045-047**

#### **Volusia - Orange - Brevard**

<b>01</b>	<b>0000EST</b>			<b>1</b>	<b>0</b>			<b>Excessive Heat</b>
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**30 0000EST**

A deep high pressure ridge persisted across the Gulf of Mexico and Florida throughout most of the June and into early July. It resulted in several long stretches of record breaking high temperatures. Melbourne had 22 days, Orlando had 12 days and Daytona Beach had 13 days where high temperature records were either tied or broken. Melbourne had four 100 degree or greater days. Orlando had three and Daytona Beach had nine. It was also very dry during this period. Melbourne received only 3 percent of its normal rainfall. Orlando received 22 percent and Daytona received 14 percent. On June 24th a 38 year old Orlando man was found unconscious on the ground next to his bicycle. He was taken to an emergency room where his body temperature was measured at 111 degrees. He died at 2:58 pm. M38OU

#### **Brevard County**

<b>Cocoa</b>	<b>07 1415EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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#### **Brevard County**

<b>Rockledge</b>	<b>07 1440EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
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#### **Okeechobee County**

<b>Okeechobee</b>	<b>12 2015EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
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Thunderstorm winds blew down trees in the Town of Okeechobee.

#### **St. Lucie County**

<b>5 SW Ft Pierce</b>	<b>17 1146EST</b>			<b>0</b>	<b>0</b>			<b>Funnel Cloud</b>
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A funnel cloud was sighted 5 miles southwest of Ft. Pierce.

#### **Osceola County**

<b>3 SE St Cloud</b>	<b>18 1545EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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#### **Lake County**

<b>Altoona</b>	<b>19 1405EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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Dime size hail also fell in the Astor Park area.

#### **Lake County**

<b>Okahumpka</b>	<b>19 1405EST</b>			<b>0</b>	<b>0</b>	<b>14K</b>		<b>Thunderstorm Wind (G60)</b>
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Thunderstorm winds blew down trees and billboards and overturned a tractor trailer on the Florida Turnpike.

#### **Orange County**

<b>Bithlo</b>	<b>19 1610EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Thunderstorm winds blew down small trees in the Bithlo area.

#### **St. Lucie County**

<b>Ft Pierce</b>	<b>20 1400EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Thunderstorm winds blew down power lines in Ft. Pierce.

#### **Okeechobee County**

<b>Okeechobee</b>	<b>20 1505EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G50)</b>
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Thunderstorm winds damaged awnings and carports on mobile homes in Okeechobee.

#### **Orange County**

<b>Orlando</b>	<b>20 1815EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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#### **Brevard County**

<b>Titusville</b>	<b>21 1518EST</b>			<b>0</b>	<b>0</b>	<b>40K</b>		<b>Thunderstorm Wind (G50)</b>
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Thunderstorm winds damaged a pier and the roof of a restaurant in Titusville.

#### **Volusia County**

<b>Deltona</b>	<b>21 1522EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind (G60)</b>
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Thunderstorm winds blew down lots of trees and power lines in Deltona.

#### **Brevard County**

<b>Titusville Airpark</b>	<b>21 1545EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
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Thunderstorm winds produced a wind gust to 81 MPH at Titusville Airpark.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, East Central</b>									
<b>Martin County</b> Port Mayaca	21	1743EST			0	0			Hail (1.75)
<b>Volusia County</b> Deltona	24	1453EST			0	0			Hail (0.88)
<b>Volusia County</b> 3 W Daytona Beach	25	1328EST			0	0			Hail (1.75)
<b>Lake County</b> Lady Lake	29	1400EST			0	1			<b>Lightning</b> A 65 year old woman was struck and knocked unconscious by lightning while entering her home through a sliding glass door.
<b>Lake County</b> Tavares	29	1650EST			0	0			Hail (2.00)
<b>Lake County</b> Tavares	29	1710EST			0	0	150K		<b>Thunderstorm Wind (G60)</b> Thunderstorm winds blew the bay doors out at a car dealership. Winds blew down a church steeple, damaged two mobile homes.
<b>Lake County</b> Howey In The Hills	29	1655EST			0	2			<b>Lightning</b> A man and a woman were injured when lightning struck the truck they were loading. The man was holding the tailgate and the woman was standing by the door when lightning hit the truck. Both required brief hospitalisation.
<b>Volusia County</b> Deltona	30	1910EST			0	0			<b>Thunderstorm Wind (G50)</b> Thunderstorm winds blew down three large trees in Deltona. Dime size hail fell in Cassadaga.
<b>FLORIDA, Northeastern</b>									
<b>FLZ025</b>	<b>Duval</b> 05	1600EST			0	1			<b>Excessive Heat</b> A 54-year-old male collapsed while riding his bicycle on Third Street in Jacksonville Beach.
<b>Union County</b> Worthington	18	1715EST			0	0	2.5K		<b>Thunderstorm Wind</b> Large trees and power lines were blown down near HWY 18 & 239A.
<b>Alachua County</b> Micanopy	18	1730EST			0	0	1K		<b>Thunderstorm Wind</b> Large trees and power lines were blown down.
<b>Marion County</b> Lowell	18	1730EST			0	0	20K		<b>Thunderstorm Wind</b> Large trees and power lines were blown down. Boat house destroyed.
<b>Marion County</b> Fairfield	18	1752EST			0	0			Hail (0.88)
<b>Alachua County</b> Gainesville	18	1800EST			0	0			Hail (0.75)
<b>Marion County</b> Orange Lake	18	1800EST			0	0			Hail (0.75)
<b>Alachua County</b> Wacahoota	18	1855EST			0	0			Hail (0.75)
<b>Marion County</b> Ocala	19	1520EST			0	0	3.5K		<b>Thunderstorm Wind</b> Large trees and power lines were blown down along SR 301.
<b>St. Johns County</b> Elkton	19	1630EST			0	0	0.50K		<b>Thunderstorm Wind</b> Large trees were blown down along CR 13.
<b>Clay County</b> Orange Park	19	1720EST			0	0			Hail (0.88)
<b>Duval County</b> Jacksonville	19	1732EST			0	0			Hail (0.75)
<b>St. Johns County</b> Bakersville	19	1745EST			0	0	2K		<b>Thunderstorm Wind</b> Large trees were blown down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, Northeastern</b>									
<b>St. Johns County</b>									
Elkton	19	1820EST			0	0	4K		Thunderstorm Wind
			Shed destroyed.						
<b>Clay County</b>									
Middleburg	19	1830EST			0	0	20K		Thunderstorm Wind
			Store damaged.						
<b>Baker County</b>									
Macclenny	19	1900EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Nassau County</b>									
Yulee	19	1900EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Duval County</b>									
Jacksonville	19	1915EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Gilchrist County</b>									
2 S Bell	22	1620EST			0	0			Hail (0.75)
<b>Gilchrist County</b>									
Bell	22	1620EST			0	0			Thunderstorm Wind (G60)
<b>Gilchrist County</b>									
4 E Bell to Bell	22	1630EST			0	0	1.5K		Thunderstorm Wind
			Large trees were blown down.						
<b>Gilchrist County</b>									
5 NE Trenton	22	1630EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Gilchrist County</b>									
Trenton	22	1645EST			0	0			Hail (0.75)
<b>Columbia County</b>									
Winfield	23	1445EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Nassau County</b>									
Evergreen	23	1500EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Duval County</b>									
Baldwin	23	1630EST			0	0			Hail (0.75)
<b>Duval County</b>									
Baldwin	23	1630EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down East of US-310.						
<b>Baker County</b>									
Macclenny	23	1700EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Marion County</b>									
Anthony	24	1503EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Putnam County</b>									
Bostwick	24	1507EST			0	0			Hail (0.88)
<b>Putnam County</b>									
Bostwick	24	1507EST			0	0	2.5K		Lightning
			Wildfire.						
<b>Marion County</b>									
Ocala to 5 S Ocala	24	1520EST			0	0	2.5K		Thunderstorm Wind
			Large trees were blown down.						
<b>Clay County</b>									
Lake Geneva	24	1522EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, Northeastern</b>									
<b>Marion County Dunnellon</b>	24	1730EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down along HWY 41 North of HWY 40.						
<b>Marion County Romeo</b>	24	1730EST			0	0			Hail (1.00)
<b>Flagler County Bunnell</b>	25	1230EST 1340EST			0	0			Lightning
			Fourty seven lightning realted fire calls at 911 center.						
<b>Flagler County 6 W Bunnell</b>	25	1230EST			0	0			Thunderstorm Wind (G70)
<b>Flagler County Bunnell</b>	25	1250EST			0	0			Hail (0.75)
<b>Flagler County Bunnell</b>	25	1250EST			0	0	25K		Thunderstorm Wind
			Large trees were blown down. One mobile home destroyed.						
<b>Putnam County Palatka</b>	25	1323EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Flagler County Bunnell</b>	25	1350EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Duval County Arlington</b>	25	1400EST			0	0	3K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Duval County Jacksonville</b>	25	1400EST			0	0			Hail (0.88)
<b>Nassau County Callahan</b>	25	1430EST			0	0	15K		Thunderstorm Wind
			Large trees were blown down. One mobile home damaged.						
<b>St. Johns County Bakersville</b>	25	1430EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Clay County Green Cove Spgs</b>	25	1500EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Bradford County Starke</b>	25	1600EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Baker County Macclenny</b>	25	1640EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Columbia County Lake City</b>	25	1640EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Suwannee County Live Oak</b>	25	1655EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Suwannee County Obrien</b>	25	1655EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Alachua County Alachua</b>	25	1700EST			0	0	25K		Thunderstorm Wind
			Large trees and power lines were blown down. Roof damage on several homes.						
<b>Columbia County Columbia</b>	25	1715EST			0	0	15K		Thunderstorm Wind
			Large trees and power lines were blown down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, Northeastern</b>									
<b>Gilchrist County</b>									
Trenton	25	1745EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Suwannee County</b>									
Dowling Park	27	1530EST			0	0	5K		Thunderstorm Wind
			Shed destroyed. Large trees were blown down.						
<b>Hamilton County</b>									
Genoa	27	1600EST			0	0	1.5K		Thunderstorm Wind
			Large trees were blown down.						
<b>Marion County</b>									
Dunnellon	27	1610EST			0	0	15K		Thunderstorm Wind
			Roof blown off barn.						
<b>Suwannee County</b>									
Houston	27	1630EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Alachua County</b>									
Archer	27	1722EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Nassau County</b>									
Hilliard	28	1634EST			0	0			Hail (0.75)
<b>Columbia County</b>									
Lake City	28	1745EST			0	0			Hail (1.00)
<b>Suwannee County</b>									
Live Oak	28	1845EST			0	0	1K		Thunderstorm Wind
			Large trees were blown down.						
<b>Suwannee County</b>									
Wellborn	28	1915EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Hamilton County</b>									
Jasper	28	1921EST			0	0			Hail (0.75)
<b>Alachua County</b>									
Hawthorne	29	1600EST			0	0	0.50K		Thunderstorm Wind
			Large tree were blown down.						
<b>Bradford County</b>									
Starke	29	1600EST			0	0	0.30K		Thunderstorm Wind
			Large tree limbs were blown down.						
<b>Union County</b>									
Lake Butler	29	1605EST			0	0	0.30K		Thunderstorm Wind
			Large tree limbs were blown down.						
<b>Nassau County</b>									
Callahan	29	1630EST			0	0	2.5K		Thunderstorm Wind
			Large tree and power lines were blown down.						
<b>Putnam County</b>									
Interlachen	29	1646EST			0	0			Hail (0.88)
<b>Baker County</b>									
Sanderson	29	1702EST			0	0	10K		Thunderstorm Wind
			Mobile home damaged.						
<b>Duval County</b>									
Jacksonville	29	1710EST			0	0	2.5K		Thunderstorm Wind
			Large tree and power lines were blown down in Western sections of the county.						
<b>Columbia County</b>									
Columbia	29	1803EST			0	0			Hail (0.75)
<b>Columbia County</b>									
Columbia	29	1830EST			0	0	3.5K		Thunderstorm Wind
			Large tree and power lines were blown down. Two buildings with roof damage.						



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, Northwest</b>									
<b>Wakulla County Southwest Portion</b>	<b>01</b>	<b>0000EST</b>			<b>0</b>	<b>2</b>			<b>Wild/Forest Fire</b>
	<b>30</b>	<b>0000EST</b>							Lightning strikes and numerous hot spots ignited new wildfires in the Apalachicola National Forest. A temporary shelter was established in Crawfordville. Eight to ten homes were threatened in the Smith Creek area, just north of Sopchoppy. Two firefighters sustained heat-related injuries. Approximately 24,621 acres of timberland were destroyed since the Holiday Fire erupted on May 25.
<b>Jackson County Sneads</b>	<b>05</b>	<b>1850EST</b>	<b>0.2</b>	<b>.1</b>	<b>0</b>	<b>0</b>	<b>5K</b>		<b>Tornado (F0)</b>
									Apparent gustnado caused minor damage to a local restaurant.
<b>Walton County Southwest Portion</b>	<b>06</b>	<b>0220EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
									Trees and power lines down as well as debris across Florida Highway 20 near Eglin Air Force Base.
<b>Liberty County Southwest Portion</b>	<b>11</b>	<b>1200EST</b>			<b>0</b>	<b>0</b>			<b>Wild/Forest Fire</b>
	<b>27</b>	<b>1900EST</b>							Several small wildfires were ignited by lightning: five acres consumed in the Juniper Creek Island area; two acres scorched in the Prison Rd area; and 60 acres destroyed along the Liberty-Franklin County line off SR 67. No homes were threatened.
<b>Lafayette County Day</b>	<b>18</b>	<b>1300EST</b>			<b>0</b>	<b>0</b>			<b>Wild/Forest Fire</b>
	<b>19</b>	<b>0900EST</b>							Wildfires consumed 75 acres of timberland along the northeastern edge of the San Pedro Bay fire complex, about three miles west of Day. No homes were threatened. A local state of emergency was declared for Lafayette County on June 18.
<b>Madison County Northeast Portion</b>	<b>18</b>	<b>1300EST</b>			<b>0</b>	<b>0</b>			<b>Wild/Forest Fire</b>
	<b>19</b>	<b>1700EST</b>							A 35-acre wildfire threatened several homes off CR 145, northeast of Madison. No damage or injuries were reported. A smaller fire burned three acres off CR 146, about five miles northwest of Madison. Cherry Lake and Madison VFDs responded.
<b>Walton County Southwest Portion</b>	<b>18</b>	<b>1400EST</b>			<b>0</b>	<b>1</b>			<b>Wild/Forest Fire</b>
	<b>20</b>	<b>1900EST</b>							A 100-acre fire in Lake Pippin Estates in Okaloosa County crossed into Walton County. SR 20 was closed until containment. One firefighter was injured. Approximately 50 homes were threatened, but none were damaged.
<b>Jefferson County Monticello</b>	<b>18</b>	<b>1915EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
									Dime sized hail and a few trees down.
<b>Taylor County Northeast Portion</b>	<b>19</b>	<b>1500EST</b>			<b>0</b>	<b>0</b>			<b>Wild/Forest Fire</b>
	<b>30</b>	<b>2000EST</b>							Lightning sparked three wildfires in the sparsely-populated 50,000-acre San Pedro Bay Forest, six miles northeast of Perry, consuming 30,213 acres. The Division of Forestry, Jefferson and Taylor County F.D., National Guard, and numerous state forestry departments, totalling more than 125 personnel, fought the blazes. A local state of emergency was declared for Taylor County on June 20.
<b>Dixie County Southeast Portion</b>	<b>19</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>			<b>Wild/Forest Fire</b>
	<b>30</b>	<b>1900EST</b>							Lightning ignited several wildfires in the sparsely-populated California Swamp Forest, about seven miles north of Suwannee, consuming 234 acres. A local state of emergency was declared for Dixie County on June 26.
<b>Madison County Greenville</b>	<b>19</b>	<b>1650EST</b>			<b>0</b>	<b>0</b>	<b>1K</b>		<b>Thunderstorm Wind</b>
<b>Holmes County Central Portion</b>	<b>19</b>	<b>1924EST</b>			<b>0</b>	<b>0</b>	<b>1K</b>		<b>Thunderstorm Wind</b>
									Straight-line winds downed trees along Florida Highways 160, 179, and 181 in Holmes County. Straight-line winds downed large trees on Interstate Highway 10 just east of U.S. Highway 221 near Greenville in Madison County.
<b>Walton County Darlington</b>	<b>19</b>	<b>1945EST</b>	<b>1</b>	<b>.2</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## FLORIDA, Northwest

Tornado touchdown at the junction of Florida Highway 2 and U.S. Highway 331 about five miles southwest of Darlington. Numerous pine tree tops snapped.

**Walton County**  
**Caney Creek**

19	2018EST	1	.2	0	0				<b>Tornado (F0)</b>
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Tornado touchdown at the intersection of Caney Creek and Florida Highway 2 just near Caney Creek. Numerous pine tree tops snapped.

**Franklin County**  
**Apalachicola Arpt**

20	1130EST 1800EST			0	0				<b>Wild/Forest Fire</b>
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A 60-acre wildfire erupted at the intersection of Gibson and Airport Rds, near the Apalachicola Municipal Airport. The fire was contained with a few hot spots remaining. No homes were threatened.

**Walton County**  
**De Funiak Spgs**

20	1525EST			0	0				<b>Hail (0.75)</b>
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Dime sized hail and large tree down at Bob Sykes Road.

**Bay County**  
**Fountain**

20	1750EST			0	0				<b>Hail (0.75)</b>
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Dime sized hail.

**Gulf County**  
**Southeast Portion**

20	1600EST			0	0				<b>Wild/Forest Fire</b>
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23  
2000EST

Lightning-ignited wildfires became a fast-moving crown fire in the Depot Creek area, about eight miles east of Port St. Joe. Considerable smoke and ash closed US 98. 30 firefighters battled the blazes. After containment, approximately 1,300 acres were consumed. No homes were threatened.

**Lafayette County**  
**Hatchbend**

22	1615EST			0	0	1K			<b>Thunderstorm Wind</b>
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Trees down in Hatchbend. One large tree down in front of a residence on Florida Highway 349.

**Calhoun County**  
**Blountstown**

22	1730EST			0	0	5K			<b>Thunderstorm Wind</b>
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Several downed power lines just north of Florida Highway 20 near Blountstown and along Highway 20 west about 15 miles west of Clarksville.

**Calhoun County**  
**Southeast Portion**

23	1800EST			0	0				<b>Wild/Forest Fire</b>
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24  
2100EST

Lightning sparked two major wildfires, one near the junction of SR 71 and SR 73, and the other near Scotts Ferry. 121 acres were destroyed. No homes were threatened.

**Madison County**  
**Southwest Portion**

23	1805EST			0	0	10K			<b>Thunderstorm Wind</b>
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Billboard sign destroyed and numerous trees down on back roads south of Interstate Highway 10.

**Jefferson County**  
**Central Portion**

25	1730EST			0	0	2K			<b>Thunderstorm Wind</b>
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**Leon County**  
**Northwest Portion**

25	1900EST			0	0	1K			<b>Thunderstorm Wind</b>
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Trees down near CR 12 in Leon County. Numerous trees and power lines down along Florida Highway 65 from Hosford to Sumatra in Liberty County. Downed trees and power lines at the intersection of Florida Highway 259 and U.S. Highway 27 in Jefferson County.

**Liberty County**  
**Hosford to  
Northwest Portion**

25	1930EST			0	0	10K			<b>Thunderstorm Wind</b>
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**Bay County**  
**Southport**

26	1430EST			0	0				<b>Wild/Forest Fire</b>
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30  
2000EST

Lightning sparked several brushfires in the towns of Southport, Highland Park, Bayou George, and Cedar Grove. The largest, Southport, scorched 49 acres. A total of 84 acres was consumed. No homes were threatened.

## FLORIDA, Southern

**Monroe County**  
**Key West**

08	0730EST 0745EST			0	0				<b>Waterspout</b>
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Weather observer sighted waterspout 2nm north of Key West International Airport. Movement was toward the west at 7 MPH.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>FLORIDA, Southern</b>									
<b>Monroe County</b> Key West	08	1123EST			0	0			<b>Funnel Cloud</b>
									Weather observer sighted funnel cloud 5nm northwest of Key West International Airport.
<b>Broward County</b> Ft Lauderdale	08	1644EST 1650EST			0	0			<b>Waterspout</b>
									Pilot reported waterspout 5nm east of Dania.
<b>Dade County</b> Miami Beach	09	1530EST			1	1			<b>Rip Currents</b>
									Elderly couple swimming near 1600 block of Collins Ave. Lifeguards rescued female about 150 yards offshore. Male was found drowned 30 yards offshore. M70IW
<b>Broward County</b> Pembroke Pines	11	1315EST 1330EST			0	0			<b>Funnel Cloud</b>
									Several funnel clouds reported by residents near I-75 and Pines Blvd.
<b>Collier County</b> East Naples	11	1700EST 1720EST			0	0			<b>Funnel Cloud</b>
									Observed at Everglades Blvd/16 TH Ave. Showers were moving to the southwest as funnel cloud came close to but did not touch ground.
<b>Palm Beach County</b> 22 E (Pbi)Palm Beach Arpt	17	0605EST			0	0			<b>Waterspout</b>
									Pilot reported.
<b>Glades County</b> Palmdale	17	1815EST 1830EST	0.1	25	0	0			<b>Tornado (F0)</b>
									F0 tornado touched down in field. No damage reported.
<b>Monroe County</b> Key West Intl Arpt	18	0640EST 0655EST			0	0			<b>Funnel Cloud</b>
									Funnel reported by NWS meteorologist 3nm south of KEYW.
<b>Monroe County</b> Key West	18	1410EST 1420EST	0.3	20	0	0	15K		<b>Tornado (F0)</b>
									Funnel cloud moved onshore and lowered resulting in a F0 tornado. The tornado moved along 10th ST between North Roosevelt Ave and Flagler Ave. Tree were toppled...roofs and awnings were damaged...powerlines were downed and a shack was tipped over.
<b>Monroe County</b> Key West	18	1410EST 1435EST			0	0			<b>Waterspout</b>
									Several waterspouts reported from 5 - 10 miles north of Key West. Reports came from several sources.
<b>Monroe County</b> Key West	18	1830EST 1835EST			0	0			<b>Funnel Cloud</b>
									Funnel cloud observed 4 miles north of Key West.
<b>Collier County</b> Marco	19	1200EST			1	0			<b>Rip Currents</b>
									34 year old male drowned at Tigertail Beach on Marco Island. His 3 year old son was rescued between Tigertail Beach and San d Dolllar Beach. Actual time of event unknown. M34IW
<b>Monroe County</b> Key West Intl Arpt	19	1645EST 1700EST			0	0			<b>Funnel Cloud</b>
									Funnel cloud observed 3nm north of KEYW. Showers producing funnel were moving slowly west.
<b>Collier County</b> Immokalee to Marco	19	2000EST 2040EST			0	0			<b>Thunderstorm Wind (G55)</b>
									Numerous trees and powerlines were downed over western Collier County.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>FLORIDA, Southern</u></b>									
<b>Monroe County</b> Key Largo	20	1500EST 1530EST			0	0			Funnel Cloud
			Funnel cloud observed 2nm south of Mile Marker 100.						
<b>Glades County</b> Moore Haven	21	1719EST 1730EST	0.2	25	0	0			Tornado (F0)
			Tornado was reported by a sheriff's deputy. F0 tornado touched down in a sugar cane field near the intersection of US27 and CR710. Minor damage to powerlines.						
<b>Palm Beach County</b> Palm Beach	23	1330EST 1345EST			0	0			Funnel Cloud
			Funnel cloud spotted by trained weather spotter. The funnel cloud was located 1nm northeast of the Breakers Hotel. The showe r producing the funnel was moving to the east at 8 knots.						
<b>Collier County</b> North Naples	23	1720EST 1730EST			0	0			Funnel Cloud
			Funnel cloud reported by Collier County EOC near Pine Ridge Rd.						
<b>Broward County</b> Miramar	25	1345EST			1	0			Lightning
			A 38-year-old woman was struck by lightning in her backyard under a avacado tree. It was not raining at the time. The bolt struc k her in the belt buckle. At the 3700 block of SW 1232nd Ave. F38UT						
<b>Palm Beach County</b> Lake Worth	25	1345EST 1400EST			0	0			Funnel Cloud
			Funnel cloud spotted near the intersection of the Florida Turnpike and Lake Worth Rd.						
<b>Palm Beach County</b> Lake Worth	25	1500EST			0	0			Thunderstorm Wind (G55)
			Patio screening was destroyed. A tree fell and damaged carport. Time estimated.						
<b>Hendry County</b> La Belle	28	1720EST 1740EST			0	0			Hail (1.75)
<b>Dade County</b> Cutler Ridge	29	1219EST 1225EST			0	0			Thunderstorm Wind (G55)
			Large Oak tree and Black Olive tree blown over on SW 168th ST and US1.						
<b>Broward County</b> Davie to Ft Lauderdale	30	1515EST 1600EST			0	0			Thunderstorm Wind (G60)
			Wind damage first thought to be a tornado at 3400 block of SW 18th St. Trees and powerlines downed. Pea-sized hail along storm path. Wing gust 43 knots measured at Fort Lauderdale International Airport a couple miles east of storm cell.						
<b>Broward County</b> Ft Lauderdale	30	1530EST 1545EST			0	0			Thunderstorm Wind (G55)
			Public reported wind gusts to 55 knots with trees down 3400 block of SW 18th St. Fort Lauderdale International Airport recorded wind gust to 44 knots. Media reports of pea-sized hail and tree limbs down around Fort Lauderdale.						
<b><u>FLORIDA, West Central</u></b>									
<b>Lee County</b> Ft Myers	03	0822EST			1	0	0	0	Heat
			The Lee County Health Department reported that an eleven month old female, left unattended in an unventilated, non-airconditioned room, died from the affects of heat in Ft Myers. F1PH						
<b>Lee County</b> North Ft Myers	13	2015EST			1	0	0	0	Heat
			The Lee County Health Department reported that 46 year-old man was found dead from the affects of heat and alcohol in the back of a closed van on the 15000 block of North Cleveland Avenue. M46VE						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, West Central</b>									
<b>Hillsborough County</b>									
Mango	19	1415EST			0	1	0	0	Lightning
A male was struck and injured by lightning in Mango.									
<b>Hillsborough County</b>									
Seffner	19	1430EST			0	1	0	0	Lightning
A female was struck and injured by lightning in Seffner.									
<b>Polk County</b>									
2 W Lakeland	19	1447EST			0	0	0	0	Hail (1.25)
Half dollar sized hail was reported near the intersection of U.S. Highway 92 (W. Memorial Boulevard) and N. Wabash Avenue in Lakeland by a Skywarn Spotter.									
<b>Polk County</b>									
2 NW Lakeland	19	1452EST			0	0	0	0	Hail (1.75)
Golfball sized hail was reported at the Kathleen High School in Lakeland.									
<b>Polk County</b>									
Lake Wales	20	1430EST			0	0	15K	0	Lightning
Lightning struck, ignited and burned 500 acres of brush west of U.S. Highway 27 between Caloosa Lake and East Lake Buffum Road in Lake Wales.									
<b>Citrus County</b>									
5 NW Inverness to Floral City	20	1430EST			0	0	15K	0	Thunderstorm Wind
Thunderstorm winds damaged the roof of a boat dock and downed several large trees along U.S. Highway 41 in Floral City. Also, thunderstorm winds downed a few small trees and limbs near the intersection of U.S. Highway 41 and State Road 486.									
<b>Sumter County</b>									
5 W Lake Panasoffkee to 5 W Bushnell	21	1255EST 1300EST			0	0	20K	0	Thunderstorm Wind
Thunderstorm winds downed a few trees and numerous branches and damaged the lanais of a couple of homes in rural, semi-wooded western Sumter county.									
<b>Hernando County</b>									
Brooksville	21	1300EST			0	0	20K	0	Thunderstorm Wind
Thunderstorm wind downed several large trees along the U.S. Highway 41 corridor between U.S. Highway 98 and County Road 476. A home and a truck were damaged by wind toppled trees in Brooksville.									
<b>Citrus County</b>									
5 NW Inverness	21	1315EST			0	0	10K	0	Thunderstorm Wind
Thunderstorm winds downed several large trees in the Heathwood Estates subdivision northwest of Inverness.									
<b>Hillsborough County</b>									
6 NW Tampa	21	1350EST			0	1	0	0	Lightning
A male was struck and injured by lightning while steering a metal grocery cart in the parking lot of a grocery store on U.S. Highway 92 (Dale Mabry) and County Road 587A (Waters Avenue).									
<b>Hillsborough County</b>									
9 NNW Tampa	21	1405EST			0	0	0	0	Hail (0.75)
Dime sized hail was reported near the intersection of U.S. Highway 92 (Dale Mabry) and State Road 579 (Fletcher Avenue).									
<b>Hillsborough County</b>									
Lutz	21	1410EST			0	0	2K	0	Thunderstorm Wind
Skywarn Spotters reported thunderstorm winds downed two large trees and snapped off the tops of a few others along U.S. Highway 92 (Dale Mabry) in Lutz.									
<b>Pasco County</b>									
Land O Lakes	21	1418EST			0	0	5K	0	Thunderstorm Wind
Thunderstorm winds downed several large trees in Land O' Lakes.									
<b>Hillsborough County</b>									
6.5 NE Tampa	21	1426EST			0	0	0	0	Hail (0.75)
Dime sized hail was reported near the intersection of State Road 580 (Busch Boulevard) and 48th Street by a Skywarn Spotter.									
<b>Hillsborough County</b>									
3 S Plant City	21	1430EST			1	0	1K	0	Thunderstorm Wind
Thunderstorm winds snapped a large 500-pound, 15 inch oak branch which fell atop and killed a 71 year old female while she walked along a sidewalk near the 6300 block of State Road 39 in Plant City. F71UT									
<b>Polk County</b>									
1 N Polk City	21	1528EST			0	0	0	0	Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## FLORIDA, West Central

Dimed sized hail was reported near State Road 544 and County Road 655 by a Skywarn Spotter.

### Polk County

1 N Polk City

21	1530EST					1	2	0	0	<b>Lightning</b>
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Under partial sunshine, sideflash from a lightning bolt of a distant thunderstorm struck and killed a 47 year old male, injured a 27 year old male and a 20 year female while they stood within 15 feet of a seven foot tall wooden pole on the 300 block of West Fussell Road north of Polk City. The lightning bolt struck the pole which was part of a pole barn under construction next to a 30 foot tall tree.

The lightning strike blew off the boots of the injured female and knocked to the ground the 27 year old injured male. M47OT

### Polk County

Polk City

21	1545EST					0	0	25K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds damaged the roof of a carport and tore down screen walls of the lanai of a home in Polk City. A few commercial buildings received roof damage from the thunderstorm wind which also downed telephone poles and lines.

### Charlotte County

Punta Gorda

22	1755EST					0	0	10K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds caused minor roof damage to four aged mobile homes and downed several tree limbs in Punta Gorda.

### Levy County

7 S Williston

22	1825EST					0	0	1K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds downed a few trees along U.S. Highway 41 and State Road 326.

### Lee County

Cape Coral

22	1845EST					0	0	5K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds downed several large palm trees, uprooted several small fruit trees and blew a trampoline through a screen pool enclosure in Cape Coral.

### Polk County

8 S Lake Wales

22	1915EST					0	0	5K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds tore off the screened porch of a mobile home and destroyed the carport of another.

### Hillsborough County

Ruskin

22	2115EST 2130EST					0	0	100K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds toppled four large trees which fell atop and crushed two mobile homes and damaged a third mobile home along U.S. Highway 41 and the Little Manatee River in Ruskin. A few additional small trees and numerous branches were downed by thunderstorm wind along 7th Street south of U.S. Highway 41 in Ruskin.

### Pinellas County

Pinellas Park

22	2225EST 2230EST					0	0	125K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds caused minor to moderate damage to numerous carports at the Pinecrest Mobile Home Park on the 2500 block of 52nd Avenue North in Pinellas Park. Several additional large trees and limbs were downed near the intersection of 58th Avenue and 31st Street.

### Levy County

Williston

23	1835EST					0	0	0	0	<b>Hail (0.75)</b>
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### Levy County

Williston

23	1850EST					0	0	250K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds caused significant wind damage to roofs, siding, awnings and overhangs of several homes in Williston. Thunderstorm winds also downed several street signs, large trees and power lines throughout Williston.

### Levy County

Williston

23	1850EST					0	0	0	0	<b>Hail (1.75)</b>
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Golfball sized hail was reported by the Williston police department.

### Levy County

1 S Williston

23	1900EST					0	0	10K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds blew off the roof of a home on NE 150th Avenue near County Road 316.

### Levy County

Otter Creek to  
Gulf Hammock

23	1905EST					0	0	25K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds downed trees and power lines from Otter Creek to Gulf Hammock.

### Hillsborough County

Brandon to  
Seffner

23	2045EST					0	0	10K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds downed several large trees and limbs from Brandon north to Seffner.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, West Central</b>									
<b>Polk County</b> Bradley Jct	23	2100EST			0	0	5K	0	<b>Thunderstorm Wind</b> Thunderstorm winds downed six 65 foot tall wood power poles and several large trees along State Road 37 near the Bradley Junction Power Plant.
<b>Polk County</b> Bradley Jct to 20 E Lake Wales	23	2100EST 2130EST			0	0	75K	0	<b>Lightning</b> Lightning struck and ignited nearly 40 wildfires which burned nearly 5,000 acres of brush and severely damaged a few homes and sheds in the Indian Lakes Estates.
<b>Pinellas County</b> 1.5 S St Petersburg	23	2148EST			0	6	0	0	<b>Lightning</b> Six firefighters, loading equipment after extinguishing a fire, were injured by the sideflash of a lightning bolt that struck a nearby palm tree and concrete sidewalk during a dissipating thunderstorm on the 800 block of 17th Avenue South in St Petersburg. One of the firefighters received second degree burns on his arms and toes from the lightning strike. The lightning bolt left a hole the size of a football in the concrete sidewalk it struck.
<b>Pinellas County</b> St Petersburg	23	2150EST 2230EST			0	0	150K	0	<b>Heavy Rain</b> Heavy rain caused significant water damage to property of three businesses that were undergoing renovation in the Northeast Shopping Center near U.S. Highway 92 (4th Street N.) and County Road 184 (38th Avenue N.). Water damage from the heavy rain caused rug, floor tile and ceiling tile damage to the buildings.
<b>Pinellas County</b> Largo	23	2217EST			0	1	0	0	<b>Lightning</b> Lightning struck and injured a male on the 15000 block of George Boulevard in Largo.
<b>Pinellas County</b> Pinellas Park	23	2218EST			0	0	0	0	<b>Hail (0.75)</b>
<b>Pinellas County</b> Pinellas Park	23	2218EST			0	0	5K	0	<b>Thunderstorm Wind (G57)</b> A thunderstorm wind gust of 65 mph was observed at County Road 501 (Belcher Road) and State Road (Ulmerton Road) by a Skywarn Spotter. Several small trees, limbs and power lines were downed by the thunderstorm winds in Pinellas Park.
<b>Pinellas County</b> Pinellas Park	23	2252EST			0	1	0	0	<b>Lightning</b> A female was struck and her eyes injured by the sideflash of lightning that struck a nearby tree along the 8800 block of 40th Lane North in Pinellas Park.
<b>Citrus County</b> 6 NW Crystal River	24	1600EST			0	0	10K	0	<b>Lightning</b> Lightning ignited several brushfires along U.S. Highway 19 near County Road 488.
<b>De Soto County</b> Arcadia	24	1658EST			0	0	10K	0	<b>Tstm Wind (G45)</b> Thunderstorm winds blew off the metal roof of a home on the 2800 block of Northeast Washington Street in Arcadia.
<b>Hardee County</b> 4 N Wauchula	24	1700EST			0	0	5K	0	<b>Tstm Wind (G45)</b> Thunderstorm winds blew off the porch of a home and damaged an adjacent mobile home on the 700 block of State Road 62.
<b>Pasco County</b> 5 NE New Port Richey to New Port Richey	24	1825EST 1840EST			0	0	25K	0	<b>Thunderstorm Wind</b> Thunderstorm winds downed several large trees which severely damaged a few mobile homes in the Moon Lake Estates five mile s northeast of New Port Richey to Bass Lake in New Port Richey.
<b>Pasco County</b> Land O Lakes to 2 S Zephyrhills	24	1830EST 1845EST			0	0	0	0	<b>Lightning</b> Lightning ignited a wildfire and burned nearly a thousand acres of brush.
<b>Hernando County</b> 15 E Brooksville	24	1830EST			0	0	0	0	<b>Tstm Wind (G45)</b> Thunderstorm winds downed a tree in Ridge Manor.
<b>Hillsborough County</b> 1 N Brandon	24	1849EST			0	0	0	0	<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA, West Central</b>									
			Dime sized hail was reported near the intersection of Interstate 75 and State Road 574 (Martin Luther King Boulevard) by a Skywarn Spotter.						
<b>Pinellas County</b> 2 SW St Petersburg	24	1940EST			0	1	0	0	<b>Lightning</b>
			A male was struck and injured by lightning on the 4900 block of Bacopa Lane South.						
<b>Lee County</b> North Ft Myers	24	2208EST			1	0	0	0	<b>Heat</b>
			The Lee County Health Department reported that a 44 year-old male died from the combined affects of heat and alcohol in an enclosed parked van in North Ft Myers. M44VE						
<b>Hillsborough County</b> 7 SW Tampa	27	1141EST			0	0	0	0	<b>Waterspout</b>
			A waterspout was observed over Old Tampa Bay near U.S. Highway 92 (Gandy Bridge).						
<b>Pasco County</b> Land O Lakes	27	1213EST			0	0	0	0	<b>Hail (1.00)</b>
			Quarter sized hail was observed in Land O' Lakes.						
<b>Manatee County</b> 2 E Parrish	27	1305EST			0	0	1K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds downed a few power lines in Parrish.						
<b>Polk County</b> 2 S Bartow	27	1400EST			0	0	0	0	<b>Lightning</b>
			Lightning ignited and burned two and a half acres of brush on Old Homeland Road two miles south of Bartow.						
<b>Citrus County</b> 6 NW Inverness	27	1530EST			0	0	150K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds damaged thirteen homes in the Citrus Hills subdivision. Six homes incurred minor to moderate roof and shingle damage while seven had minor damage to lanais and pool cages. Several large one to two foot wide oak trees were snapped at the base by thunderstorm winds along Falconry Court Road.						
<b>Pasco County</b> 2 W Zephyrhills	27	1555EST			0	0	0	0	<b>Hail (0.88)</b>
			Nickel sized hail was reported along State Road 54 and Dean Dairy Road.						
<b>Citrus County</b> Crystal River	27	1600EST			0	0	20K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds blew off the roof of a commercial building along U.S. Highway 19.						
<b>Pasco County</b> 2 W Zephyrhills	27	1600EST			0	0	5K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds damaged the roof of a mobile home and toppled a shed in the Sandalwood mobile home park near the intersection of Dianthus and Zinnia Streets.						
<b>Citrus County</b> 1 SW Crystal River	27	1605EST			0	0	0	0	<b>Waterspout</b>
			A waterspout was observed in Kings Bay.						
<b>Citrus County</b> 4 SW Homosassa Spgs to Beverly Hills	27	1630EST 1640EST			0	0	40K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds downed two large trees along Yulee Drive near the Homosassa River. In Beverly Hills, thunderstorm winds downed several large trees, power lines and toppled carpools near S. Fillmore Street and Rose Avenue.						
<b>Lee County</b> 9 SE Ft Myers	28	1630EST			0	0	20K	0	<b>Lightning</b>
			Lightning struck and damaged four pieces of electrical equipment of the control tower at the Regional Southwest International Airport in Ft Myers.						
<b>Manatee County</b> 4 N Bradenton	29	1345EST			0	0	10K	0	<b>Thunderstorm Wind</b>
			Thunderstorm winds damaged the roofs of a couple of homes and downed several large trees and branches in Ellenton.						
<b>Pinellas County</b> 5 W St Petersburg	29	1437EST			0	0	0	0	<b>Hail (0.75)</b>
			Dime sized hail was reported in Gulfport by a Skywarn Spotter.						
<b>Pinellas County</b> 3 S St Petersburg	29	1445EST			0	0	0	0	<b>Hail (1.75)</b>



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## FLORIDA, West Central

Golfball sized hail was reported over the southern portion of St Petersburg.

### **Citrus County**

<b>1 NE Inverness to 3 SE Inverness</b>	29	1445EST			0	0	50K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds damaged an aluminum and screened pool enclosure on Ren Place near the Inverness Golf and Country Club . Thunderstorm winds also downed several large trees and damaged the roofs of a few homes along South Waterview Drive on Gospel Island, one mile northeast of Inverness.

### **Citrus County**

<b>3 E Floral City</b>	29	1555EST			0	0	250K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds damaged the roofs of 23 homes, downed trees atop a few vehicles, snapped several large branches and downed power lines along Trails End Road.

### **Pasco County**

<b>11 NE New Port Richey</b>	29	1600EST			1	0	0	0	<b>Lightning</b>
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Lightning struck and killed a 25 year-old male standing in a field along the 18000 block of Lester Dairy Road near the intersection of U.S. Highway 41 and State Road 54.  
M25OU

### **Charlotte County**

<b>3 SE Englewood</b>	30	0100EST 0105EST			0	0	0	0	<b>Waterspout</b>
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A waterspout was observed over Lemon Bay near the mouth of Buck Creek.

### **Charlotte County**

<b>3 SE Englewood</b>	30	0105EST	0.1	5	0	0	0	0	<b>Tornado (F0)</b>
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A waterspout over Lemon Bay moved onshore and dissipated near the intersection of County Road 775 and Buck Creek.

### **Hillsborough County**

<b>4 NW Brandon</b>	30	1533EST			1	0	0	0	<b>Lightning</b>
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A 26 year-old male was struck and killed by lightning while working on a third story roof along Princess Palm Avenue in Sabe 1 Park.  
M26OU

### **Manatee County**

<b>Myakka City</b>	30	1550EST			0	0	10K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds caused extensive damage to a roof of a mobile home in Myakka City.

### **Polk County**

<b>Ft Meade</b>	30	1630EST			0	0	5K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds uprooted two large trees which fell atop and damaged the roof of a home along the 4300 block of U.S. Highway 92 in Ft Meade.

### **Polk County**

<b>1 S Bartow</b>	30	1658EST			0	0	5K	0	<b>Thunderstorm Wind</b>
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Thunderstorm winds downed several large oak trees in Bartow.

### **Polk County**

<b>1 S Bartow</b>	30	1710EST			0	0	0	0	<b>Hail (0.75)</b>
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Dime sized hail was reported by the Bartow police department.

### **Polk County**

<b>5 N Bartow</b>	30	1722EST			0	0	0	0	<b>Hail (0.75)</b>
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Dime sized hail was reported in Highland City by a Skywarn Spotter.

### **Polk County**

<b>5 SW Lakeland</b>	30	1750EST			0	0	200K	0	<b>Thunderstorm Wind (G50)</b>
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A thunderstorm wind gust of 58 mph was observed at the Lakeland Municipal Airport. Nearly 15,000 homes and businesses lost electrical power from wind blown branches that fell atop and downed power lines in Lakeland.

## FLORIDA, West Panhandle

### **Escambia County**

<b>Countywide</b>	05 06	2345CST 0030CST			0	0	150K		<b>Thunderstorm Wind (G60)</b>
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A line of severe thunderstorms moved across the county between 1145 pm and 1230 am. Trees and power lines were blown down throughout the county. Most structural damage occurred between Molino and Century where five structures were damaged. The winds turned a mobile home over near Molino where an 89 year old male lived. He suffered minor scratches and refused medical treatment.

### **Santa Rosa County**

<b>Countywide</b>	06	0010CST 0100CST			0	0	150K		<b>Thunderstorm Wind (G60)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## FLORIDA, West Panhandle

A line of severe thunderstorms moved through the county between 1210 am and 100 am. Trees and power lines were blown down throughout the county. Most of the damage occurred in the central and south part of the county. Fifteen structures suffered minor damage as a result of high winds and trees falling on them in the Pace area. No injuries were reported.

### **Okaloosa County** Countywide

<b>06</b>	<b>0030CST 0130CST</b>			<b>0</b>	<b>0</b>	<b>4M</b>		<b>Thunderstorm Wind (G61)</b>
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A line of severe thunderstorms moved through the county between 1230 am and 130 am. Trees and power lines were blown down throughout the county. Most of the damage occurred in the south part of the county. Hurlburt field reported a gust of 70 mph and Eglin reported a gust of 59 mph. On Eglin Air Force Base the wind damaged three aircraft. One of the aircraft was picked up and blown across a barrier. This aircraft suffered the most damage. A spokesman estimated wind gusts of 92 mph near where the aircraft were damaged. Some minor structural damage occurred in Valparaiso and Niceville. No injuries were reported.

### **Santa Rosa County** Berrydale to Munson

<b>23</b>	<b>1454CST 1500CST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind (G50)</b>
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Two trees were blown down between Berrydale and Munson.

## GEORGIA, East Central

### **Columbia County** Harlem

<b>04</b>	<b>1914EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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EPD reported trees down.

### **Lincoln County** Lincolnton

<b>09</b>	<b>1725EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G65)</b>
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EPD reported many trees down in Pleasantville subdivision.

### **Richmond County** Hephzibah

<b>10</b>	<b>1650EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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Public reported trees down.

### **Richmond County** Hephzibah

<b>10</b>	<b>1656EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Hail (0.75)</b>
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Public reported dime size hail.

### **Richmond County** 18 SSW Augusta to 18 SSE Augusta

<b>10</b>	<b>1710EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Hail (0.75)</b>
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SKYWARN spotter reported 3/4 inch hail south of Hephzibah near the Burke county line.

### **Burke County** 1 N Waynesboro to Girard

<b>10</b>	<b>1815EST 1830EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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Utility company reported trees and powerlines down.

### **Meduffie County** Thomson to Dearing

<b>16</b>	<b>0145EST 0155EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G55)</b>
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Sheriff reported trees down.

### **Columbia County** 2 S Leah

<b>16</b>	<b>0155EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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Spotter reported trees down along highway 150.

### **Lincoln County** 5 S Lincolnton

<b>16</b>	<b>0155EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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Public reported several trees down.

### **Columbia County** Evans

<b>16</b>	<b>1552EST</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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SKYWARN spotter reported 3/4 inch hail.

### **Richmond County** Augusta

<b>16</b>	<b>1558EST 1600EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
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Several SKYWARN reports of golf ball size hail around Augusta.

### **Richmond County** Augusta

<b>19</b>	<b>1315EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind (G55)</b>
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EOC reported trees down.

### **Columbia County** Appling

<b>19</b>	<b>1320EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
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Sheriff reported nickel size hail.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>GEORGIA, East Central</u></b>									
<b>Lincoln County</b>									
Lincolnton to Double Branches	19	1320EST 1330EST			0	0	0		Thunderstorm Wind (G60)
			Sheriff reported trees down.						
<b>Richmond County</b>									
Augusta	19	1320EST			0	0			Hail (0.88)
			EOC reported nickel size hail.						
<b>Mcduffie County</b>									
Thomson	19	1321EST			0	0	0		Thunderstorm Wind (G55)
			Sheriff reported trees down.						
<b>Richmond County</b>									
Augusta	19	1412EST			0	0			Hail (0.88)
			EOC reported nickel size hail.						
<b>Burke County</b>									
Gough	19	1420EST			0	0	0		Thunderstorm Wind (G55)
			EOC reported trees down on highway 305.						
<b><u>GEORGIA, Lower</u></b>									
<b>Clinch County</b>									
Homerville	05	1925EST			0	0	25K		Thunderstorm Wind
			Mobile home destroyed.						
<b>Atkinson County</b>									
Pearson	05	1930EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Clinch County</b>									
Homerville	05	1935EST			0	0	1K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Coffee County</b>									
Douglas	05	1938EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Jeff Davis County</b>									
Hazelhurst	05	2000EST			0	0	1.5K		Thunderstorm Wind
			Large trees were blown down West of HWY 341.						
<b>Appling County</b>									
Baxley	05	2015EST			0	0	5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Bacon County</b>									
Alma	05	2017EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Ware County</b>									
Waycross	05	2022EST			0	0	15K		Thunderstorm Wind
			Large trees and power lines were blown down along HWY 122. Large tree fell on a truck.						
<b>Brantley County</b>									
Hoboken	05	2046EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Wayne County</b>									
Jesup	05	2052EST			0	0	2.5K		Thunderstorm Wind (G60)
			Large trees and power lines were blown down.						
<b>Pierce County</b>									
Blackshear	05	2110EST			0	0	3K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Camden County</b>									
Woodbine	05	2135EST			0	0	1.5K		Thunderstorm Wind (G60)
			Large trees and power lines were blown down.						
<b>Glynn County</b>									
Brunswick	05	2142EST			0	0	3.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, Lower</b>									
<b>Camden County</b> Woodbine	19	1545EST			0	0	1.5K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Appling County</b> Baxley	19	1600EST			0	0	15K		Thunderstorm Wind
									Animal Shelter damaged. Large trees were blown down.
<b>Brantley County</b> Nahunta	19	1640EST			0	0			Hail (0.75)
<b>Charlton County</b> Racepond	19	1645EST			0	0			Hail (1.00)
<b>Charlton County</b> Winokur	19	1655EST			0	0			Hail (0.75)
<b>Brantley County</b> Hoboken	19	1727EST			0	0	2K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Glynn County</b> Brunswick	19	1730EST			0	0			Hail (0.75)
<b>Charlton County</b> Folkston	19	1735EST			0	0			Hail (0.75)
<b>Brantley County</b> Hortense	19	1745EST			0	0	0.50K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Pierce County</b> Homestead	19	1745EST			0	0	1.5K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Clinch County</b> Homerville	19	1800EST			0	0	1K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Echols County</b> Needmore	19	1805EST			0	0	2.5K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Charlton County</b> Folkston	19	1845EST			0	0	0.50K		Thunderstorm Wind
									Large trees were blown down.
<b>Ware County</b> Waycross	19	1923EST			0	0	1.5K		Thunderstorm Wind
									Large trees were blown down.
<b>Charlton County</b> Uptonville	22	1645EST			0	0	1K		Thunderstorm Wind
									Large trees were blown down along US 1.
<b>Camden County</b> Kingsland	23	1425EST			0	0	1.5K		Thunderstorm Wind
									Large trees were blown down.
<b>Camden County</b> St Marys	23	1430EST			0	0	2K		Thunderstorm Wind
									Large trees were blown down along Colerain Road.
<b>Glynn County</b> Brunswick	23	1530EST			0	0	2.5K		Thunderstorm Wind
									Large trees and power lines were blown down.
<b>Glynn County</b> St Simons Is	23	1530EST			0	0			Hail (0.75)
<b>Glynn County</b> St Simons Is	23	1530EST			0	0	3K		Thunderstorm Wind
									Large trees were blown down.
<b>Camden County</b> St Marys	25	1330EST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, Lower</b>									
<b>Camden County</b> St Marys	25	1330EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Clinch County</b> Homerville	25	1430EST			0	0			Hail (1.00)
<b>Clinch County</b> Homerville	25	1430EST			0	0	2K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Clinch County</b> Homerville	25	1500EST			0	0			Hail (1.00)
<b>Ware County</b> Waycross	25	1505EST			0	0			Hail (1.00)
<b>Pierce County</b> Blackshear	27	1330EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Appling County</b> Surrency	27	1355EST			0	0	1K		Thunderstorm Wind
			Large trees were blown down.						
<b>Bacon County</b> Coffee	27	1355EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Wayne County</b> Broadhurst	27	1405EST			0	0	2.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Clinch County</b> Homerville	27	1500EST			0	0	0.50K		Thunderstorm Wind
			Large trees were blown down.						
<b>Jeff Davis County</b> Hazelhurst	27	1515EST			0	0	15K		Thunderstorm Wind
			Roof lifted off a tobacco barn. Large trees were blown down.						
<b>Echols County</b> Haylow	27	1548EST			0	0	2K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Clinch County</b> Dupont	27	1600EST			0	0			Hail (0.88)
<b>Coffee County</b> West Green	27	1600EST			0	0	5K		Thunderstorm Wind
			Large trees were blown down.						
<b>Ware County</b> Glenmore	27	1600EST			0	0	1.5K		Thunderstorm Wind
			Large trees and power lines were blown down.						
<b>Charlton County</b> Folkston	28	1637EST			0	0			Hail (0.75)
<b>Brantley County</b> Waynesville	28	1715EST			0	0			Hail (1.00)
<b>Brantley County</b> Hoboken	28	1720EST			0	0			Hail (1.00)
<b>Brantley County</b> Hickox	28	1725EST			0	0			Hail (1.00)
<b>Wayne County</b> Screvan	29	1410EST			0	0	0.50K		Thunderstorm Wind
			Large tree and power lines were blown down.						
<b>Camden County</b> Woodbine	29	1625EST			0	0	2.5K		Thunderstorm Wind
			Large tree and power lines were blown down.						
<b>Glynn County</b> Brunswick	29	1630EST			0	0	2.5K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>GEORGIA, Lower</u></b>									
			Large tree and power lines were blown down.						
<b><u>GEORGIA, North and Central</u></b>									
<b>Treutlen County</b>									
Soperton	01	1703EST			0	0			Hail (0.75)
<b>Treutlen County</b>									
Soperton	01	1703EST			0	0	1K		Thunderstorm Wind
			Treutlen county 911 reported dime size hail and several trees blown down.						
<b>Montgomery County</b>									
4 N Higgston	01	1730EST			0	0	2K		Thunderstorm Wind
			Montgomery county 911 reported numerous trees down. There was an unconfirmed report of a tornado near the Montgomery-Toombs county line.						
<b>Toombs County</b>									
Vidalia to Ohoopee	01	1730EST 1800EST			0	0	10K		Thunderstorm Wind
			Toombs county 911 reported trees and power lines were blown down across the county. Some homes had damage to shingles and had trees fall on them.						
<b>Montgomery County</b>									
Higgston	01	1735EST			0	0			Hail (0.75)
<b>Banks County</b>									
Homer	04	1230EST			0	0	1K		Thunderstorm Wind
			The Banks county EMA reported trees were blown down across roads.						
<b>Madison County</b>									
Danielsville to Comer	04	1230EST 1300EST			0	0	100K		Thunderstorm Wind
			Severe thunderstorm winds caused damage across Madison county. Many trees were blown down. One fell onto a warehouse in Diamond Hill causing damage. A large oak tree fell onto a trailer in the Newtown community and destroyed it. Several chicken houses in the Newtown community were destroyed or damaged. The Danielsville sheriff's office reported power lines down.						
<b>Bartow County</b>									
2 W White	04	1320EST			0	0			Hail (0.75)
<b>Murray County</b>									
5 N Chatsworth	04	1320EST			0	0			Hail (1.00)
<b>Bartow County</b>									
1 N Cartersville	04	1355EST			0	0	1K		Thunderstorm Wind
			Bartow county 911 reported several trees were blown down.						
<b>Floyd County</b>									
3 W Rome	04	1435EST			0	0			Hail (0.75)
<b>Walker County</b>									
Lookout Mtn	04	1440EST			0	0			Hail (0.75)
<b>Polk County</b>									
Cedartown to Rockmart	04	1532EST 1553EST			0	0			Hail (1.75)
			The public reported nickel size hail in Cedartown and golf ball size hail in Rockmart.						
<b>Cherokee County</b>									
Woodstock to 3 S Holly Spgs	04	1540EST 1545EST			0	0	10K		Thunderstorm Wind (G61)
			The public reported several trees blown down. Winds were estimated at 60 to 70 mph. A spotter reported a building was destroyed.						
<b>Cherokee County</b>									
Woodstock	04	1543EST			0	0			Hail (1.00)
<b>Fulton County</b>									
3 W Roswell	04	1550EST			0	0			Hail (1.75)
<b>Fulton County</b>									
3 W Roswell	04	1550EST			0	0	2K		Thunderstorm Wind
			The public reported golf ball size hail and several trees blown down.						
<b>Polk County</b>									
Rockmart	04	1553EST			0	0	2K		Thunderstorm Wind
			The public reported golf ball size hail and several trees down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Cobb County</b> 3 S Powder Spgs	04	1624EST			0	0			Hail (0.75)
<b>Cobb County</b> Dobbins Afb	04	1634EST			0	0			Thunderstorm Wind (G68)
A wind gust to 68 knots was recorded at Dobbins AFB.									
<b>Fulton County</b> Sandy Spgs	04	1635EST			0	0			Hail (1.00)
A report from the public indicated quarter size hail. This was the second storm to move through northern Fulton county within 45 minutes.									
<b>Gwinnett County</b> Duluth	04	1705EST			0	0			Hail (0.75)
<b>Floyd County</b> 10 S Rome	04	1715EST			0	0			Hail (0.75)
<b>Floyd County</b> 10 S Rome	04	1715EST			0	0	1K		Thunderstorm Wind
The public reported dime size hail and tops of trees snapped off.									
<b>Haralson County</b> 4 E Bremen	04	1805EST			0	0			Hail (1.00)
<b>Douglas County</b> Lithia Spgs	04	1832EST			0	0			Hail (0.75)
<b>Fayette County</b> 3 NW Fayetteville	04	1845EST			0	0	1K		Thunderstorm Wind
Two 2 foot diameter oak trees were blown down.									
<b>Fulton County</b> Fairburn	04	1848EST			0	0			Hail (0.75)
<b>Fayette County</b> Tyrone	04	1851EST			0	0			Hail (0.75)
<b>Fayette County</b> 1 W Tyrone to 5 N Fayetteville	04	1900EST 1904EST			0	0			Hail (1.75)
Several public reports indicated hail ranging from dime to golf ball size fell across parts of northern Fayette county.									
<b>Clayton County</b> 2 W Jonesboro	04	1903EST			0	0			Hail (1.00)
<b>Fayette County</b> 5 N Fayetteville	04	1905EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds knocked trees down on houses in the McIntosh Woods subdivision.									
<b>Clayton County</b> 3 NW Lovejoy	04	1910EST			0	0			Hail (2.75)
Baseball size hail was reported at Tara Beach.									
<b>Henry County</b> Stockbridge to 8 E Mc Donough	04	1920EST 1930EST			0	0			Hail (1.00)
The public reported nickel to quarter size hail.									
<b>Butts County</b> Jackson	04	1930EST			0	0	2K		Thunderstorm Wind
A newspaper reported power lines were knocked down in Jackson.									
<b>Gwinnett County</b> Duluth	04	1947EST			0	0			Hail (0.75)
<b>Laurens County</b> Dublin	04	2015EST			0	0	5K		Thunderstorm Wind
A HAM radio operator reported trees down. Laurens county 911 reported many trees down within a 10 mile radius of I-16 and highway 441. Some were blocking roads.									
<b>Coweta County</b> 2 S Newnan	04	2056EST			0	0	1K		Thunderstorm Wind
A HAM radio operator reported trees down blocking roads.									
<b>Floyd County</b> Rome	05	0645EST			0	0	5K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
									Floyd county 911 reported several trees and power lines were blown down.
<b>Polk County</b> 5 SW Cedartown	05	0700EST			0	0	1K		Thunderstorm Wind
									Polk county 911 reported several trees were blown down.
<b>Douglas County</b> 3 W Douglasville to 2 S Douglasville	05	0715EST 0730EST			0	0	700K		Thunderstorm Wind
									An NWS survey team verified straight-line wind damage in the Douglasville area. As many as 100 homes were damaged, mostly from numerous falling trees. Shingles were torn from roofs and a few chimneys were damaged. A brick sign at a grocery store was toppled. Most of the damage occurred in a path from the Arbor Station subdivision to Chapel Hill Road just south of I-20. The path was about 200 yards wide and 1/2 mile long. All the trees were laying down in an easterly direction. Winds were estimated at 70 to 80 mph. There were reports of a funnel cloud in the area, but apparently it stayed just above the ground.
<b>Haralson County</b> 5 E Buchanan	05	0715EST			0	0			Hail (0.75)
<b>Haralson County</b> Tallapoosa to 5 E Buchanan	05	0715EST 0730EST			0	0	100K		Thunderstorm Wind
									The Haralson county EMA director and the public reported severe thunderstorm wind damage across Haralson county. There were 7 homes and 2 businesses damaged. Numerous trees were blown down. One tree fell on a house and another on a vehicle. There were 10 roads blocked by fallen trees.
<b>Paulding County</b> 5 S Dallas	05	0720EST			0	0	2K		Thunderstorm Wind
									Trees and power lines were blown down near the community of New Georgia.
<b>Carroll County</b> Villa Rica	05	0725EST			0	0	200K		Thunderstorm Wind
									The Carroll county EMA and the public reported thunderstorm winds damaged 12 buildings, 6 of them houses. Damage ranged from minor to moderate. Trees and power lines were also blown down.
<b>Fulton County</b> Fairburn to Union City	05	0735EST 0745EST			0	0	2K		Thunderstorm Wind
									An off-duty NWS employee and a public report indicated limbs and several trees were blown down.
<b>Coweta County</b> Newnan	05	0800EST			0	0	0.50K		Thunderstorm Wind
									Coweta county 911 reported trees down.
<b>Fayette County</b> 5 N Fayetteville	05	0800EST			0	0	1K		Thunderstorm Wind
									The public reported 3 trees and power lines were blown down.
<b>Spalding County</b> Griffin	05	0825EST			0	0	10K		Thunderstorm Wind
									Spalding county 911 reported numerous trees and power lines were blown down county-wide.
<b>Pike County</b> Zebulon	05	0830EST			0	0	25K		Thunderstorm Wind
									The Pike county sheriff's office reported trees down and some damage to houses, mostly to roofs.
<b>Harris County</b> 5 S Whitesville	05	1711EST 1725EST			0	0	100K		Thunderstorm Wind (G52)
									Harris county 911 reported 2 houses were destroyed, and many trees and power lines were blown down. A report from the public estimated the winds up to 60 mph.
<b>Troup County</b> West Pt	05	1713EST 1719EST			0	0	2K		Thunderstorm Wind
									Troup county 911 reported trees down north of West Point. Power was knocked out in some areas.
<b>Polk County</b> Cedartown	05	1730EST 1745EST			0	0	10K		Thunderstorm Wind
									Polk county 911 reported numerous trees were knocked down.
<b>Sumter County</b> Americus	05	1740EST 1745EST			0	0	50K		Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
			Thunderstorm winds knocked many trees down and damaged 3 houses.						
<b>Floyd County</b> Rome	05	1745EST 1800EST			0	0	200K		Thunderstorm Wind
			Floyd county 911 reported numerous trees were blown down in Rome and across Floyd county. The wind knocked trees across power lines, onto vehicles, and into homes across southern Floyd county. About 15 vehicles and 25 homes were damaged by wind s that probably reached 60-70 mph. Upwards of 6,000 homes lost power.						
<b>Crisp County</b> Cordele	05	1750EST 1800EST			0	0			Hail (1.75)
			Several public reports indicated dime to as large as golf ball size hail fell in Cordele. The hail covered the yard at one house.						
<b>Upson County</b> 10 W Thomaston	05	1755EST			0	0			Hail (0.88)
			Several reports were received from the public of dime to nickel size hail.						
<b>Upson County</b> 5 W Thomaston to Yatesville	05	1800EST 1810EST			0	0	150K		Thunderstorm Wind
			Thunderstorm winds knocked trees down on houses between Thomaston and Crest. Six chicken houses and farm buildings were destroyed or damaged and several house roofs were damaged in the Yatesville area. The city of Yatesville lost power.						
<b>Dooly County</b> Vienna to Unadilla	05	1820EST 1830EST			0	0	50K		Thunderstorm Wind
			A newspaper reported that thunderstorm winds knocked down old barns, damaged some mobile homes and blew over a tractor-trailer rig on I-75.						
<b>Peach County</b> Byron	05	1820EST 1835EST			0	0	50K		Thunderstorm Wind
			Numerous trees and power lines were knocked down in Byron and all along the Peach-Houston county line. Most of the county los t power. Dime to quarter size hail was also reported.						
<b>Crawford County</b> Roberta to 8 SE Knoxville	05	1825EST 1833EST			0	0	10K		Thunderstorm Wind
			Public and spotter reports indicated a large oak tree, pine trees, and some power lines were knocked down.						
<b>Houston County</b> Perry to Warner Robins	05	1825EST 1830EST			0	0			Hail (0.88)
<b>Pike County</b> 3.5 S Zebulon	05	1828EST			0	0	1K		Thunderstorm Wind
			Thunderstorm winds knocked some trees down.						
<b>Cherokee County</b> Woodstock to Canton	05	1830EST 1845EST			0	0	5K		Thunderstorm Wind
			The Cherokee county EMA reported numerous trees and power lines were blown down.						
<b>Houston County</b> Centerville to Kathleen	05	1830EST 1845EST			0	0	25K		Thunderstorm Wind (G61)
			Many trees were knocked down, some of them large. A citizen using hand-held equipment measured winds of 70 mph.						
<b>Peach County</b> Byron	05	1830EST			0	0			Hail (1.00)
<b>Whitfield County</b> Dalton	05	1833EST			0	0	2K		Thunderstorm Wind (G52)
			A spotter reported a few trees were downed next to the Dalton High School. He estimated winds at 60 mph.						
<b>Bibb County</b> 5 S Macon to Macon	05	1835EST 1845EST			0	0	100K		Thunderstorm Wind
			More than 500 trees were felled by thunderstorm winds, some onto houses. Crews spent the entire night clearing the debris. Power outages affected about 40,000 homes and businesses.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Dodge County</b> Eastman	05	1850EST 1900EST			0	0	25K		Thunderstorm Wind
			A newspaper reported thunderstorm winds took part of the roof off of a bank and tore a hangar door from an aircraft shop at Georgia Technical Institute.						
<b>Gwinnett County</b> 2 S Suwanee to Buford	05	1900EST 1915EST			0	0	5K		Thunderstorm Wind
			A few trees were knocked down by thunderstorm winds in the parking lot of a shopping center near Buford High School. A tree was blown onto a house near Suwanee.						
<b>Wilcox County</b> 4 S Abbeville	05	1900EST 1920EST			0	0	5K		Thunderstorm Wind
			A cooperative observer reported several trees were blown down around the county.						
<b>Pulaski County</b> Hawkinsville	05	1904EST			0	0	5K		Thunderstorm Wind
			15 to 20 trees were blown down in and around Hawkinsville.						
<b>Hall County</b> 3 SW Gainesville to 5 E Gainesville	05	1933EST 1945EST			0	0	30K		Thunderstorm Wind
			Thunderstorm winds knocked several trees down in the Flat Creek Road area southwest of Gainesville and in the Barrett Road area of east Hall county. Three homes were damaged by falling trees. Trees were also tangled in power lines.						
<b>Fannin County</b> 6 W Colwell	05	2000EST			0	0	5K		Thunderstorm Wind
			An off-duty NWS meteorologist on a hiking trip spotted damage in the Cohutta Wilderness in northwest Fannin county. This was apparently the result of a downburst from a storm that passed through the area the evening of June 5th. All the trees on the side of a mountain were flattened in a 50 yard wide path. Another smaller path of about 20 yards wide may have had a brief F0 tornado touchdown.						
<b>Union County</b> Blairsville	09	1430EST			0	0	0.50K		Thunderstorm Wind
			The Union county 911 office reported 2 trees were blown down.						
<b>Jackson County</b> Nicholson	09	1655EST			0	0	0.50K		Thunderstorm Wind
			Jackson county 911 reported trees down across roads in 3 different areas.						
<b>Madison County</b> 1 S Neese	09	1710EST			0	0			Hail (1.00)
			The public reported quarter size hail near highway 106.						
<b>Chattooga County</b> Menlo	09	1750EST			0	0	0.50K		Thunderstorm Wind
			A public report indicated 2 big trees were knocked down across a road.						
<b>Floyd County</b> Rome	09	1845EST			0	0	0		Thunderstorm Wind
			Floyd county 911 reported trees knocked down by thunderstorm winds.						
<b>Warren County</b> Warrenton	09	1900EST			0	0	5K		Thunderstorm Wind
			Warren county 911 reported numerous trees were blown down county-wide.						
<b>Polk County</b> Aragon to Rockmart	09	1905EST			0	0	20K		Thunderstorm Wind
			Polk county 911 reported trees down on houses and cars and across roads. Power lines were also knocked down.						
<b>Paulding County</b> 12 NW Dallas	09	1930EST			0	0	3K		Thunderstorm Wind
			The public reported several trees were blown down. Also, an aluminum building was blown over.						
<b>Paulding County</b> 3 S Dallas to Dallas	09	1947EST 1955EST			0	0			Hail (0.88)
			The public reported dime to nickel size hail.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Douglas County</b> 7 W Douglasville	09	2000EST			0	0			<b>Hail (1.75)</b> The public reported golf ball size hail near highway 61 in extreme northwest Douglas county. A funnel cloud was also reportedly spotted.
<b>Jefferson County</b> 5 S Wrens	09	2010EST			0	0	5K		<b>Thunderstorm Wind</b> Jefferson county 911 reported trees and power lines down at 3 different locations between Wrens and Louisville.
<b>Walker County</b> Rock Spg	10	1430EST			0	0	2K		<b>Thunderstorm Wind</b> Walker county 911 reported several trees down and power outages.
<b>Dade County</b> Trenton	10	1435EST			0	0			<b>Hail (0.75)</b>
<b>Pickens County</b> Tate	10	1515EST			0	0	1K		<b>Thunderstorm Wind</b> Pickens county 911 reported several trees down.
<b>Banks County</b> Homer	10	1522EST			0	0			<b>Hail (0.75)</b>
<b>Gwinnett County</b> Dacula	10	1700EST			0	0	10K		<b>Lightning</b> A house was damaged by fire set by lightning.
<b>Rockdale County</b> 3 W Conyers to Conyers	10	1710EST 1715EST			0	0			<b>Hail (0.88)</b> A HAM radio operator and a public report indicated dime to nickel size hail.
<b>Heard County</b> Franklin	15	2300EST			0	0	1K		<b>Thunderstorm Wind</b> A HAM operator reported trees down near highway 100.
<b>Troup County</b> Countywide	15	2300EST 2315EST			0	0	50K		<b>Thunderstorm Wind</b> Squall line winds toppled trees onto houses and cars from West Point through La Grange to Hogansville. A police car and equipment valued at \$35,000 was destroyed. 10,000 Troup countians lost power.
<b>Coweta County</b> 4 S Newnan	15	2310EST 2320EST			0	0	2K		<b>Thunderstorm Wind (G58)</b> A HAM operator reported a measured wind gust of 67 mph and the public reported downed trees.
<b>Carroll County</b> Carrollton	15	2315EST			0	0			<b>Hail (0.75)</b>
<b>Carroll County</b> Countywide	15	2315EST			0	0	100K		<b>Thunderstorm Wind</b> The Carroll county EMA reported 30 structures sustained minor to moderate damage from falling trees as a squall line moved through west Georgia. Five mobile homes were damaged and 1 was destroyed when a tree split it in half as it fell.
<b>Meriwether County</b> 2 S Lone Oak to Lone Oak	15	2315EST			0	0	10K		<b>Thunderstorm Wind</b> Meriwether county 911 and a spotter reported trees down in the Lone Oak community which caused damage to houses and cars.
<b>Pike County</b> Countywide	15	2325EST 2335EST			0	0	5K		<b>Thunderstorm Wind</b> Pike county sheriff's office reported several trees down and power outages across the county.
<b>Bartow County</b> Euharlee to Cartersville	15	2330EST			0	0	5K		<b>Thunderstorm Wind</b> The public reported the roof and eaves were damaged on a house in Euharlee. Part of a tree fell on a house in Cartersville.
<b>Coweta County</b> Senoia to 3 N Newnan	15	2330EST 2340EST			0	0	20K		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **GEORGIA, North and Central**

Public and spotter reports indicated trees were knocked down in several locations in and around Newnan. Some were blocking driveways and roads. Power and cable TV lines were downed also. One fell on an occupied car. Some shingles were blown off of a roof in Senoia.

### **Douglas County Countywide**

15	2330EST 2345EST			0	0	75K		<b>Thunderstorm Wind</b>
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The Douglas county newspaper reported severe thunderstorm winds knocked trees down countywide. Although lots of damage to homes and vehicles occurred, none of it was heavy according to the sheriff.

### **Fayette County Peachtree City to Fayetteville**

15	2330EST 2340EST			0	0	50K		<b>Thunderstorm Wind</b>
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A squall line continued from Carroll, Heard, and Troup counties eastward through Coweta into Fayette county. It passed the Weather Service Forecast Office at Falcon Field in Peachtree City between 1230 and 1236 AM EDT. 2 planes were flipped over. The ASOS wind sensor was broken by the wind. It last measured 41 knots, but winds were estimated at 60 knots. A sign from a nearby building was blown into the parking lot. Trees were blown down in Peachtree city and in Fayetteville, damaging a house and an apartment.

### **Lamar County Countywide**

15	2335EST 2350EST			0	0	25K		<b>Thunderstorm Wind</b>
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Lamar county 911 reported trees blown down county-wide. The roof was blown off a house on Chapel Mill Road in the northeast part of the county.

### **Cherokee County Countywide**

15	2345EST			0	0	5K		<b>Thunderstorm Wind</b>
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Cherokee county 911 reported trees and power lines down.

### **Clayton County Jonesboro**

15	2345EST			0	0			<b>Hail (1.75)</b>
16	0000EST							

The public reported golf ball size hail.

### **Clayton County Jonesboro**

15	2345EST			0	0	1K		<b>Thunderstorm Wind</b>
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An off-duty NWS employee reported 2 trees were blown down.

### **Fulton County East Pt**

15	2345EST			0	0			<b>Hail (1.75)</b>
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### **Fulton County East Pt to Atlanta**

15	2345EST 2356EST			0	0	100K		<b>Thunderstorm Wind (G55)</b>
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The squall line continued into Fulton county where a spotter at the communications center in East Point reported trees were downed and blocking at least 15 intersections. At least 10 dwellings were damaged by falling trees. Golf ball size hail was reported. Three-fourths of the city of East Point lost power. In downtown Atlanta, CNN Weather reported windows on the 7th floor were blown out of the CNN building and weather instruments and a satellite dish on the roof were damaged. A spotter estimated wind gusting to 55 knots. Almost 200,000 Georgia Power customers lost power in the Atlanta metro area..

### **Henry County Stockbridge**

15	2350EST			0	0			<b>Hail (0.75)</b>
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### **Spalding County Griffin**

15	2351EST 2356EST			0	0	100K		<b>Thunderstorm Wind</b>
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The squall line moved through Spalding county downing numerous trees and large limbs in Griffin. A large oak tree fell on 1 home destroying it. Other houses and vehicles were damaged by falling trees and limbs. Power outages resulted to 80 percent of Griffin Electric's 14,000 customers as power poles snapped and lines fell.

### **Henry County Mc Donough to Hampton**

15	2352EST			0	0	5K		<b>Thunderstorm Wind</b>
16	0000EST							

The public reported aluminum siding was torn off a house in Hampton and several trees and tree limbs were knocked down in McDonough and Stockbridge.

### **Cobb County Vinings to Marietta**

15	2355EST			0	0	5K		<b>Thunderstorm Wind (G55)</b>
16	0005EST							

Spotters measured a wind gust to 55 knots and reported power lines and a tree down. The public reported 5 inch diameter limb s were blown down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Rockdale County</b> 3 S Conyers	16	0000EST 0010EST			0	0	5K		<b>Thunderstorm Wind</b>
									The public reported trees down and shingles blown off a house in the southern part of the county.
<b>Jasper County</b> Countywide	16	0015EST 0030EST			0	0	2K		<b>Thunderstorm Wind</b>
									The Monticello newspaper reported severe thunderstorm winds knocked down trees and limbs county-wide. Some blocked road s and knocked down power lines. Property damage was minimal.
<b>Monroe County</b> Countywide	16	0015EST 0030EST			0	0	5K		<b>Thunderstorm Wind</b>
									The Monroe county sheriff reported trees down.
<b>De Kalb County</b> Countywide	16	0025EST 0030EST			0	0	20K		<b>Thunderstorm Wind</b>
									The DeKalb county 911 and HAM operators reported trees and power lines down county-wide. Two lanes of I-285 were blocked. Newspaper reports indicated there were trees down across roads and blocking traffic in Decatur. Fifteen intersections sustained major damage to the signal systems. The Ponce de Leon corridor was hit hard with power outages affecting many homes.
<b>Gwinnett County</b> Norcross	16	0025EST			0	0	5K		<b>Thunderstorm Wind</b>
									The public reported trees down on a house at Peachtree Corners.
<b>Morgan County</b> Countywide	16	0027EST			0	0	25K		<b>Thunderstorm Wind</b>
									The public reported several trees down on homes county-wide. Power outages occurred throughout the county.
<b>Walton County</b> 4 E Monroe	16	0030EST			0	0	5K		<b>Thunderstorm Wind</b>
									The public reported a tree down on a house. Several limbs were also blown down.
<b>Oglethorpe County</b> Arnoldsville	16	0055EST			0	0	2K		<b>Thunderstorm Wind</b>
									The public reported several trees down near Wolfskin and Lake Oglethorpe. There were power outages throughout the county.
<b>Madison County</b> Countywide	16	0100EST			0	0	5K		<b>Thunderstorm Wind</b>
									The public reported trees down and power outages throughout the county.
<b>Oconee County</b> Watkinsville	16	0100EST			0	0	25K		<b>Thunderstorm Wind</b>
									The Oconee county sheriff reported wind damage to the Post Office in Watkinsville. Numerous trees were knocked down county-wide.
<b>Jackson County</b> Countywide	16	0105EST 0120EST			0	0	50K		<b>Thunderstorm Wind</b>
									Severe thunderstorm winds continued into Jackson county. Newspaper accounts said that trees were knocked down countywide, damaging several homes, and causing widespead power outages.
<b>Clarke County</b> Countywide	16	0110EST			0	0	10K		<b>Thunderstorm Wind</b>
									The public reported several trees down county-wide. About 10,000 Georgia Power customers in northeast Georgia lost power, with most of those in the Athens and Oconee county areas.
<b>Wilkes County</b> Countywide	16	0115EST 0130EST			0	0	25K		<b>Thunderstorm Wind</b>
									Newspaper accounts stated that severe thunderstorm winds knocked down trees across Wilkes county, damaging a few homes, and d causing power outages.
<b>Cherokee County</b> Holly Spgs	16	1430EST			0	0			<b>Lightning</b>
									The Cherokee county newspaper reported a fire set by lightning damaged the chimney of a house.
<b>Heard County</b> Corinth	16	1435EST 1440EST			0	0			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Upton County</b> Thomaston	16	1435EST 1440EST			0	0			Hail (0.75)
<b>Butts County</b> 7 E Jackson	16	1440EST 1450EST			0	0			Hail (0.75)
<b>Coweta County</b> Grantville	16	1445EST			0	0			Hail (0.75)
<b>Jasper County</b> Monticello	16	1445EST			0	0			Hail (0.75)
<b>Pike County</b> Zebulon	16	1445EST 1450EST			0	0			Hail (0.75)
<b>Upton County</b> 8 W Thomaston	16	1455EST 1507EST			0	0			Hail (0.75)
<b>Meriwether County</b> Luthersville	16	1500EST 1510EST			0	0			Hail (0.75)
<b>Monroe County</b> Russellville	16	1505EST 1510EST			0	0			Hail (1.75)
									The public reported hail from dime to golf ball size.
<b>Bibb County</b> Macon	16	1515EST 1530EST			0	0			Hail (1.75)
									The public reported hail ranging from dime to golf ball size.
<b>Coweta County</b> 4 W Moreland	16	1525EST			0	0			Hail (0.75)
<b>Henry County</b> Locust Grove	16	1530EST			0	0			Hail (0.75)
<b>Butts County</b> 6 W Jackson to 8 N Jackson	16	1535EST			0	0			Hail (0.75)
<b>Coweta County</b> Senoia	16	1535EST			0	0			Hail (0.75)
<b>Bibb County</b> 8 W Macon to Macon	16	1602EST 1617EST			0	0			Hail (1.00)
									Several public reports were received of dime to quarter size hail.
<b>Douglas County</b> Douglasville	16	1610EST 1617EST			0	0			Hail (0.75)
<b>Heard County</b> Texas	16	1617EST			0	0			Hail (1.25)
									The public reported half dollar size hail.
<b>Upton County</b> 10 W Thomaston to Thomaston	16	1630EST 1645EST			0	0			Hail (1.75)
									Several public reports indicated hail from dime to golf ball size fell across the north half of Upton county.
<b>Wilkinson County</b> 5 SW Nickelsville	16	1635EST			0	0			Hail (1.50)
									The public reported 1 1/2 inch hail in the community of Cooktown.
<b>Walton County</b> Monroe	16	1659EST			0	0			Hail (0.75)
<b>Twiggs County</b> Jeffersonville	16	1700EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Twiggs County</b> Jeffersonville	16	1700EST			0	0	0		<b>Thunderstorm Wind</b>
									The Twiggs county sheriff's office reported dime size hail and large limbs down in the road.
<b>Wilkinson County</b> 10 SW Irwinton to 5 SW Nickelsville	16	1702EST 1715EST			0	0			<b>Hail (2.00)</b>
									The sheriff's office reported golf ball size hail on highway 96 near thtre Twiggs county line. The public reported 11/2 to 2 inch hail in the town of Cooktown.
<b>Clarke County</b> Athens	16	1715EST			0	0	0.50K		<b>Thunderstorm Wind</b>
									The Clarke county EMA reported 4 trees down near Old Elberton and Lem Edwards roads.
<b>Laurens County</b> East Dublin	16	1730EST 1745EST			0	0	10K		<b>Hail (1.75)</b>
									The public reported damage to several cars from hail ranging from dime to golf ball size.
<b>Bibb County</b> 2 N Lizella to Lizella	16	1735EST			0	0			<b>Hail (0.90)</b>
									The public reported nickel size hail on Lake Tobesofkee.
<b>Laurens County</b> 10 NW Dublin to 3 SE Dublin	16	1840EST 1850EST			0	0	75K		<b>Thunderstorm Wind</b>
									Newspaper accounts of the evening's storm said there were trees down, storage buildings and barns destroyed and trees down on houses. The worst hit area was northwest of Dublin in the highways 338 and 441 area. A tree was also blown down southeast of town which blocked 1 lane of I-16.
<b>Laurens County</b> 4 N Dublin	16	1855EST			0	0			<b>Hail (1.00)</b>
<b>Emanuel County</b> Oak Park	16	2010EST			0	0	2K		<b>Thunderstorm Wind</b>
									Emanuel county 911 reported several trees were knocked down.
<b>Johnson County</b> Wrightsville	16	2145EST			0	0	0.50K		<b>Thunderstorm Wind</b>
									Johnson county 911 reported a tree and several large limbs were blown down.
<b>Chattooga County</b> Summerville	19	0825EST 0830EST			0	0			<b>Hail (0.75)</b>
<b>Bartow County</b> 5 N Cartersville	19	1000EST			0	0			<b>Hail (0.75)</b>
<b>Pickens County</b> Jasper	19	1005EST			0	0			<b>Hail (0.75)</b>
<b>Bartow County</b> Cartersville	19	1010EST			0	0			<b>Hail (1.00)</b>
									The public reported dime to quarter size hail.
<b>Cobb County</b> Powder Spgs	19	1015EST			0	0	2K		<b>Thunderstorm Wind</b>
									Some trees and a metal fence were knocked down.
<b>Paulding County</b> 10 N Dallas	19	1015EST			0	0			<b>Hail (1.00)</b>
<b>Paulding County</b> 10 NE Dallas	19	1030EST			0	0			<b>Hail (1.00)</b>
<b>Fulton County</b> 2 W Sandy Spgs	19	1045EST			0	0	10K		<b>Thunderstorm Wind</b>
									The public reported that a large air conditioner unit at Phipps Plaza was knocked over. Fulton county 911 reported 2 large trees blown down.
<b>Fulton County</b> Atlanta	19	1055EST			0	0			<b>Hail (0.75)</b>
<b>De Kalb County</b> Dunwoody	19	1100EST			0	0	5K		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
Newspaper and public reports indicated thunderstorm winds knocked down quite a few trees.									
<b>Paulding County</b>									
Dallas	19	1102EST			0	0			Hail (0.75)
<b>Hall County</b>									
Gainesville	19	1105EST			0	0			Hail (0.88)
<b>Gwinnett County</b>									
Norcross to Dacula	19	1110EST 1130EST			0	0	20K		Thunderstorm Wind
Trees were knocked down on a few houses and power lines in Norcross, Suwanee, Lawrenceville, and Dacula.									
<b>Gwinnett County</b>									
Suwanee to Dacula	19	1112EST 1130EST			0	0			Hail (1.00)
Several public reports were received of dime to quarter size hail in Suwanee, Lawrenceville and Dacula.									
<b>Cobb County</b>									
Dobbins Afb	19	1115EST			0	0			Thunderstorm Wind (G61)
A gust to 61 knots (70mph) was recorded at Dobbins AFB.									
<b>Cobb County</b>									
Marietta	19	1115EST			0	2	50K		Lightning
Lightning injured a man on a road maintenance crew on Canton Road near I-75. Another man was injured by lightning off Barret Parkway near Kennesaw. Seven structure fires resulted from lightning strikes.									
<b>Cobb County</b>									
Marietta	19	1115EST			0	0	100K		Thunderstorm Wind
An ancient hollow oak tree 7 feet in diameter was toppled onto a duplex on Hedges street, destroying it. Trees landed on several other homes as well. Power lines were downed throughout the area, knocking out power at thousands of homes and businesses. Traffic lights were out at several intersections.									
<b>Cobb County</b>									
Mableton to Smyrna	19	1125EST 1129EST			0	0			Hail (1.00)
The public reported dime to quarter size hail at 2 different locations.									
<b>Fulton County</b>									
Roswell	19	1140EST			0	0	20K		Lightning
Roswell firefighters responded to calls where at least 3 houses were struck by lightning.									
<b>Fulton County</b>									
Fairburn to East Pt	19	1141EST 1156EST			0	0			Hail (1.00)
A few public reports indicated dime to quarter size hail fell across southern Fulton county.									
<b>De Kalb County</b>									
Stone Mtn	19	1142EST			0	0			Hail (0.75)
<b>Fulton County</b>									
5 N Atlanta	19	1142EST			0	0	10K		Thunderstorm Wind
Numerous trees and power lines were knocked down at Lennox Square in the Buckhead area.									
<b>Walton County</b>									
Loganville	19	1142EST			0	0			Hail (1.00)
<b>Clarke County</b>									
Athens	19	1150EST			0	0			Funnel Cloud
A police officer spotted a funnel cloud near highway 29.									
<b>Clarke County</b>									
Athens	19	1150EST			0	0			Hail (0.75)
<b>Coweta County</b>									
Sargent	19	1150EST			0	0			Hail (1.00)
<b>Coweta County</b>									
Sargent	19	1150EST			0	0	20K		Thunderstorm Wind
Newspaper and public reports stated that 3 houses were damaged by trees falling on them. An elderly was trapped in her home until fire personnel helped her get out.									
<b>Clayton County</b>									
Jonesboro	19	1155EST 1200EST			0	0			Hail (1.75)
Two public reports indicated quarter and golfball size hail fell near Jonesboro.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Clarke County</b> Athens	19	1159EST			0	0	20K		Thunderstorm Wind
									Newspaper and public reports indicated lots of tree limbs and some trees were knocked down. Damages occurred to cars and houses.
<b>Clayton County</b> Jonesboro	19	1200EST			0	0			Funnel Cloud
									A private citizen reported a funnel cloud.
<b>Clayton County</b> Jonesboro to Lovejoy	19	1200EST 1215EST			0	0	0.50K		Thunderstorm Wind
									The public and an off-duty NWS employee reported several trees were knocked down by thunderstorm winds.
<b>Coweta County</b> Madras	19	1200EST			0	0			Hail (0.75)
<b>Fayette County</b> Peachtree City to Fayetteville	19	1200EST 1210EST			0	0	30K		Thunderstorm Wind
									An off-duty NWS employee reported 2 pine trees were knocked down in Planterra Ridge subdivision. A newspaper reported the frame of a house under construction in the Lakeside on Redwine subdivision was blown down.
<b>Rockdale County</b> 5 W Conyers	19	1205EST			0	0	20K		Thunderstorm Wind
									Rockdale county 911 reported a roof was blown off a building. Several trees were also blown down across the county.
<b>Fayette County</b> Fayetteville	19	1207EST			0	0			Funnel Cloud
									The public reported seeing a funnel cloud on Redwine Road.
<b>Coweta County</b> Madras	19	1215EST			0	0	20K		Lightning
									Fire started by lightning damaged a house on Happy Valley Circle.
<b>Coweta County</b> Sharpsburg to Moreland	19	1220EST 1230EST			0	0	0.50K		Thunderstorm Wind
									The public reported trees down between Whitesburg and Newnan, and in Sharpsburg.
<b>Coweta County</b> Moreland to Grantville	19	1225EST			0	0			Hail (0.75)
<b>Henry County</b> Mc Donough to 5 SSE Mc Donough	19	1240EST 1245EST			0	0			Hail (1.00)
									Dime to quarter size hail fell according to the public.
<b>Troup County</b> La Grange	19	1245EST			0	0			Hail (0.75)
<b>Lamar County</b> Barnesville	19	1302EST			0	0	0		Thunderstorm Wind
									A HAM operator reported small trees were knocked down along highway 41.
<b>Putnam County</b> 12 E Eatonton	19	1303EST			0	0			Hail (0.75)
<b>Douglas County</b> 3 SE Douglasville	19	1400EST			0	0	30K		Lightning
									A mobile home off Anneewakee Road was burned to the ground after being hit by lightning. A residence on Tall Pines Drive suffered minor damage.
<b>Houston County</b> Centerville	19	1400EST 1405EST			0	0			Hail (0.88)
									Two public reports indicated dime to nickel size hail fell in Centerville.
<b>Bibb County</b> 10 SW Macon	19	1415EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Laurens County</b> Countywide	19	1430EST 1500EST			0	0	10K		Thunderstorm Wind
			The Laurens county EMA reported several trees down and damage to structures county-wide.						
<b>Dade County</b> 4 W Trenton	20	1722EST			0	0	0.50K		Thunderstorm Wind
			Dade county 911 reported trees down across a road.						
<b>Walker County</b> La Fayette to 5 S La Fayette	20	1735EST 1740EST			0	0	1K		Thunderstorm Wind
			Walker county 911 and a spotter reported several trees down.						
<b>White County</b> Helen to Cleveland	24	1925EST 1940EST			0	0			Hail (1.00)
			Several reports from White county 911, a spotter and the public indicated dime to quarter size hail fell across the county.						
<b>Lumpkin County</b> 6 NE Dahlonega to Dahlonega	24	1935EST 1950EST			0	0			Hail (1.75)
			Several public reports indicated hail ranging from quarter to golf ball size fell in east and central Lumpkin county.						
<b>Hall County</b> Gainesville	24	2021EST			0	0			Hail (1.00)
<b>Madison County</b> Hull	24	2139EST			0	0			Hail (0.88)
<b>Clarke County</b> Athens	24	2148EST 2209EST			0	0			Hail (0.75)
<b>Marion County</b> 5 SW Buena Vista	25	1430EST			0	0	1K		Thunderstorm Wind
			Marion county 911 reported trees were knocked down.						
<b>Sumter County</b> Andersonville	25	1445EST 1455EST			0	0			Hail (0.75)
<b>Sumter County</b> Andersonville to 2 E Andersonville	25	1445EST 1455EST			0	0	15K		Thunderstorm Wind (G65)
			Sumter Electric reported trees down on power lines just east of Americus. The public reported an estimated wind gust to 75 mph that flattened a corn field in Andersonville.						
<b>Marion County</b> Doyle to 3 SE Doyle	25	1500EST			0	0			Hail (0.75)
<b>Schley County</b> 5 W Ellaville to Ellaville	25	1500EST			0	0			Hail (0.75)
<b>Harris County</b> 10 SW Hamilton	25	1612EST			0	0			Hail (1.00)
			A HAM operator reported dime to quarter size hail.						
<b>Lumpkin County</b> 19 N Dahlonega	25	1730EST			0	0			Thunderstorm Wind (G52)
			A radio station employee reported trees were knocked down. Winds were estimated at 60 mph.						
<b>Douglas County</b> Douglasville	25	1839EST 1850EST			0	0			Hail (0.88)
			There were several reports from the public and a spotter of dime to nickel size hail.						
<b>Douglas County</b> Douglasville	25	1839EST 1850EST			0	0	2K		Thunderstorm Wind
			Public and spotter reports indicated tree limbs were downed and a McDonalds sign was blown over. Winds were estimated at 60 to 75 mph.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>GEORGIA, North and Central</b>									
<b>Carroll County</b> Bowdon	25	1900EST			0	0	1K		Thunderstorm Wind
									A HAM operator reported a few trees were blown down.
<b>Coweta County</b> 4 NE Madras	25	1900EST			0	0	0.50K		Thunderstorm Wind
									A HAM radio operator reported 3 trees were knocked down.
<b>Douglas County</b> Douglasville	25	1910EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds knocked a tree down on a deck and another one was knocked down on a fence.
<b>Coweta County</b> 3 N Thomas Xrds	25	1935EST 1940EST			0	0			Hail (0.75)
<b>Banks County</b> 3 SE Baldwin	26	1627EST			0	0			Hail (0.75)
<b>Oconee County</b> Watkinsville	26	1730EST 1800EST			0	0			Hail (1.00)
									Several public reports of dime to quarter size hail were received from in and around the Watkinsville area.
<b>Oconee County</b> Watkinsville	26	1735EST 1740EST			0	0	1K		Thunderstorm Wind
									The public reported several trees were blown down and uprooted.
<b>Hancock County</b> Mayfield	26	1750EST			0	0			Hail (0.75)
<b>Toombs County</b> 3 S Lyons to 5 S Lyons	27	1618EST 1625EST			0	0	5K		Thunderstorm Wind
									Toombs county 911 reported power lines and trees knocked down and an onion shed destroyed. Hail of unknown size also fell.
<b>Laurens County</b> Cedar Grove	27	1750EST			0	0			Hail (1.00)
<b>Emanuel County</b> Nunez	27	1955EST			0	0	5K		Thunderstorm Wind
									Emanuel county 911 reported trees down and power outages.
<b>Forsyth County</b> 5 N Cumming	29	1750EST			0	0	20K		Thunderstorm Wind
									The Forsyth county EMA director reported wind damage in the northern part of the county. Trees and power lines were knocked down. Several roofs were damaged or torn off. There was a report of a possible tornado.
<b>Forsyth County</b> 8 S Cumming	30	1845EST			0	0	0		Thunderstorm Wind
									The public reported 2 trees blown down.
<b>Cherokee County</b> Ball Ground	30	1900EST			0	0	0.50K		Thunderstorm Wind
									The public reported trees down.
<b>Forsyth County</b> 10 S Cumming	30	1900EST			0	0	10K		Lightning
									The Forsyth county EMA reported lightning started a house fire in southern Forsyth county. Damages were unknown.
<b>Gwinnett County</b> Suwanee to Lawrenceville	30	1920EST 1940EST			0	0	3K		Thunderstorm Wind (G52)
									A spotter and the public reported trees and power lines down. The wind was estimated at 60 mph.
<b>Douglas County</b> Countywide	30	1930EST			0	0	10K		Thunderstorm Wind
									The Douglas county 911 reported trees and power lines down all across the county.
<b>Fulton County</b> Alpharetta	30	2000EST 2010EST			0	0	0.50K		Thunderstorm Wind
									The public reported 2 trees were blown down, and a spotter reported large limbs down and power outages.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>GEORGIA, North and Central</u></b>									
<b>De Kalb County</b>									
Stone Mtn	30	2010EST			0	0	1K		Thunderstorm Wind
			De Kalb county 911 reported large limbs knocked down power lines.						
<b>Walton County</b>									
Loganville	30	2012EST			0	0	1K		Thunderstorm Wind
			A spotter reported trees and power lines down.						
<b>Henry County</b>									
Stockbridge	30	2030EST			0	0	1K		Thunderstorm Wind
			A spotter reported a tree and 3 power poles were blown down.						
<b><u>GEORGIA, Northeast</u></b>									
<b>Stephens County</b>									
Toccoa	04	1140EST			0	0			Hail (0.88)
<b>Stephens County</b>									
Toccoa	04	1140EST			0	0			Thunderstorm Wind (G53)
<b>Hart County</b>									
Hartwell	04	1205EST			0	0			Hail (1.75)
<b>Hart County</b>									
Hartwell	04	1205EST			0	0			Thunderstorm Wind (G50)
<b>Elbert County</b>									
2 W Elberton	04	1315EST			0	0			Hail (0.75)
<b>Elbert County</b>									
Fortsonia	04	1355EST			0	0			Hail (1.75)
			Clusters of thunderstorms developed near a stationary front along the South Carolina/Georgia border. Some the storms became severe, producing large hail and damaging winds. Wind damage was confined mainly to downed trees.						
<b>Hart County</b>									
Countywide	09	1612EST 1630EST			0	0			Hail (0.88)
<b>Hart County</b>									
Countywide	09	1612EST 1630EST			0	0			Thunderstorm Wind (G50)
<b>Elbert County</b>									
1 S Ruckersville to 2 S Elberton	09	1650EST 1701EST			0	0			Hail (1.75)
<b>Elbert County</b>									
1 S Ruckersville to 2 S Elberton	09	1650EST 1701EST			0	0			Thunderstorm Wind (G50)
			Severe thunderstorms produced large hail in addition to winds that downed numerous trees and power lines.						
<b>Stephens County</b>									
Toccoa to 9 SE Toccoa	16	0123EST 0130EST			0	0	50K		Thunderstorm Wind (G74)
<b>Elbert County</b>									
Countywide	16	0125EST 0135EST			0	0			Thunderstorm Wind (G50)
<b>Franklin County</b>									
Countywide	16	0125EST 0135EST			0	0			Thunderstorm Wind (G50)
<b>Hart County</b>									
Countywide	16	0125EST 0135EST			0	0			Thunderstorm Wind (G50)
			A line of severe thunderstorms downed numerous trees and power lines across much of the above listed counties. A roof was blown off a house southeast of Toccoa and several trees fell on houses and vehicles in Elbert county.						
<b>Franklin County</b>									
Lavonia	19	1100EST			0	0			Thunderstorm Wind (G50)
<b>Habersham County</b>									
Clarkesville to Turnerville	19	1133EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>GEORGIA, Northeast</u></b>									
<b>Stephens County</b> Toccoa	19	1200EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Elbert County</b> Bowman	19	1210EST			0	0			<b>Hail (1.00)</b> Severe thunderstorms produced damaging winds which blew a greenhouse over in Lavonia. In addition, power lines and a power pole were blown down. Trees and power lines were downed in Clarkesville, leaving much of the city without power. More trees were blown down in Toccoa and large hail fell in Bowman.
<b>Stephens County</b> 4 SE Toccoa	22	1820EST			0	0			<b>Hail (0.88)</b>
<b>Stephens County</b> 8 E Toccoa	22	1825EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Habersham County</b> Mt Airy	22	2000EST			0	0			<b>Thunderstorm Wind (G50)</b> Isolated severe thunderstorms downed trees and produced large hail. Power was out for a while in Mt Airy.
<b>Habersham County</b> 10 NW Clarkesville	24	1840EST			0	0			<b>Hail (1.00)</b>
<b>Hart County</b> 4 S Hartwell	24	2100EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Elbert County</b> Elberton	24	2105EST			0	0			<b>Thunderstorm Wind (G50)</b> A few severe thunderstorms moved slowly southwest across northeast Georgia, producing large hail and wind damage. A tree and power lines were down in the Liberty Hill area in Hart county and numerous trees were downed in Elberton.
<b>Rabun County</b> 5 E Clayton	26	1450EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Stephens County</b> 2 W Toccoa	26	1615EST			0	0			<b>Thunderstorm Wind (G50)</b> Severe thunderstorms downed trees and caused a few power outages.
<b>Hart County</b> 10 SSW Hartwell	30	2000EST			0	0			<b>Thunderstorm Wind (G50)</b> Trees were downed by a severe thunderstorm in southwestern Hart county.
<b><u>GEORGIA, Southeast</u></b>									
<b>GAZ087&gt;088-099-101-114&gt;119-137&gt;141</b>	<b>Jenkins - Screven - Candler - Effingham - Tattnall - Evans - Inland Bryan - Coastal Bryan - Inland Chatham - Coastal Chatham - Long - Inland Liberty - Coastal Liberty - Inland McIntosh - Coastal McIntosh</b>								
	01	0000EST			0	0			<b>Excessive Heat</b>
	30	2359EST							Temperatures were well into the 90s and occasionally exceeded 100 degrees throughout the month with heat indices near 110 degrees on several days. Rainfall was well below normal across southeast Georgia which caused the area to approach the incipient drought stage.
<b>Candler County</b> Metter	05	2030EST 2033EST			0	0			<b>Thunderstorm Wind (G50)</b> Numerous trees and powerlines down.
<b>Tattnall County</b> 5 SW Glennville	05	2035EST 2038EST			0	0			<b>Thunderstorm Wind (G50)</b> Trees down.
<b>Evans County</b> Claxton	05	2050EST 2053EST			0	0			<b>Thunderstorm Wind (G50)</b> Trees and powerlines down.
<b>Bulloch County</b> Denmark	05	2100EST 2103EST			0	0			<b>Thunderstorm Wind (G50)</b> Many trees and powerlines down.
<b>Long County</b> Ludowici	05	2110EST 2113EST			0	0			<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>GEORGIA, Southeast</b>									
<b>Liberty County</b> Hinesville	05	2120EST 2122EST			0	0			Thunderstorm Wind (G50)
<b>Bryan County</b> Richmond Hill	05	2130EST 2133EST			0	0			Thunderstorm Wind (G50)
<b>Mcintosh County</b> Darien	05	2140EST 2143EST			0	0			Thunderstorm Wind (G50)
			Numerous trees and powerlines down across the affected counties as an area of strong thunderstorms moved through during the evening hours.						
<b>Effingham County</b> Rincon to 3 S Rincon	05	2110EST 2114EST			0	0			Thunderstorm Wind (G50)
			Numerous trees and powerlines down.						
<b>Chatham County</b> Pooler to 2 SE Savannah	05	2115EST 2120EST			0	0			Thunderstorm Wind (G50)
			Numerous trees and powerlines down.						
<b>Screven County</b> Sylvania	10	1735EST 1738EST			0	0			Thunderstorm Wind (G52)
			Trees and powerlines down.						
<b>Bryan County</b> 2 N Pembroke to 1 SE Ellabell	19	1420EST 1425EST			0	0			Thunderstorm Wind (G50)
<b>Chatham County</b> Savannah to 3 SE Savannah	19	1500EST 1505EST			0	0			Thunderstorm Wind (G50)
<b>Effingham County</b> 4 NW Egypt to 5 SE Rincon	19	1600EST 1620EST			0	0			Thunderstorm Wind (G50)
<b>Long County</b> Ludowici	19	1600EST 1604EST			0	0			Thunderstorm Wind (G50)
<b>Chatham County</b> Savannah	19	1615EST 1618EST			0	0			Thunderstorm Wind (G50)
<b>Liberty County</b> Hinesville to 10 SE Hinesville	19	1615EST 1625EST			0	0			Thunderstorm Wind (G50)
<b>Bulloch County</b> 4 N Portal to 5 S Stilson	19	1620EST 1635EST			0	0			Thunderstorm Wind (G50)
<b>Bryan County</b> Richmond Hill	19	1630EST 1634EST			0	0			Thunderstorm Wind (G50)
<b>Mcintosh County</b> Darien	19	1705EST 1710EST			0	0			Thunderstorm Wind (G60)
			Intense and well defined squall line of thunderstorms that extended northeast-southwest across CWA produced very strong winds that knocked down numerous trees in each county. Some trees and limbs fell on powerlines that caused power outages for several hours. A tree fell on a mobile home and there were signs down at the Magnolia Bluff Factory Shops in McIntosh County.						
<b>Mcintosh County</b> Darien	22	1545EST 1548EST			0	0			Thunderstorm Wind (G50)
			Powerlines down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>GEORGIA, Southeast</u></b>									
<b>Bryan County</b> 5 NW Richmond Hill to Richmond Hill	27	1640EST 1644EST			0	0			Thunderstorm Wind (G50)
			Trees and powerlines down.						
<b>Tattnall County</b> Glennville	28	1900EST			0	0	250K		Lightning
			Lightning caused fire struck a church and burned it to the ground.						
<b>Long County</b> Ludowici	29	1500EST 1505EST			0	0			Thunderstorm Wind (G50)
			Trees down.						
<b>Liberty County</b> Midway	29	1520EST 1523EST			0	0			Hail (1.00)
<b><u>GEORGIA, Southwest</u></b>									
<b>GAZ124-127&gt;131- 145&gt;148-158-160&gt;161</b>	<b>Terrell - Worth - Turner - Tift - Ben Hill - Irwin - Mitchell - Colquitt - Cook - Berrien - Thomas - Lowndes - Lanier</b>								
	05	1815EST 1945EST			0	0	250K	20K	High Wind
			Numerous reports of trees and power lines down as 50 to 60 mph straight-line winds blew through Southwest Georgia. Several homes were damaged from fallen trees. A few barns were destroyed in Turner County. Numerous grass and tree fires from sparking power lines in Colquitt County. A mobile home lost its roof in the Bear Creek subdivision near Norman Park. One house received extensive fire damage and several homes sustained minor damage from fallen trees in Moultrie. The roof from the Moultrie YMCA building was blown off. An estimated 10 to 15 acres of corn were damaged, and four greenhouses and a mobile home were destroyed in Terrell County.						
<b>Brooks County</b> Quitman	18	1745EST			0	0	10K		Thunderstorm Wind
<b>Thomas County</b> Thomasville	18	1848EST			0	0	1K		Thunderstorm Wind
			Numerous trees down in the vicinity of and north of Thomasville. Trees and power lines down on Georgia Highway 33 about five miles south of Quitman. Some minor damage to buildings.						
<b>Dougherty County</b> Albany	19	1610EST			0	0	50K		Thunderstorm Wind
			Straight-line winds toppled two large trees down in the northwest section of Albany. Lightning and downed power lines ignited several small fires. One storage shed was destroyed by fire.						
<b>Cook County</b> Adel	25	1530EST			0	0	175K		Thunderstorm Wind
			Severe thunderstorm winds raked the Cook County Airport in Adel, damaging four planes and two hangars. The winds knocked out power to 1,000 Sparks residents. A few billboards near Interstate 75 were damaged.						
<b>Grady County</b> Countywide	25	1800EST			0	0	2K		Thunderstorm Wind
<b>Decatur County</b> Countywide	25	1835EST			0	0	15K		Thunderstorm Wind
			Numerous trees and power lines down. One tree fell onto a mobile home in Decatur County.						
<b><u>GEORGIA, West Central</u></b>									
<b>Muscogee County</b> Columbus	05	1726EST			0	1	45K	0	Thunderstorm Wind (G60)
			Numerous trees and power lines were down in Columbus. A gust to 69 mph was reported at the Columbus airport. At least 60,000 residents were without power. One person was injured in the storm. Several trees blocked roads. Three or four small planes were damaged at the Columbus airport.						
<b>Muscogee County</b> Columbus	19	1405EST			0	0	0	0	Hail (0.75)
			Dime size hail was reported in Columbus.						
<b>Muscogee County</b> Columbus	25	1610EST			0	0	0	0	Hail (0.88)
			Nickel size hail was reported in Columbus.						





# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## HAWAII

### **Maui County**

<b>Maalaea</b>	21	1500HST			0	0			<b>Wild/Forest Fire</b>
	22	0200HST							
A brush fire located off Honoapiilani Highway between McGregor Point and the Pali Tunnel burned 200 acres and sent about 70 people to local shelters until the blaze was contained.									

## IDAHO, Extreme Southeast

### **Bear Lake County**

<b>Bern</b>	03	1650MST			0	0	0	1K	<b>Hail (0.75)</b>
A severe thunderstorm was reported by a spotter in Bern. Minor hail damage occurred to crops in the area.									

### **Bear Lake County**

<b>Montpelier</b>	10	1400MST	0.1	30	0	0	20K	10K	<b>Tornado (F0)</b>
A tornado was observed just outside of Montpelier. It caused some damage to a farm property.									

## IDAHO, North

### **Lemhi County**

<b>Shoup</b>	24	1400MST			0	0			<b>Thunderstorm Wind (G52)</b>
Thunderstorm wind was strong enough to cause 2 to 3 inch diameter tree limbs to break off.									

### **Lemhi County**

<b>Leadore</b>	25	1700MST			0	2			<b>Lightning</b>
A couple of Bureau of Land Management employees were struck by lightning while in a car. They were off from work for at least 5 days following.									

## IDAHO, Northwest

### **Boundary County**

<b>Bonnors Ferry</b>	11	1705PST 1720PST			0	0	0	0	<b>Heavy Rain</b>
1 inch of rain in 15 minutes									

### **Bonner County**

<b>Oldtown</b>	15	1140PST			0	0	0	0	<b>Hail (1.00)</b>
1 inch diameter hail									

### **Bonner County**

<b>Sandpoint</b>	15	1220PST			0	0	0	0	<b>Hail (0.75)</b>
3/4 inch diameter hail									

### **Kootenai County**

<b>Spirit Lake</b>	22	1108PST 1123PST			0	0	0	0	<b>Heavy Rain</b>
.30 inches of rain in 15 minutes									

### **Latah County**

<b>Deary</b>	22	1325PST			0	0	0	0	<b>Tstm Wind/Hail</b>
1/2 inch hail									

### **Boundary County**

<b>Porthill</b>	29	0900PST 2100PST			0	0	0	0	<b>Flood</b>
2.02 inches of rain at bonnors ferry and 1.98 inches at porthill. Parker Creek had some flooding									

## IDAHO, Southeast

### **Cassia County**

<b>Burley</b>	08	1545MST	0.2	.1	0	0	4K		<b>Tornado (F0)</b>
Evergreen Nursery greenhouse roofs removed and plants damaged.									

### **Cassia County**

<b>Declo to Burley</b>	08	1550MST 1641MST			0	0			<b>Funnel Cloud</b>
4 funnel cloud reports.									

### **Jefferson County**

<b>Rigby</b>	13	1330MST			0	0			<b>Hail (1.00)</b>
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### **Jefferson County**

<b>Rigby</b>	13	1930MST			0	0			<b>Hail (1.75)</b>
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### **Fremont County**

<b>St Anthony to Ashton</b>	13	1942MST			0	0			<b>Hail (1.00)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>IDAHO, Southeast</b>									
		Hail fell up to 2 inches deep.							
<b>Madison County</b> Rexburg	13	2015MST 2146MST			0	0			Thunderstorm Wind (G50)
		Tri-state Tire Plant lost 100' of its roof. Numerous trees downed causing power outages. Barn roof blown off.							
<b>Fremont County</b> St Anthony	13	2100MST			0	0			Hail (1.00)
<b>Teton County</b> Tetonia	14	2018MST			0	0			Hail (1.00)
<b>Madison County</b> Rexburg	15	2000MST			0	0			Funnel Cloud
<b>Butte County</b> 15 E Arco	16	0915MST 0920MST	0.1	.1	0	0			Tornado (F0)
		No damage; over lava field.							
<b>Cassia County</b> Elba	22	1343MST			0	0			Hail (0.75)
<b>Oneida County</b> 8 SW Holbrook to Holbrook	22	1345MST			0	0			Hail (1.25)
<b>Power County</b> 8 S Arbon	22	1430MST			0	0			Hail (1.25)
<b>Bannock County</b> 2 NW Mc Cammon	22	1455MST			0	0			Hail (1.25)
<b>Madison County</b> Rexburg	22	1710MST			0	0			Hail (0.75)
<b>Lincoln County</b> Shoshone to Richfield	25	1538MST 1548MST			0	0			Hail (1.25)
<b>Cassia County</b> Albion to Idahome	25	1552MST 1615MST			0	0			Hail (0.75)
<b>Power County</b> Arbon	25	2046MST			0	0	250K		Hail (1.00)
<b>Bannock County</b> Portneuf	25	2109MST			0	0			Hail (0.75)
<b>Minidoka County</b> Heyburn to Rupert	25	2115MST 2125MST			0	0			Hail (1.75)
		I-84 covered with hail.							
<b>Bingham County</b> Springfield to Pingree	25	2209MST 2220MST			0	0			Hail (0.75)
<b>Madison County</b> Rexburg	25	2235MST 2335MST			0	0			Tstm Wind/Hail
		55 knot wind.							
<b>Bingham County</b> Blackfoot	30	1820MST			0	0			Thunderstorm Wind (G52)
		Trees blown down.							
<b>IDAHO, Southwest</b>									
<b>Twin Falls County</b> 15 SE (Twf)Twin Falls Arpt	10	1113MST 1115MST			0	0			Funnel Cloud
		Air Traffic Controllers at the Twin Falls Airport sighted a funnel cloud southeast of the airport.							
<b>Boise County</b> 5 S Horseshoe Bend	10	2015MST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## IDAHO, Southwest

A heavy downpour along Highway 55 just south of Horseshoe Bend caused a hillside to let go and cover a portion of the highway with dirt, mud and debris.

### **Boise County**

**5 W Horseshoe Bend**

11	1742MST				0	0			<b>Flash Flood</b>
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A flash flood covered Highway 52 with up to 3 feet of water near the Boise/Gem County line.

### **Ada County**

**Boise**

12	1430MST				0	0			<b>Urban/Sml Stream Fld</b>
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### **Washington County**

**10 N Weiser**

12	1700MST				0	0			<b>Flash Flood</b>
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An afternoon of widespread heavy showers and thunderstorms caused generally minor flooding problems throughout southwest Idaho. Urban flooding caused by overloaded storm drains left standing water up to 5 inches deep at a few intersections in Boise, disrupting traffic. In Washington County near the town of Weiser a levee holding an irrigation canal broke. The ensuing flood closed Highway 95 north of Weiser with water rising over a bridge and surrounding a trailer home.

### **Ada County**

**Boise**

25	0800MST 0830MST				0	0			<b>Urban/Sml Stream Fld</b>
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### **Elmore County**

**20 W Atlanta**

25	0920MST				0	0			<b>Flash Flood</b>
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Scattered heavy rain showers and thunderstorms were noted over the Upper Treasure Valley and the Boise Mountains. In Boise a heavy rain shower overloaded the storm drain system. Reports of up to 8 inches of water on roads and intersections were reported, with water pressure blowing manhole covers off of the manholes. A small mud slide was reported in the Boise Foothills. In the Boise Mountains a thunderstorm triggered a flash flood of mud and debris over the Middle Fork Boise River Road west of Atlanta near milepost 60.

### **Owyhee County**

**30 SE Bruneau to  
27 S Bruneau**

25	1420MST				0	0			<b>Hail (0.75)</b>
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### **Gooding County**

**15 W Gooding to  
1 W Gooding**

25	1504MST 1520MST				0	0	2K		<b>Hail (1.50)</b>
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### **Twin Falls County**

**5 S Twin Falls to  
Twin Falls**

25	1520MST 1650MST				0	0			<b>Hail (1.00)</b>
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### **Gem County**

**5 E Emmett**

25	1630MST				0	0			<b>Hail (0.75)</b>
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### **Jerome County**

**5 SE Jerome**

25	1630MST				0	0			<b>Hail (1.00)</b>
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During the afternoon of June 25th scattered severe thunderstorms developed over southwest and south central Idaho. The Magic Valley bore the brunt of these storms with numerous reports of 3/4 inch to one and a half inch hail over Owyhee, Gooding, Jerome and Twin Falls Counties. On Interstate 84 near the town of Bliss large hailstones broke automobile windshields. In the Treasure Valley one report of 3/4 inch hail was received from the Gem County town of Emmett.

## ILLINOIS, Central

### **Sangamon County**

**3 E Chatham**

04	1858CST				0	0	0		<b>Thunderstorm Wind</b>
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Thunderstorm winds blew down a large tree 3 miles east of Chatham.

### **Scott County**

**4 W Winchester**

04	2032CST				0	0			<b>Hail (1.75)</b>
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### **Mason County**

**Manito to  
San Jose**

11	0315CST 0325CST				0	0	0		<b>Thunderstorm Wind</b>
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As a severe thunderstorm moved southeast across Mason County, it blew down several trees and power lines in Manito and San Jose. In San Jose, one tree fell onto a house causing minor damage and another fell onto a truck. No injuries were reported and no damage estimate was available.

### **Sangamon County**

**Pleasant Plains to  
Chatham**

11	1400CST 1424CST				0	0			<b>Thunderstorm Wind (G61)</b>
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Thunderstorm winds blew down several trees in Pleasant Plains and in Chatham. In Chatham, a tree fell onto a van and truck causing minor damage. No injuries were reported and no damage estimate was available.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Menard County</b> 2 N Athens	11	1415CST			0	0	0		<b>Thunderstorm Wind</b> Thunderstorm winds broke off ten power poles at the base of each. Also, numerous large tree limbs were blown down and on one window was blown out on a house. No injuries were reported and no damage estimate was available.
<b>Knox County</b> 1 NE Knoxville to 5 NE Knoxville	11	1430CST 1438CST			0	0	100K		<b>Thunderstorm Wind</b> As a severe thunderstorm moved northeast across Knox County, thunderstorm winds blew over a semi on I-74 one mile northeast of Knoxville. The driver was not injured. The winds also blew over several trees and caused minor damage to 5 homes in the area. Also, a part of the roof of a machine shed was peeled off and a garage was destroyed. Damage is estimated around \$100,000.
<b>Tazewell County</b> 1 N Delavan	11	1450CST			0	0			<b>Hail (1.25)</b>
<b>Crawford County</b> 2 SE Robinson to Palestine	11	1725CST 1735CST			0	0	15K		<b>Thunderstorm Wind</b> Thunderstorm winds damaged a barn and blew down several trees 2 miles southeast of Robinson. Debris from the barn caused minor damage to two mobile homes in the area. In Palestine, the winds blew down a tree which fell onto a mobile home causing minor damage. No injuries were reported and damage was estimated around \$15,000.
<b>De Witt County</b> 4 N Wapella	12	1436CST			0	0	0		<b>Thunderstorm Wind</b> Thunderstorm winds blew over a semi on Hwy 51 four miles north of Wapella. No injuries were reported.
<b>Logan County</b> Broadwell	12	1438CST			0	0	0	0	<b>Hail (0.75)</b>
<b>Vermilion County</b> Potomac to Danville	12	1517CST 1600CST			0	0	0	0	<b>Thunderstorm Wind (G52)</b> Thunderstorm winds blew down several trees, tree limbs, and power lines in Potomac, Danville and Catlin. No injuries or structural damage were reported.
<b>Piatt County</b> Cerro Gordo to Atwood	12	1523CST 1540CST			0	0	0		<b>Thunderstorm Wind</b> Thunderstorm winds blew down numerous trees, tree limbs, and power lines in Cerro Gordo and Atwood.
<b>Christian County</b> Stonington to 3 S Stonington	12	1535CST			0	0	0		<b>Thunderstorm Wind</b> Thunderstorm winds blew down two trees onto a mobile home 3 miles south of Stonington causing extensive damage. Also, several power poles were blown down in Stonington. No injuries were reported and no damage estimate was available.
<b>Champaign County</b> 2 NW Homer to Homer	12	1538CST 1550CST			0	1	0		<b>Thunderstorm Wind</b> Thunderstorm winds blew over a semi on Hwy 49 near Homer. The driver sustained minor injuries. Also, numerous trees were blown down at Homer Lake.
<b>Moultrie County</b> 2.5 S Kirksville	12	1618CST			0	0	0		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several large trees 2.5 miles south of Kirksville.
<b>Coles County</b> Mattoon	12	1641CST 1708CST			0	0			<b>Hail (1.75)</b>
<b>Sangamon County</b> Divernon	12	1657CST			0	0			<b>Hail (1.00)</b>
<b>Edgar County</b> Paris to Vermilion	12	1700CST 1715CST			0	0			<b>Thunderstorm Wind (G61)</b> Thunderstorm winds blew down numerous trees and tree limbs from Paris to Vermilion as the thunderstorm associated with them moved east southeast across Edgar County.
<b>Cumberland County</b> 1 E Greenup	12	1712CST			0	0	0		<b>Thunderstorm Wind</b> A tree was blown down causing damage to the roof of a church on Route 40 one mile east of Greenup. No injuries were reported and no damage estimate was available.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Effingham County</b> Altamont	12	1715CST			0	0	0	0	<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees, numerous tree limbs, and power lines in Altamont. No injuries were reported. Some minor structural damage was reported though no damage estimate was available.
<b>Clark County</b> Countywide	12	1726CST 1738CST			0	0	0	0	<b>Thunderstorm Wind</b> Thunderstorm winds blew down numerous trees, tree limbs, and power lines throughout the county.
<b>Christian County</b> Assumption	12	1735CST			0	0	0	0	<b>Hail (0.75)</b>
<b>Shelby County</b> 1.5 N Shelbyville to Windsor	12	1743CST 1801CST			0	0	0.20K	0	<b>Hail (1.75)</b>
<b>Shelby County</b> Findlay to 2 SE Findlay	12	1752CST 1754CST			0	0	0	0	<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees. Also, the winds destroyed a porch roof and caused damage to the roof of a home two miles southeast of Findlay. No injuries were reported and no damage estimate was available.
<b>Clay County</b> 4 NW Flora to 3 W Flora	12	1805CST 1808CST			0	0	0	0	<b>Hail (1.75)</b>
<b>Clay County</b> Xenia to Clay City	12	1808CST 1825CST			0	0	0	0	<b>Thunderstorm Wind</b> A severe thunderstorm moved east across southern portions of Clay County. Winds associated with the storm blew down numerous trees from Xenia to Clay City. Some of the trees caused extensive damage to the high school in Flora, as well as, homes and vehicles. The winds also destroyed a building on Route 50 eight miles west of Flora and a garage 4 miles west of Flora. No injuries were reported and no damage estimate was available.
<b>Richland County</b> Parkersburg to Berryville	12	1848CST 1855CST			0	0	0	0	<b>Thunderstorm Wind</b> Thunderstorm winds destroyed a barn near Parkersburg, as well as, blowing down several trees and power lines in the Parkersburg and Berryville areas. One tree fell onto a trailer in Bonpas, though no injuries were reported. No damage estimate was available.
<b>Peoria County</b> Peoria	14	0715CST 0720CST			0	0	0	0	<b>Thunderstorm Wind</b>
<b>Logan County</b> Lincoln to Mt Pulaski	14	0723CST 0735CST			0	0	0	0	<b>Thunderstorm Wind (G55)</b>
<b>Marshall County</b> Sparland	14	0730CST			0	0	0	0	<b>Thunderstorm Wind</b>
<b>Tazewell County</b> Washington	14	0730CST			0	0	0	0	<b>Thunderstorm Wind</b>
<b>Woodford County</b> Spring Bay	14	0730CST			0	0	0	0	<b>Thunderstorm Wind</b>
<b>McLean County</b> Heyworth to Le Roy	14	0750CST 0800CST			0	0	0	0	<b>Thunderstorm Wind</b> A line of severe thunderstorms moved quickly east across northern portions of Central Illinois. Thunderstorm winds blew down numerous trees, tree limbs, and power lines. No injuries or structural damage were reported.
<b>Clay County</b> 2 S Louisville	14	0805CST			0	0	0	0	<b>Thunderstorm Wind</b> Thunderstorm winds blew 2 vehicles off the road on Hwy 45 two miles south of Louisville. No injuries were reported and the vehicles only sustained minor damage. No damage estimate was available.
<b>Schuyler County</b> Camden	14	1623CST	0.1	10	0	0	0	0	<b>Tornado (F0)</b> A tornado briefly touched down in a field just outside of Camden. No injuries or damage were reported.
<b>Schuyler County</b> 2 SE Pleasant View	14	1656CST	0.1	10	0	0	0	0	<b>Tornado (F0)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
A tornado briefly touched down in a field two miles southeast of Pleasant View. No injuries or damage were reported.									
<b>Vermilion County</b>									
<b>Catlin</b>	<b>14</b>	<b>1700CST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
	<b>15</b>	<b>0600CST</b>							
A series of thunderstorms moved through the southern portions of Vermilion County. Up to two inches fell in an hour in this area. Numerous roads were flooded and some water was reported in basements. Some of the towns affected by the flooding were Catlin, Hawbuck, Hillery, Tilton, and Georgetown. Flooding slowly subsided by the early morning hours on the 15th of June. No damage estimate was available.									
<b>Fulton County</b>									
<b>3 NE Marbletown</b>	<b>14</b>	<b>1745CST</b>	<b>0.1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Tornado (F0)</b>
Storm chasers witnessed a tornado briefly touch down in field 3 miles northeast of Marbletown. No injuries or damage were reported.									
<b>Peoria County</b>									
<b>Peoria</b>	<b>14</b>	<b>1827CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
		<b>1845CST</b>							
Thunderstorm winds blew down a couple of trees, both of which fell onto several homes causing minor damage. No injuries were reported and no damage estimate was available.									
<b>Christian County</b>									
<b>2 S Mt Auburn</b>	<b>14</b>	<b>1852CST</b>	<b>0.1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Tornado (F0)</b>
A tornado briefly touched down in a field two miles south of Mt. Auburn. No injuries or damage were reported.									
<b>Effingham County</b>									
<b>Effingham</b>	<b>14</b>	<b>1913CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
As a severe thunderstorm moved through Effingham it blew down numerous large tree limbs throughout the town.									
<b>Macon County</b>									
<b>Long Creek to Mt Zion</b>	<b>14</b>	<b>1919CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
		<b>1920CST</b>							
Thunderstorm winds blew down several power lines and tree limbs in Long Creek and Mt. Zion.									
<b>Clay County</b>									
<b>4 NE Flora</b>	<b>14</b>	<b>1931CST</b>	<b>0.1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Tornado (F0)</b>
A tornado briefly touched down in a field 4 miles northeast of Flora. No injuries or damage were reported.									
<b>Knox County</b>									
<b>Galesburg</b>	<b>18</b>	<b>1700CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
Thunderstorm winds blew down several power lines in Galesburg.									
<b>Fulton County</b>									
<b>Farmington to Norris</b>	<b>18</b>	<b>1740CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
		<b>1750CST</b>							
Thunderstorm winds blew down numerous trees, tree limbs, and power lines in Farmington and Norris. Also, the winds destroyed a barn and damaged a large storage building. No damage estimate was available.									
<b>Peoria County</b>									
<b>Elmwood to Peoria</b>	<b>18</b>	<b>1742CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
		<b>1811CST</b>							
Thunderstorm winds blew down numerous trees, tree limbs, and power lines in an area extending from Elmwood to Peoria. Some of the trees fell onto homes causing structural damage. No injuries were reported and no damage estimate was available.									
<b>Cass County</b>									
<b>Beardstown</b>	<b>18</b>	<b>1745CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
		<b>1755CST</b>							
Thunderstorm winds blew down a tree onto a house and another one fell onto a car in Beardstown. No injuries were reported and no damage estimate was available.									
<b>Schuyler County</b>									
<b>2 SE Rushville</b>	<b>18</b>	<b>1745CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
Thunderstorm winds blew down several trees, some of which caused damage to a home two miles southeast of Rushville. Also, numerous power lines and tree limbs were blown down. No injuries were reported and no damage estimate was available.									
<b>Mason County</b>									
<b>Countywide</b>	<b>18</b>	<b>1755CST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Thunderstorm Wind</b>
		<b>1830CST</b>							
Thunderstorm winds blew down numerous trees, tree limbs, and power lines countywide.									
<b>Stark County</b>									
<b>Bradford</b>	<b>18</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Morgan County</b> Waverly	18	1805CST			0	0	0	0	Thunderstorm Wind
									Thunderstorm winds blew down several power lines and power poles in Waverly.
<b>Marshall County</b> Sparland to 4 E Lacon	18	1807CST 1823CST			0	0	0	0	Thunderstorm Wind
									Thunderstorm winds blew down several trees, numerous tree limbs, and damaged a grain elevator. No injuries were reported and no damage estimate was available.
<b>Tazewell County</b> Countywide	18	1817CST 1850CST			0	0	0	0	Thunderstorm Wind
									Thunderstorm winds blew off part of a roof of a shopping center in Morton. Some of the debris damaged several vehicles in the adjacent parking lot. In Washington, a construction trailer was blown over. Countywide numerous trees, tree limbs, and power lines were blown down. No injuries were reported and no damage estimate was available.
<b>Woodford County</b> Metamora	18	1830CST			0	0	0	0	Thunderstorm Wind
									Numerous large tree limbs were blown down in Metamora.
<b>Sangamon County</b> Farmingdale to Chatham	18	1840CST 1858CST			0	0			Thunderstorm Wind (G61)
									Several trees, tree limbs, and power lines were blown down in an area between Farmingdale and Chatham.
<b>McLean County</b> 1 W Bloomington	18	1904CST			0	0	0	0	Thunderstorm Wind
									A large tree was snapped off 4 to 5 feet above the ground one mile west of Bloomington, next to I-55. No structural damage or injuries were reported.
<b>Christian County</b> Kincaid to Pana	18	1951CST 2020CST			0	0			Thunderstorm Wind (G52)
									Numerous trees, tree limbs, and power lines were blown down in an area extending from Kincaid to Pana. In Pana, one of the fallen trees damaged a car. No one was injured and no damage estimate was available.
<b>Champaign County</b> Philo	18	2008CST			0	0	0		Hail (1.00)
<b>Champaign County</b> Tolono	18	2010CST			0	0		0	Thunderstorm Wind
									A large tree was blown down in Tolono. No injuries or structural damage were reported.
<b>Shelby County</b> Moweaqua to Windsor	18	2020CST 2045CST			0	0	0.30K		Thunderstorm Wind
									Trees, tree limbs, and power lines were blown down in an area extending from Moweaqua to Windsor. In Windsor, one tree fell onto some playground equipment causing approximately \$300 in damage. No injuries were reported.
<b>Vermilion County</b> Danville	18	2030CST			0	0			Thunderstorm Wind (G60)
<b>Moultrie County</b> Sullivan	18	2037CST			0	0			Thunderstorm Wind (G52)
<b>Coles County</b> Mattoon	18	2055CST			0	0			Thunderstorm Wind (G61)
									Numerous trees were blown down all over town.
<b>Cumberland County</b> Neoga	18	2100CST			0	1		0	Thunderstorm Wind
									Thunderstorm winds blew over a semi on I-57 near Neoga. The driver was ok, while his passenger sustained minor injuries.
<b>Effingham County</b> Effingham	18	2118CST			0	0	0.40K	0	Thunderstorm Wind
									Numerous trees, tree limbs, and power lines were blown down in Effingham. One small tree landed on a car causing minor damage. No one was injured and damage was estimated around \$400.
<b>Clark County</b> 1 S Martinsville	18	2125CST			0	0	0		Thunderstorm Wind
									A large tree was blown down across North Creek Road about one mile south of Martinsville.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Clay County</b> Xenia to Flora	18	2205CST 2220CST			0	0	0	0	Thunderstorm Wind
Numerous trees and power lines were blown down in an area extending from Xenia to Flora. No injuries were reported.									
<b>Schuyler County</b> Rushville	22	0620CST			0	0	0	0	Thunderstorm Wind
Numerous large tree limbs were blown down in Rushville.									
<b>Cass County</b> 3 E Beardstown	22	0630CST			0	0	0	0	Thunderstorm Wind
Large tree limbs were blown down, some of which were lying on Route 125 between Beardstown and Virginia.									
<b>Lawrence County</b> Lawrenceville	22	1215CST			0	0	0	0	Hail (0.75)
<b>Macon County</b> Decatur to 10 SSE Decatur	22	1900CST 1940CST			0	0	0	0	Thunderstorm Wind
Thunderstorm winds blew down numerous trees, tree limbs, and power lines in an area between Decatur and 10 miles south southeast of Decatur. Also, the roof of one barn was blown off and a power pole blown over in Oakley.									
<b>Clay County</b> 1 E Xenia to Flora	22	2045CST 2100CST			0	0	0	0	Thunderstorm Wind
Numerous power lines were blown down in an area extending from one mile east of Xenia to Flora.									
<b>Richland County</b> 1 N Parkersburg	22	2110CST			0	0	0	0	Thunderstorm Wind
Several power lines were blown down one mile north of Parkersburg.									
<b>ILZ027&gt;031-036&gt;038-040&gt;057-061&gt;063-066&gt;068-071&gt;073</b>									
			<b>Knox - Stark - Peoria - Marshall - Woodford - Fulton - Tazewell - Mclean - Schuyler - Mason - Logan - De Witt - Piatt - Champaign - Vermilion - Cass - Menard - Scott - Morgan - Sangamon - Christian - Macon - Moultrie - Douglas - Coles - Edgar - Shelby - Cumberland - Clark - Effingham - Jasper - Crawford - Clay - Richland - Lawrence</b>						
	26	0300CST			1	0			Excessive Heat
	28	1500CST							
A hot and humid airmass built in across Central Illinois late in June. High temperatures on June 26th and 27th climbed into the middle and upper 90s. This combined with the high humidity values produced heat indices of 105 to 110 degrees at times. Several heat related illnesses were reported in area hospitals due to the heat. One death was reported in Peoria and was confirmed to be heat related as a woman died in her home on June 27th. Also, several highways in the area had sections of roadway buckle due to the excessive heat. F82PH									
<b>Marshall County</b> Henry to Wenona	28	0230CST 0250CST			0	0	0	0	Thunderstorm Wind
Several trees and power lines were blown down in an area extending from Henry to Wenona.									
<b>Menard County</b> Petersburg to 1 N Athens	28	1840CST 1900CST			0	3	0	0	Thunderstorm Wind
Thunderstorm winds blew down a beer tent at the county fair. The tent injured 3 people, one seriously. Also, numerous trees, tree limbs, and power lines were blown down countywide.									
<b>Mason County</b> Forest City	28	1843CST			0	0	0	0	Thunderstorm Wind
Several power lines were blown down in Forest City.									
<b>Logan County</b> Countywide	28	1900CST 1930CST			0	1	1M		Thunderstorm Wind (G69)
Thunderstorm winds, which were gusting to 79 mph at the weather service office, caused considerable damage throughout Logan county. The winds blew down hundreds of trees, tree limbs, power poles, and power lines. One mile north of Broadwell, an equipment shed was destroyed. Several homes sustained damage from fallen trees and/or tree limbs. One woman was slightly injured when a fireworks tent that she was working in blew down.									
<b>Sangamon County</b> 8 W Williamsville	28	1900CST			0	0	0	0	Thunderstorm Wind
Several trees were blown down eight miles west of Williamsville. One of the fallen trees landed on chimney and caused minor damage. No injuries were reported and no damage estimate was available.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Tazewell County</b> Armington	28	1924CST			0	0	0		Thunderstorm Wind
									Numerous large tree limbs were blown down in Armington.
<b>De Witt County</b> Countywide	28	1930CST 2010CST			0	0	0		Thunderstorm Wind
									Numerous trees, tree limbs, power poles, and power lines were blown down countywide. No injuries were reported.
<b>Mclean County</b> Bloomington Arprt	28	1945CST			0	0	0		Thunderstorm Wind (G70)
									Thunderstorm winds gusted up to 81 mph at the airport in Bloomington. Numerous tree limbs and power lines were blown down throughout town.
<b>Champaign County</b> Fisher	28	2020CST			0	0			Thunderstorm Wind (G52)
									Several trees and power lines were blown down in Fisher.
<b>Effingham County</b> Moccasin	28	2030CST			0	0	1K	0	Thunderstorm Wind
									Thunderstorm winds blew down numerous large tree limbs in Moccasin. The limbs caused minor damage to one home, mainly guttering and siding damage, and severely damaged a pickup truck. No injuries were reported and damage was estimated around \$1,000.
<b>Schuyler County</b> Frederick	28	2117CST			0	0			Hail (1.75)
<b>Clark County</b> Melrose	28	2130CST			0	0	0		Thunderstorm Wind
									Numerous large trees were blown down, which caused damage to several homes and vehicles in Melrose. Also, several mobile homes were destroyed. No injuries were reported and no damage estimate was available.
<b>Logan County</b> Lincoln	28	2220CST			0	0	0		Thunderstorm Wind
									Large tree limbs were blown down again in Lincoln. One large tree limb pierced the roof of a house that had sustained damage with a storm that had occurred several hours earlier. No injuries were reported and no damage estimate was available.
<b>Knox County</b> Countywide	29	1456CST 1537CST			0	2	1M		Thunderstorm Wind (G52)
<b>Fulton County</b> Countywide	29	1508CST 1555CST			0	1	100K		Thunderstorm Wind (G61)
									As the bow echo moved through Fulton County it blew down hundreds of trees, one of which fell on a woman in Cuba, who was trying to seek shelter from the storm. She sustained serious injuries and was hospitalized for a time.
<b>Fulton County</b> 4 ENE Avon to 8 E Avon	29	1509CST 1512CST	5	400	0	0	15K	50K	Tornado (F1)
									A tornado touched down initially 4 miles east northeast of Avon, travelling to the east southeast. Initial damage occurred at a farmstead with damage to a barn (\$15,000). A farm house was damaged, ripping off part of the roof, part of the siding, and moving it off the foundation. Damage to a nearby beanfield was estimated around \$50,000. The tornado lifted briefly then touched down 8 miles east of Avon, damaging a machine shed and a horse barn. Numerous trees were also damaged along the tornado's path. No injuries were reported.
<b>Peoria County</b> Countywide	29	1514CST 1607CST			0	4	1.1M	470K	Thunderstorm Wind (G57)
<b>Knox County</b> 3.5 SW Williamsfield to 3 SSE Williamsfield	29	1520CST 1522CST	3	200	0	1	2M		Tornado (F1)
									A tornado touched down 3.5 miles southwest of Williamsfield. It destroyed a steel corn crib, blew down a large tree which damaged a home. Also, several windows were blown out on the home. As the tornado travelled east it caused major tree damage for a mile. Then it blew a large tree onto another home and destroyed an empty silo. Next it destroyed a barn and two outbuildings, knocked yet another tree onto a home, as well as, breaking several windows and blowing several 2x4s into the home. Further down the road, the roof and east walls of two homes were destroyed. Then for the last half of a mile, ten power poles were blown down, as well as, numerous trees and a barn sustained moderate damage. One woman sustained minor injuries from flying glass. Damage is estimated around \$2 million.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops		
<b>ILLINOIS, Central</b>										
<b>Stark County</b> Countywide	29	1520CST 1555CST			0	1				Thunderstorm Wind (G57)
<b>Fulton County</b> 1 WNW Farmington to .5 ESE Farmington	29	1522CST 1524CST	1.5	100	0	0	670K			Tornado (F1)
A tornado touched down on the west side of Farmington and travelled to the east southeast. It first severely damaged a lumberyard, ripping off the roof of a large storage facility. Then as it moved into the downtown area, several buildings sustained damage to the back walls, as well as, roof damage. Also, several projectiles were found in this area (2x4s driven into the ground). A block down the road a house lost its roof and then as the tornado moved into the east side of town, the second story of a brick building was demolished. Across the street at the high school, a large garage was destroyed which damaged several vehicles. Also, the gymnasium sustained significant roof and water damage and the new press box and bleachers at the football stadium were destroyed. Damage at the high school was estimated around \$400,000. As the tornado lifted on the east side of town, it blew down or damaged numerous trees. No deaths or injuries were reported.										
<b>Schuyler County</b> Countywide	29	1526CST 1612CST			0	0		0		Thunderstorm Wind
<b>Mason County</b> Countywide	29	1537CST 1618CST			0	0		0		Thunderstorm Wind
<b>Cass County</b> Countywide	29	1540CST 1630CST			0	0		0		Thunderstorm Wind
As the storms moved through Cass County, Chandlerville was the hardest hit. Three mobile homes were blown over and half the roof of the bank was torn off. Also, the grain elevator sustained moderate damage. No injuries were reported.										
<b>Tazewell County</b> Countywide	29	1540CST 1630CST			0	0	2M	1M		Thunderstorm Wind (G83)
As the storms moved through Tazewell County, more intense damage was observed in two main areas, Morton and South Pekin. In Morton, as a tornado moved through southwestern portions of the city, strong microburst winds (100 to 110 mph) caused considerable tree and power line damage, as well as, structural damage in and close to the tornado path which masked or "wiped out" any evidence of a possible tornado touchdown. The tornado occurrence was not discounted however, as there were numerous valid spotter observations plus a mesocyclone signature on doppler radar. In the South Pekin area, 7 railroad cars were blown over and two high-tension towers were blown down. Fortunately, no injuries were reported and damage in Tazewell County was estimated around \$3 million.										
<b>Marshall County</b> Countywide	29	1543CST 1630CST			0	0	250K			Thunderstorm Wind
<b>Woodford County</b> Countywide	29	1543CST 1640CST			0	0				Thunderstorm Wind (G52)
<b>Tazewell County</b> Marquette Hgts to 1 SW Morton	29	1545CST 1552CST	8.5	100	0	0	1M			Tornado (F1)
A tornado formed over the Marquette Heights area blowing down numerous trees and power lines as it travelled to the east southeast. When the tornado reached the Groveland area, numerous homes sustained minor to moderate damage and part of the canopy over the gas pumps at a convenience store was blown down. As the tornado reached the southwestern side of Morton it intensified. It caused considerable damage to a 30 store shopping center, tearing half the roof off and breaking windows. In this same area it also caused moderate damage to a cinema, several restaurants, and other businesses. Then the tornado moved into a residential area causing light to moderate damage to around 24 homes, mainly roof damage, before lifting and dissipating. So far damage has been estimated around \$1 million and no injuries or deaths were reported.										
<b>Logan County</b> Countywide	29	1550CST 1650CST			0	0	500K	2.5M		Thunderstorm Wind (G61)
<b>Menard County</b> Countywide	29	1550CST 1642CST			0	0		0		Thunderstorm Wind
<b>McLean County</b> Countywide	29	1600CST 1700CST			0	0	1.1M			Thunderstorm Wind (G70)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ILLINOIS, Central

In Mclean County as the storms moved through, there were more intense areas of damage due to microbursts (100 to 110 mph) in the Mclean and Leroy areas. In the town of Mclean, a large billboard was bent over and a business on the east side of town lost a large portion of its roof, as well as, several large motorized doors. Further east in Leroy, hundreds of trees were blown down, some of which fell onto homes causing moderate damage. In Bloomington, a home was destroyed by fire due to a freak accident. Large tree limbs were blown down onto the home's gas meter, knocking it off the wall. Live downed power lines helped to spark the fire. No injuries were reported and damage in Mclean County was estimated around \$1.1 million.

### **Morgan County Countywide**

29	1600CST 1700CST				0	0	0	0	<b>Thunderstorm Wind</b>
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### **De Witt County Countywide**

29	1610CST 1657CST				0	0	1M	0	<b>Thunderstorm Wind (G96)</b>
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In DeWitt County, a strong microburst (100 to 110 mph) hit around the Clinton Nuclear Power Plant facility and the adjacent Clinton Lake recreation area. The nuclear plant lost three high voltage transmission lines, though there was no structural damage to the facility. Nearby at the marina, the roof on the west side was blown off and several large boats (not in the water) were blown over. Also, hundreds of trees were blown down, some of which blocked Routes 54 and 10 for a time. No injuries were reported.

### **Sangamon County Countywide**

29	1610CST 1700CST				0	0	10K	0	<b>Thunderstorm Wind (G61)</b>
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### **Scott County Countywide**

29	1612CST 1700CST				0	0	0	0	<b>Thunderstorm Wind</b>
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### **Macon County Countywide**

29	1625CST 1723CST				0	0	500K	0	<b>Thunderstorm Wind</b>
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As the bow echo moved through Macon County, the Maroa area sustained considerable damage. A high-tension transmission line was blown down across US 51. Eight structures which carried the line were damaged and a nearby barn and shed were destroyed. No injuries were reported.

### **Sangamon County 7 S Springfield**

29	1630CST	0.1	10		0	0	0	0	<b>Tornado (F0)</b>
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An off-duty police officer witnessed a tornado briefly touch down and pull a large tree out of the ground in the Huntington Heights subdivision 7 miles south of Springfield. No structural damage or injuries were reported.

### **Piatt County Countywide**

29	1631CST 1723CST				0	0	300K	0	<b>Thunderstorm Wind</b>
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### **Christian County Countywide**

29	1634CST 1740CST				0	0	0	0	<b>Thunderstorm Wind</b>
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### **Sangamon County .6 NNW Pawnee to .3 N Pawnee**

29	1636CST 1637CST	0.5	40		0	0	130K	0	<b>Tornado (F0)</b>
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As a tornado touched down on the north side of Pawnee, it blew the roof off of a house and twisted it on its foundation. Some debris (2x6s) from the house were driven into the roof of the garage on the house next door. The tornado continued for about half a mile before lifting and dissipating knocking down several trees. Damage to the two homes was estimated around \$130,000. No injuries or deaths were reported.

### **Champaign County Countywide**

29	1642CST 1730CST				0	2	500K	0	<b>Thunderstorm Wind (G72)</b>
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Several areas in Champaign County sustained considerable damage caused by microbursts (100 to 110 mph) as the thunderstorms marched across the county. Just south of Willard Airport, a mobile home was destroyed. A woman inside the mobile home sustained minor injuries as the home was rolled off its foundation and disintegrated. A nearby roofing business literally lost its roof. In the same general area, two semis were blown over on I-57 with one driver sustaining minor injuries. Further south, just south of Tolono, 21 cars of a freight train were blown off the tracks. No injuries were reported with that incident.

### **Moultrie County Countywide**

29	1650CST 1742CST				0	0	0	0	<b>Thunderstorm Wind</b>
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### **Douglas County Countywide**

29	1655CST 1752CST				0	1	0	0	<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Shelby County Countywide</b>	29	1655CST 1800CST			0	0	0	0	Thunderstorm Wind
<b>Champaign County .8 WNW Tolono to .2 WNW Tolono</b>	29	1658CST 1659CST	0.6	20	0	0			Tornado (F0)
A tornado briefly touched down in Tolono on the west side near the park. It travelled to the east southeast for about half a mile knocking down numerous trees, tree limbs, and power lines before lifting and dissipating. A few of the trees landed on home s causing light to moderate damage. No damage estimate was available. No injuries or deaths were reported.									
<b>Vermilion County Countywide</b>	29	1705CST 1750CST			0	0	0	0	Thunderstorm Wind
<b>Coles County Countywide</b>	29	1712CST 1800CST			0	0			Thunderstorm Wind (G70)
<b>Edgar County Countywide</b>	29	1718CST 1810CST			0	0	0	0	Thunderstorm Wind
<b>Clark County Countywide</b>	29	1723CST 1832CST			0	0	0	0	Thunderstorm Wind
<b>Cumberland County Countywide</b>	29	1734CST 1819CST			0	0	0	0	Thunderstorm Wind
<b>Effingham County Countywide</b>	29	1736CST 1832CST			0	0	0	0	Thunderstorm Wind
<b>Jasper County Countywide</b>	29	1750CST 1840CST			0	0	0	0	Thunderstorm Wind
<b>Clay County Countywide</b>	29	1800CST 1900CST			0	0	0	0	Thunderstorm Wind
<b>Crawford County Countywide</b>	29	1800CST 1855CST			0	0	0	0	Thunderstorm Wind
<b>Richland County Countywide</b>	29	1820CST 1900CST			0	0	0	0	Thunderstorm Wind
<b>Lawrence County Countywide</b>	29	1834CST 1930CST			0	0	0	0	Thunderstorm Wind

A large bow echo system developed over eastern Iowa and moved rapidly to the southeast into Illinois. It moved into Central Illinois's County Warning Area (CWA) around 4 pm in Knox County and exited the CWA (Lawrence County) around 830 pm. Damage was reported in all 35 counties with this system. The overall general area of wind damage was produced by the passage of the bow echo's "gust front" on the leading edge of the line of thunderstorms. Wind speeds were measured or estimated to be between 60 to 80 mph, blowing down or uprooting thousands of trees, tree limbs, power poles, and power lines. Hundreds of trees fell onto structures causing damage ranging from just torn guttering to major roof and structural damage. Also, hundreds of vehicles sustained damage from fallen trees and numerous outbuildings, sheds, and silos were either damaged or destroyed. Considerable crop damage was sustained in most areas. In some areas, more intense damage was observed, caused by stronger wind speeds. Speeds were measured or estimated in these areas at 100 to 110 mph. These areas of damage were apparently "microbursts" produced by a series of mesocyclones that formed on the forward edges of the bow echo. These microbursts, or swaths of more intense wind damage were generally about 1/2 a mile in width. In these areas significant structural damage occurred, such as peeling off roofs, blowing over freight railroad cars, bending steel power poles, and other structural damage. A third phenomena that occurred with this event were spin-up tornadoes along the leading edge of the bow echo structure. These tornadoes caused significant damage in narrow swaths along the bow echo's path and were often masked by the microburst damage occurring adjacent to them. Based on valid spotter observations and mesocyclone signatures on doppler radar, the existence of these tornadoes was validated. Overall, approximately twelve people sustained injuries and damage was estimated around \$16 million.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Central</b>									
<b>Schuyler County</b>									
<b>Bader</b>	29	1819CST			0	0	0		<b>Thunderstorm Wind</b>
									Thunderstorm winds associated with another line of storms blew down several trees and tree limbs in Bader. No injuries were reported.
<b>ILLINOIS, Northeast</b>									
<b>Livingston County</b>									
<b>Dwight</b>	11	0100CST 1300CST			0	0	250K		<b>Urban/Sml Stream Fld</b>
									Thunderstorms dumped 4 to 6 inches of rain in northeast Livingston County. A cooperative observer at Dwight measured 4.75 inches. Numerous roads, yards and basements were flooded. A car dealership suffered about \$250,000 in damages when the parking lot flooded. Gooseberry Creek and Brewster Creek flooded. Illinois Highway 47 was closed.
<b>Ford County</b>									
<b>Gibson City</b>	12	1505CST			0	0			<b>Hail (1.75)</b>
<b>Ford County</b>									
<b>Paxton</b>	12	1518CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Straight line winds downed several tree limbs and a few trees into electric poles, causing power outages throughout Paxton. Two large trees were uprooted.
<b>La Salle County</b>									
<b>Northeast Portion</b>	16	1330CST 2000CST			0	0			<b>Flash Flood</b>
									Thunderstorms produced as much as 6.5 inches of rain in northeast LaSalle County. The rain caused a rapid rise on the lower Fox River at Dayton. The river rose 4 feet in a few hours. Route 52 was closed near Serena.
<b>Boone County</b>									
<b>Belvidere</b>	18	1415CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Winnebago County</b>									
<b>3 SW Rockford</b>	18	1452CST			0	0			<b>Hail (0.75)</b>
<b>Winnebago County</b>									
<b>Rockford</b>	18	1458CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Ogle County</b>									
<b>Leaf River to Stillman Vly</b>	18	1500CST 1507CST			0	0			<b>Thunderstorm Wind (G50)</b>
									Thunderstorms brought hail and damaging winds to north central Illinois. Tree limbs and power lines were downed in the western part of Winnebago County. Winds snapped 7 utility poles and damaged trees at Machesney Park and Loves Park in eastern Winnebago County. Trees and wires were downed in Belvidere. There was also tree damage in Ogle County along highway 72 from Leaf River to Stillman Valley. A tree fell on a house and a shed was blown over at Stillman Valley.
<b>Ogle County</b>									
<b>Rochelle</b>	18	1429CST			0	1			<b>Lightning</b>
									A 27 year old man was injured when lightning struck a nearby tree.
<b>Lee County</b>									
<b>Dixon</b>	18	1755CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Lee County</b>									
<b>Nelson</b>	18	1755CST	0.5	20	0	0			<b>Tornado (F0)</b>
<b>Winnebago County</b>									
<b>Loves Park</b>	18	1805CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>La Salle County</b>									
<b>Countywide</b>	18	1811CST			0	0			<b>Hail (1.75)</b>
<b>La Salle County</b>									
<b>Countywide</b>	18	1811CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Boone County</b>									
<b>Poplar Grove</b>	18	1815CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>De Kalb County</b>									
<b>Countywide</b>	18	1820CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Mchenry County</b>									
<b>Countywide</b>	18	1830CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Kane County</b>									
<b>Countywide</b>	18	1840CST			0	0			<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Northeast</b>									
<b>Kendall County</b> Sandwich to Yorkville	18	1905CST			0	0			Thunderstorm Wind (G64)
<b>Will County</b> Romeoville to Joliet	18	1920CST 1930CST			0	0			Thunderstorm Wind (G61)
<b>Du Page County</b> Naperville to Bolingbrook	18	1928CST			0	0			Thunderstorm Wind (G50)
<b>Cook County</b> Chicago to Midlothian	18	1935CST 1950CST			0	1			Thunderstorm Wind (G56)
<b>Lake County</b> Wadsworth	18	1952CST			0	0			Thunderstorm Wind (G50)
<p>A squall line moved east across north central and northeast Illinois causing widespread wind damage to trees and power lines. In Winnebago County, there were numerous trees and tree limbs downed in Loves Park and Machesney Park and the roof was torn off a sheet metal business. A small, brief tornado occurred in a field between Nelson and Dixon in Lee County. Golfball size hail was reported at the La Salle/Putnam County line and trees and utility poles were downed in western La Salle County. In Boone County, at Oak Lawn mobile home park at Poplar Grove many trees and limbs were blown down. Mobile homes and vehicles were damaged. A 120 year old, landmark barn was destroyed between Capron and Poplar Grove. Tree limbs and power lines were reported to be blown down in De Kalb and McHenry Counties. In Kane County trees were damaged in several towns along Highway 25. In Kendall County, a ham radio operator/storm spotter in Sandwich recorded a 74 mph wind gust and a large tree fell on a house in Yorkville. In Will County, a 70 mph wind gust was recorded at the NWS office in Romeoville. A bleacher was blown over in Homer Township. Wind gusts blew vehicles off I-80 just east of I-55 in Joliet. In Du Page County the scoreboard was destroyed at Naperville North High School and trees were downed in Bolingbrook. In Lake County a mobile home was blown over at Wadsworth. In Cook County, observers measured a 58 mph wind gust on the west side of Chicago and a 64 mph wind gust in Midlothian. Trees were damaged in the north suburbs of Glencoe, Wilmette and Winetka. The gym roof at Field School in Northbrook was peeled off. Four planes were damaged at Palwaukee Airport. In the west and south suburbs, the roof of a transmission shop was damaged in Bridgeview. Trees were blown down in Brookfield and Hodgkins. Siding on houses and fences were also damaged. In Evergreen Park a tree fell, damaging 2 houses. A 22 year old man was seriously injured when a tree fell on him in Chicago. Funnel clouds were spotted in Lake County and waterspouts were seen east of Wilmette. Damage to power lines resulted in 156,000 customers losing power.</p>									
<b>ILZ014</b>									
<b>Cook</b>									
24		0900CST			10	0			Excessive Heat
28		2300CST							
<p>Daytime temperatures were in the lower to middle 90s with dewpoints in the 70s on the 24th and 25th, producing heat indices of 102 to 107. Thunderstorms brought some relief from the heat on the 26th, though humidity was still high. The heat returned on the 27th with a peak heat index of 107. The 28th was a little cooler with the heat index in the middle to upper 90s. Ten heat-related deaths were reported in Cook County as a result of the heat. The deaths occurred from the 26th to the 29th. Two more deaths occurred in early July as a result of this heat wave. (see July Storm Data for northeast Illinois) F93PH, F74PH, M57PH, F56PH, M77PH, M39BU, F68PH, M87PH, F72PH, F80PH</p>									
<b>Winnebago County</b> Durand	25	1937CST	0.5	20	0	0			Tornado (F0)
<p>A small tornado touched down briefly near Durand. There was no damage.</p>									
<b>Lake County</b> Countywide	25	2015CST 2045CST			0	0			Thunderstorm Wind (G50)
<b>McHenry County</b> Countywide	25	2015CST 2045CST			0	0			Thunderstorm Wind (G50)
<p>Trees and power lines were downed throughout McHenry and Lake Counties. A tree branch came through the roof of a mobile home at Illinois State Beach near Zion. The storms also brought local flooding of roads and low lying areas. There was frequent lightning which started several house fires.</p>									
<b>Boone County</b> North Portion	25 26	2200CST 1200CST			0	0			Flash Flood
<b>Winnebago County</b> North Portion	25 26	2200CST 1200CST			0	0			Flash Flood
<p>Nearly stationary thunderstorms produced heavy rainfall over northern Winnebago and Boone Counties. Radar estimated as much as</p>									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ILLINOIS, Northeast

6 to 8 inches of rain had fallen by 400 AM CST. Many roads were inundated from the flood waters. The Winnebago County Sheriff closed the Rock and Kishwaukee Rivers to recreational boating due to the high water and swift current. Illinois Highway 173 between Poplar Grove and Capron in Boone County was closed because of flooding from Beaver Creek. Flooding of Willow Creek was reported in Machesney Park.

<b>Ogle County</b>									
Byron	25	2330CST			0	0			Thunderstorm Wind (G50)
									Thunderstorm winds blew down trees and limbs and damaged a motel.

<b>Kane County</b>									
Elgin	26	0130CST			0	0			Thunderstorm Wind (G55)

<b>Du Page County</b>									
Dupage Co Arpt	26	0145CST			0	0			Thunderstorm Wind (G57)

<b>Cook County</b>									
Palos Hills to Park Forest	26	0220CST 0245CST			0	0			Thunderstorm Wind (G65)

<b>Cook County</b>									
Hazel Crest	26	0252CST			0	0			Hail (2.00)

<b>Boone County</b>									
Capron	27	2320CST			0	0			Thunderstorm Wind (G50)

<b>Lee County</b>									
Dixon	28	0150CST			0	0			Thunderstorm Wind (G50)

<b>Ogle County</b>									
Countywide	28	0150CST			0	0			Thunderstorm Wind (G50)

<b>Winnebago County</b>									
Countywide	28	0150CST			0	0			Thunderstorm Wind (G50)

<b>Boone County</b>									
Countywide	28	0220CST			0	0			Thunderstorm Wind (G50)

<b>La Salle County</b>									
Countywide	28	0240CST			0	0			Thunderstorm Wind (G50)

<b>Kendall County</b>									
Lisbon	28	0300CST			0	0			Thunderstorm Wind (G50)

<b>Grundy County</b>									
Morris	28	0310CST			0	0	60K	40K	Thunderstorm Wind (G61)

<b>Kankakee County</b>									
Bourbonnais	28	0340CST			0	0			Thunderstorm Wind (G61)

A squall line caused wind damage to portions of north central and northeast Illinois during the late night hours of the 27th and the early morning hours of the 28th. County sheriffs departments reported numerous trees and power lines down in Winnebago, Ogle, Lee and Boone Counties. Large trees were down in Tonica in southwest La Salle County. The most severe damage was in Grundy County. A wind gust of 70 mph was reported at the emergency management office in Morris. Power poles were snapped in Morris causing widespread power outages. Roads were blocked by large tree branches and uprooted trees. Falling tree limbs damaged buildings and vehicles. Corn fields were also damaged by strong winds. Lightning set a house on fire in Morris. A trailer was overturned at the Sportsman's Club in Bourbonnais, Kankakee County.

<b>Ford County</b>									
Melvin	28	2000CST			0	0			Thunderstorm Wind (G50)
									Thunderstorm winds blew down trees in Melvin.

<b>La Salle County</b>									
Ottawa to Streator	29	1600CST 1626CST			0	0			Thunderstorm Wind (G59)

<b>De Kalb County</b>									
Sandwich	29	1624CST			0	0			Thunderstorm Wind (G58)

<b>Livingston County</b>									
Cornell to Flanagan	29	1625CST 1642CST			0	0			Thunderstorm Wind (G50)

<b>Kankakee County</b>									
Countywide	29	1642CST			0	0			Hail (1.00)

<b>Kendall County</b>									
Lisbon	29	1650CST			0	0			Thunderstorm Wind (G61)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Northeast</b>									
<b>Ford County</b>									
Melvin to Gibson City	29	1700CST 1715CST			0	0			Thunderstorm Wind (G50)
<b>Grundy County</b>									
Coal City	29	1700CST			0	0			Thunderstorm Wind (G50)
<b>Will County</b>									
Peotone	29	1700CST			0	0			Thunderstorm Wind (G50)
Thunderstorms brought strong winds and heavy rain to parts of northeast and east central Illinois. A 67 mph wind gust was reported at Sandwich Airport in De Kalb County and a 68 mph gust was reported by a spotter in Streator, La Salle County. In La Salle County tree limbs and power lines were damaged in Ottawa, Marseilles, Utica, Serena, Newark and Streator. Quarter sized hail was reported by Skywarn spotters in northern Kankakee County. Strong winds in Peotone in Will County overturned a horse trailer and downed trees. In Livingston County the roof of an old building was torn off in Cornell and the roof of Salem Children's Home was damaged in Flanagan. Trees were also knocked down. Tree limbs were downed in Coal City and Wilmington in southeast Grundy County and southwest Will County. Trees were blown down in Melvin and Gibson in Ford County. In Melvin a tree fell on a propane tank. The storms also produced very heavy rainfall. In Morris 2 inches of rain fell in 30 minutes causing flooding of roads and low lying areas. Several buildings and vehicles were flooded.									
<b>ILLINOIS, Northwest</b>									
<b>Stephenson County</b>									
Freeport	18	1415CST			0	0	1K		Thunderstorm Wind (G56)
Several trees were blown down and vents were ripped off a tire store after straight line thunderstorm winds up to 65 mph rushed across the county.									
<b>Rock Island County</b>									
East Moline to Silvis	18	1600CST 1611CST			0	0			Hail (1.75)
Severe thunderstorms resulted in numerous reports of hail across Northern Rock Island County. Hail sizes ranged from three quarters of an inch in Silvis to one and three fourth inches in East Moline.									
<b>Mercer County</b>									
.5 NW Seaton to 2 SE Aledo	18	1610CST 1620CST	6	880	0	0	110K		Tornado (F2)
The tornado damaged several rural home sites. Northeast of Seaton damage was noted to farm buildings and a silo. South of Aledo seven power lines poles were snapped, and a farmhouse 4 miles west of Aledo was destroyed. The tornado also damaged or destroyed farm buildings, roofs and chimneys south of Aledo.									
<b>Henry County</b>									
Colona	18	1615CST 1630CST			0	0			Thunderstorm Wind (G78)
A squall line roared across the community producing substantial wind damage from strong straight line winds 70 to 90 mph. The damage path width was about 3/4 mile wide, however, no injuries were reported.									
<b>Henry County</b>									
Colona to Green Rock	18	1617CST 1624CST			0	0			Hail (1.00)
<b>Rock Island County</b>									
Milan	18	1625CST			0	0			Hail (3.00)
<b>Warren County</b>									
Smithshire	18	1630CST	0.1	.5	0	0	0		Tornado (F0)
Brief tornado touchdown resulted in no apparent damage.									
<b>Rock Island County</b>									
Barstow	18	1640CST 1705CST			0	0			Hail (1.00)
Hail fell for 25 minutes at Barstow.									
<b>Jo Daviess County</b>									
Galena to Stockton	18	1645CST 1700CST			0	0	3K		Thunderstorm Wind
Numerous trees were downed by strong thunderstorm winds from Galena to Stockton.									
<b>Jo Daviess County</b>									
East Dubuque	18	1650CST			0	0			Hail (1.75)
<b>Mcdonough County</b>									
Blandinsville to Bushnell	18	1655CST 1720CST			0	0	1.2K		Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Northwest</b>									
Numerous trees and power lines were downed in Blandinsville, Macomb, and Bushnell after strong thunderstorms roared across the county.									
<b>Carroll County</b> 2 E Milledgeville	18	1700CST			0	0	0.50K		Thunderstorm Wind
	Strong thunderstorm winds downed several trees.								
<b>Stephenson County</b> Pearl City to Freeport	18	1705CST 1720CST			0	0			Hail (1.00)
<b>Carroll County</b> Thomson	18	1715CST			0	0			Hail (1.00)
<b>Bureau County</b> Manlius	18	1730CST	0.1	.5	0	0	0		Tornado (F0)
	Brief tornado touchdown resulted in no reported damage.								
<b>Bureau County</b> 2 W Princeton to Princeton	18	1740CST 1750CST			0	0			Hail (1.75)
	A strong thunderstorm dropped hail ranging in size from one inch to one and three fourth inches near Princeton.								
<b>Jo Daviess County</b> Elizabeth	25	1820CST			0	0			Hail (0.75)
<b>Jo Daviess County</b> Stockton	25	1843CST			0	0			Hail (0.75)
<b>Jo Daviess County</b> Galena	28	0100CST			0	0	1K		Thunderstorm Wind
	Several large tree limbs were blown down.								
<b>Whiteside County</b> Albany to Fulton	28	0115CST			0	0	4K		Thunderstorm Wind
	Power was out across Western Whiteside County after strong thunderstorm winds downed trees and damaged a power transformer.								
<b>Carroll County</b> Mt Carroll to Lanark	28	0120CST 0130CST			0	0	5K		Thunderstorm Wind (G65)
	Branches were broken and large trees were uprooted by strong thunderstorm winds across Carroll County during the early morning hours. At Lake Carroll a large oak tree smashed through the patio door of a home and some of the branches punched through the roof on the garage. Another large tree damaged a home in Lanark and crushed a swing set.								
<b>Carroll County</b> Savanna	28	0128CST			0	0	0.50K		Thunderstorm Wind
	High winds toppled trees causing minor property damage.								
<b>Carroll County</b> Shannon	28	0130CST			0	2	8K		Thunderstorm Wind
	High winds blew down trees and power lines, and ripped the roof off of a small building. Two people were injured after they were hit by debris.								
<b>Rock Island County</b> Countywide	28	0130CST			0	0	5K		Thunderstorm Wind
	Thunderstorm winds racing across the county downed numerous trees and limbs.								
<b>Whiteside County</b> Erie	28	0130CST			0	0			Thunderstorm Wind (G78)
<b>Stephenson County</b> Pearl City to Lena	28	0135CST 0137CST			0	0	1K		Thunderstorm Wind
	Trees and power lines were downed between Pearl City and Lena after thunderstorms roared across the county.								
<b>Bureau County</b> Princeton	28	0215CST			0	0	2K		Thunderstorm Wind
	Strong thunderstorm winds knocked down trees and power lines.								
<b>Putnam County</b> Countywide	28	0315CST 0330CST			0	0	10K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## ILLINOIS, Northwest

Widespread damage was reported across the county after thunderstorm winds downed trees and power lines. The cities of Hennepin, Granville, and Standard suffered power outages. And numerous trees were blown down in Mc Nabb, Mark, and Magnolia.

<b>Bureau County</b> 3 NE Wyanet	28	0100CST			0	0	0.50K		Thunderstorm Wind
<b>Mercer County</b> Countywide	29	1422CST 1530CST			0	0			Thunderstorm Wind (G56)
<b>Rock Island County</b> Countywide	29	1426CST 1530CST			0	0			Thunderstorm Wind (G52)
<b>Henderson County</b> Countywide	29	1430CST 1550CST			0	0			Thunderstorm Wind (G74)
<b>Mcdonough County</b> Countywide	29	1430CST 1600CST			0	0			Thunderstorm Wind (G70)
<b>Henry County</b> Countywide	29	1440CST 1550CST			0	0			Thunderstorm Wind (G52)
<b>Mercer County</b> New Boston	29	1440CST	1	2	0	0	5K		Tornado (F1)
<b>Warren County</b> Countywide	29	1440CST 1545CST			0	0			Thunderstorm Wind (G78)
<b>Hancock County</b> Countywide	29	1445CST 1550CST			0	0			Thunderstorm Wind (G52)
<b>Mcdonough County</b> 3 S Blandinsville	29	1445CST			0	0			Thunderstorm Wind (G95)
<b>Warren County</b> 8 E Roseville	29	1508CST	1	2	0	0	2K		Tornado (F0)
<b>Mcdonough County</b> Macomb	29	1516CST			0	0			Thunderstorm Wind (G76)
<b>Henderson County</b> 3 W Bald Bluff	29	1535CST	1	100	0	0	15K		Tornado (F1)
<b>Bureau County</b> Countywide	29	1548CST 1600CST			0	0			Thunderstorm Wind (G70)
<b>Putnam County</b> Countywide	29	1555CST 1645CST			0	0			Thunderstorm Wind (G52)
<b>Hancock County</b> Hamilton	29	1715CST			0	0			Hail (1.00)

Supercell thunderstorms over Iowa intensified into a squall line which moved southeastward causing widespread damage across Eastern Iowa into Western Illinois. In Western Illinois the storms spun up at least three non-supercell tornadoes near New Boston, Keithsburg and Roseville. However, the majority of damage was caused by 60 to greater than 100 mph straightline winds. The strong winds flattened farm fields, damaged roofs, and blew over semitrailers. Numerous trees and power lines downed by the storm resulted in power and telephone outages lasting from a few hours, to several days at the most seriously damaged locations. In Hancock and Henderson counties 30 electrical poles were broken. Illinois utility companies reported that more than 58,000 homes and businesses were affected by outages. Some very large trees at Oquawaka and near the Big River State Forest were uprooted by winds estimated at 90 mph. Damage was heavy to homes, trees and outbuildings in Keithsburg, Blandinsville, Woodhull, Cordova, Little York, Macomb, Good Hope, Colchester, Wyanet, Spring Valley, Hennepin, and Hamilton. The Mercer County Fairgrounds at Aledo also reported heavy damage.

## ILLINOIS, South

<b>Pope County</b> 3 N Golconda	02	2044CST			0	0			Hail (1.00)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, South</b>									
<b>Jackson County</b> Dowell	09	1711CST			0	0			Hail (1.00)
<b>Franklin County</b> West Frankfort	09	1746CST			0	0			Hail (1.75)
<b>Williamson County</b> Corinth	09	1802CST			0	0	20K		Thunderstorm Wind (G55)
									Siding and roofing was torn off a small church. Large tree limbs were blown down.
<b>Franklin County</b> Zeigler	09	1815CST			0	0	40K		Thunderstorm Wind (G55)
									A barn was blown down. Numerous trees and power lines were downed.
<b>Jackson County</b> Campbell Hill	12	1805CST			0	0			Hail (1.00)
<b>Perry County</b> Willisville	12	1805CST			0	0			Hail (0.75)
<b>Jackson County</b> (Mdh)Crbndl/Mrfysbro	12	1837CST			0	0	50K		Thunderstorm Wind (G56)
									Trees were blown down in the city of Carbondale.
<b>Jackson County</b> De Soto to Carbondale	12	1840CST			0	0	40K		Hail (1.00)
									Hail the size of quarters covered the ground at DeSoto. Vehicles were dented by hail in Carbondale.
<b>Wayne County</b> Fairfield to 3 N Ellery	12	1840CST			0	0	15K		Thunderstorm Wind (G55)
									Trees were blown down across parts of Wayne County. Some rural residences were damaged, mainly by falling trees, from the Fairfield area to Mount Erie and east.
<b>Wabash County</b> Gards Pt to Patton	12	1900CST 1915CST			0	0	80K		Thunderstorm Wind
									Straight-line damaging winds across the county resulted in numerous downed trees and several destroyed barns. In Mt. Carmel, considerable damage was caused by large tree limbs striking vehicles and residences. A number of streets were blocked by downed trees.
<b>Wabash County</b> 1 N Patton to 1 NNE Patton	12	1909CST 1910CST	0.3	30	0	0	2K		Tornado (F0)
									A weak, short-lived tornado downed some trees, but no structural damage was reported.
<b>Williamson County</b> 5 S Marion to 6 SSE Marion	12	1915CST 1920CST	2	100	0	0	100K		Tornado (F1)
									The tornado touched down half a mile east of Illinois Route 37 in the community of Hudgens and moved east-southeast for 2 miles. Damage occurred at several residences in Hudgens. At the first residence, several trees were uprooted, a couple of which were 50 feet tall. Siding on a barn was damaged by flying debris. At a second residence, decking was ripped off a porch, and shingles were blown off. Several large trees were snapped, and a dog house was blown about 40 feet. At a third residence, a barn was demolished with debris scattered in all directions. A vehicle was damaged by flying lawn furniture. At a fourth residence, the fascia on the west eave of the house was found about 300 feet northwest of the house wrapped around a tree trunk. At the fifth residence in Hudgens, a huge oak tree fell on top of a camper, and two other large oak trees were snapped. The only other damage, which occurred at a residence near the end of the track, was significant. A tree caused major roof damage to the house, and a nearby barn lost siding and roofing. Loose objects such as trash cans, lawn chairs, and child's toys were found up to a quarter mile away. Witnesses reported seeing rotating clouds about the time the damage occurred. Peak wind speeds were estimated between 90 and 100 MPH.
<b>Edwards County</b> Albion to 4 S Albion	12	1920CST			0	1	50K		Thunderstorm Wind (G61)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>ILLINOIS, South</b>									
<b>Saline County</b> Stonefort	12	1926CST			0	0			<b>Funnel Cloud</b>
The funnel cloud was associated with the same supercell thunderstorm that produced a tornado just south of Marion.									
<b>Williamson County</b> 3.5 S Marion	12	1930CST			0	0	25K		<b>Thunderstorm Wind (G61)</b>
Numerous large trees were blown down along Illinois Route 37. A metal roof was completely torn off an antique shop. A retire d airline pilot estimated gusts were up to 70 MPH.									
<b>Saline County</b> Stonefort	12	1950CST			0	0			<b>Thunderstorm Wind (G50)</b>
Several trees and some tree limbs were blown down.									
<b>Pulaski County</b> Mound City	12	2045CST			0	0	4K		<b>Thunderstorm Wind (G50)</b>
Several trees were blown down.									
<b>Alexander County</b> 3 N Urbandale	12	2050CST			0	0	5K		<b>Thunderstorm Wind (G52)</b>
A co-operative observer reported several trees down over power lines.									
<b>Union County</b> 1 E Anna	14	1604CST			0	0			<b>Funnel Cloud</b>
State police reported a funnel cloud near the intersection of U.S. 51 and Illinois 146.									
<b>Jackson County</b> Murphysboro	14	1623CST			0	0	5K		<b>Thunderstorm Wind (G57)</b>
A wind gust to 66 MPH was recorded at the Murphysboro Emergency Operations Center. Tree limbs were blown down, and two police vehicles were damaged by wind-driven debris.									
<b>Johnson County</b> Goreville	14	1625CST			0	0			<b>Hail (0.75)</b>
<b>Johnson County</b> New Burnside to Simpson	14	1628CST			0	0	60K		<b>Thunderstorm Wind (G55)</b>
Numerous trees were down across northern and eastern parts of the county. Two garages were heavily damaged, along with some structural damage to five homes. Trees blocked twelve county roads and U.S. Highway 45.									
<b>Johnson County</b> 2 E Tunnel Hill to 2.3 E Tunnel Hill	14	1635CST 1636CST	0.3	30	0	0	5K		<b>Tornado (F0)</b>
The brief touchdown occurred just east of Tunnel Hill. Numerous trees were down, and a garage was damaged.									
<b>Union County</b> 3 S Ware	14	1655CST			0	0	3K		<b>Thunderstorm Wind (G52)</b>
State police estimated wind gusts to 60 MPH. At least one large tree was blown down.									
<b>Hardin County</b> Cave In Rock to Elizabethtown	14	1726CST			0	0	40K		<b>Hail (2.00)</b>
Large hail fell, measuring up to 2 inches in diameter at Elizabethtown. The hail shredded some gardens and likely dented vehicles.									
<b>Hardin County</b> Cave In Rock	14	1726CST			0	0	5K		<b>Thunderstorm Wind</b>
Trees were blown down, blocking a few roads, including Illinois Routes 1 and 146.									
<b>Pope County</b> Eddyville to 2 S Eddyville	14	1732CST			0	0	20K		<b>Thunderstorm Wind (G60)</b>
Thunderstorm winds downed trees and blew a roof off a building.									
<b>ILZ087-091&gt;094</b>									
<b>Gallatin - Hardin - Alexander - Pulaski - Massac</b>									
	15	0800CST			0	0			<b>Flood</b>
	30	2359CST							
The Ohio River crested 2 to 4 feet above flood stage at Shawneetown, Grand Chain, and Cairo between June 21 and 25. This resulted in minor agricultural bottomland flooding.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, South</b>									
<b>ILZ084</b>			<b>Jackson</b>						
	<b>15</b>	<b>2000CST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>30</b>	<b>2359CST</b>							
	The Big Muddy River crested at 21.6 feet at Murphysboro on June 26. Flood stage there is 16 feet. This resulted in moderate flooding of agricultural bottomland. River levels were kept high due to backwater from the Mississippi River, which was also above flood stage.								
<b>ILZ078</b>			<b>Wabash</b>						
	<b>18</b>	<b>0600CST</b>			<b>0</b>	<b>0</b>	<b>40K</b>		<b>Flood</b>
	<b>30</b>	<b>0800CST</b>							
	The Wabash River crested about 10 feet above flood stage at Mount Carmel on the 24th. This resulted in extensive flooding of agricultural bottomland, and several local farm levees were topped. Flood stage at Mt. Carmel is 19 feet, and the crest was near 29 feet.								
<b>Jefferson County</b>									
<b>Dix</b>	<b>18</b>	<b>2240CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
	Several trees were blown down in the Dix area.								
<b>Williamson County</b>									
<b>Herrin</b>	<b>20</b>	<b>0145CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G56)</b>
	Wind gusts up to 65 MPH were observed.								
<b>Franklin County</b>									
<b>Royalton to Zeigler</b>	<b>20</b>	<b>0155CST</b> <b>0202CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind (G50)</b>
	Gusts up to 58 MPH downed power lines in Zeigler, and a tree fell on a car in Royalton.								
<b>Williamson County</b>									
<b>Blairsville to 2 S Cambria</b>	<b>20</b>	<b>0212CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>		<b>Thunderstorm Wind (G50)</b>
	Trees were blown down.								
<b>Saline County</b>									
<b>Harrisburg</b>	<b>20</b>	<b>0248CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
	Trees were blown down.								
<b>Saline County</b>									
<b>Carriers Mills</b>	<b>21</b>	<b>0250CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G55)</b>
	Numerous trees and power lines were blown down.								
<b>Saline County</b>									
<b>Harrisburg</b>	<b>21</b>	<b>0302CST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind (G87)</b>
	A thunderstorm produced wind gusts estimated near 100 MPH in Harrisburg. Hundreds of trees were uprooted or snapped. Some of the trees were up to 5 feet in diameter. Several utility poles were blown over or snapped. A few storage barns and garages were blown off their foundations. Weak structures such as small sheds were completely destroyed. Numerous power lines were down, knocking out power to an estimated 35,000 people. The damage path ranged from 3/4 to 1 mile wide, and between 4 and 5 miles long.								
<b>Massac County</b>									
<b>Metropolis</b>	<b>21</b>	<b>0345CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind (G52)</b>
	A tree 2 to 3 feet in diameter fell on a house. Two trailers were damaged by wind.								
<b>ILZ084-088-092</b>			<b>Jackson - Union - Alexander</b>						
	<b>21</b>	<b>0900CST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>30</b>	<b>2000CST</b>							
	The Mississippi River crested at 35.4 feet at Thebes on June 26. Flood stage there is 33 feet. This resulted in minor flooding of agricultural bottomland.								
<b>ILZ075&gt;078-080&gt;094</b>			<b>Jefferson - Wayne - Edwards - Wabash - Perry - Franklin - Hamilton - White - Jackson - Williamson - Saline - Gallatin - Union - Johnson - Pope - Hardin - Alexander - Pulaski - Massac</b>						
	<b>22</b>	<b>0900CST</b>			<b>1</b>	<b>0</b>			<b>Excessive Heat</b>
	<b>29</b>	<b>1800CST</b>							
	Temperatures exceeded 90 degrees for at least 7 consecutive days. Oppressive humidity produced heat indices as high as 110 degrees. The prolonged heat and humidity resulted in the death of an elderly man in Johnston City, near Marion. The coroner measured the temperature in his apartment, where his body was found, at 110 degrees. M83PH								
<b>Wayne County</b>									
<b>Orchardville</b>	<b>22</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind (G59)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, South</b>									
Trees were uprooted, and a home was damaged.									
<b>Wayne County</b> 2 S Cisne to 2.5 SE Cisne	22	1944CST 1948CST	0.5	40	0	0			<b>Tornado (F0)</b>
A brief tornado touchdown was observed by emergency personnel. The touchdown was in open country and produced only tree damage.									
<b>Wayne County</b> Mt Erie	22	2003CST			0	0			<b>Hail (0.88)</b>
<b>Franklin County</b> Benton	22	2020CST			0	0			<b>Hail (1.00)</b>
<b>Franklin County</b> Benton	22	2030CST			0	0			<b>Thunderstorm Wind (G50)</b>
Three trees were down.									
<b>Wabash County</b> Mt Carmel	22	2055CST			0	0	4K		<b>Thunderstorm Wind (G50)</b>
A few trees and limbs were down. A tree fell across Illinois Route 1 north of Mt. Carmel, blocking traffic for about 30 minutes.									
<b>Edwards County</b> Albion	22	2200CST 2345CST			0	0			<b>Flash Flood</b>
<b>Wayne County</b> Cisne	22	2200CST 2345CST			0	0			<b>Flash Flood</b>
<b>Wabash County</b> Mt Carmel	22	2215CST 2345CST			0	0			<b>Flash Flood</b>
Slow-moving thunderstorms produced heavy rainfall, estimated up to 2 inches per hour in spots. Flooding of roads was a problem in the Mt. Carmel area. In Edwards County, water was over Route 130 in spots.									
<b>Wayne County</b> Cisne to Mt Erie	29	1835CST			0	0	3K		<b>Thunderstorm Wind (G52)</b>
Several trees were blown down in northern parts of the county.									
<b>Jefferson County</b> Dix	29	1910CST			0	0	7K		<b>Thunderstorm Wind (G52)</b>
Numerous trees and power lines were down in northern parts of the county.									
<b>Franklin County</b> Sesser to Christopher	29	2007CST			0	0			<b>Funnel Cloud</b>
The funnel cloud was observed by emergency services personnel.									
<b>Gallatin County</b> Shawneetown	29	2030CST			0	0	3K		<b>Thunderstorm Wind (G54)</b>
Wind gusts to 65 MPH downed trees and power lines.									
<b>Franklin County</b> West Frankfort	29 30	2145CST 0330CST			0	0	100K		<b>Flash Flood</b>
<b>Jackson County</b> Carbondale	29 30	2145CST 0330CST			0	0	100K		<b>Flash Flood</b>
<b>Perry County</b> Du Quoin	29 30	2145CST 0030CST			0	0	50K		<b>Flash Flood</b>
<b>Williamson County</b> Crab Orchard	29 30	2145CST 0330CST			0	0	50K		<b>Flash Flood</b>

Thunderstorms repeatedly moved over the same areas, causing excessive rainfall amounts over 3 inches in 3 hours. Numerous roads were flooded from DuQuoin to West Frankfort. The flooding was widespread around West Frankfort and DuQuoin, where several feet of water covered some streets. A cooperative observer for the National Weather Service measured 4.7 inches of rain in DuQuoin, most of which fell within two hours. In downtown Carbondale, cars were flooded and water rose within the city's new city hall and civic center. There was an unconfirmed report of 3.5 inches in Carbondale between 10:30 P.M. and midnight. At Southern Illinois University in Carbondale, the basements and ground floors of many of the 24 buildings on campus were saturated from

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## ILLINOIS, South

substantial flooding. The Recreation Center suffered the most damage, including indoor basketball and racquetball courts. In Williamson County, more than 4 inches of rain fell at a television station just west of Marion.

<b>Gallatin County</b>									
Shawneetown	29	2245CST			0	0	10K		Flash Flood
	30	0300CST							
<b>Hardin County</b>									
Elizabethtown	29	2245CST			0	0			Flash Flood
	30	0300CST							
<b>Pope County</b>									
Eddyville	29	2245CST			0	0			Flash Flood
	30	0300CST							
<b>Saline County</b>									
Harrisburg	29	2245CST			0	0			Flash Flood
	30	0300CST							
<b>Johnson County</b>									
Vienna	29	2345CST			0	0			Flash Flood
	30	0300CST							
<b>Union County</b>									
Anna	29	2345CST			0	0			Flash Flood
	30	0300CST							

Thunderstorms that caused major flash flooding to the northwest, especially Franklin and Perry Counties, moved southeast across parts of southeast Illinois. There were reports of flooded roads and near bankful conditions.

<b>Union County</b>									
1.5 S Anna	29	2248CST			0	0	30K		Thunderstorm Wind (G55)

A fruit orchard sustained extensive damage. Many apple trees were uprooted or snapped, and a portion of a barn roof was peeled back.

## ILLINOIS, Southwest

<b>Greene County</b>									
White Hall	04	1940CST			0	0			Hail (1.00)

A storm spotter reported 3/4 inch hal in White Hall.

<b>Pike County</b>									
Pleasant Hill	04	2016CST			0	0			Hail (1.75)

The County Sheriff reported golfball size hail.

<b>Calhoun County</b>									
Hardin	12	1506CST			0	0			Hail (1.75)

Golfball size hail was reported in Hardin.

<b>Calhoun County</b>									
Batchtown	12	1515CST			0	0			Hail (1.00)

<b>Jersey County</b>									
Jerseyville	12	1532CST			0	0			Hail (1.00)

<b>Jersey County</b>									
2 E Jerseyville	12	1535CST			0	0			Hail (1.75)

<b>Jersey County</b>									
Jerseyville	12	1539CST			0	0			Hail (1.00)

Hail up to golfball size was reported in and just east of Jerseyville.

<b>Macoupin County</b>									
Bunker Hill	12	1544CST			0	0			Hail (1.00)

<b>Macoupin County</b>									
Bunker Hill	12	1550CST			0	0			Hail (1.75)

<b>Macoupin County</b>									
Brighton	12	1556CST			0	0			Hail (1.00)

<b>Macoupin County</b>									
Bunker Hill	12	1600CST			0	0			Hail (2.00)

<b>Macoupin County</b>									
Dorchester	12	1603CST			0	0			Hail (1.75)

<b>Macoupin County</b>									
Brighton	12	1605CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
<b>Macoupin County Bunker Hill</b>	12	1608CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Macoupin County Gillespie</b>	12	1608CST			0	0			<b>Hail (1.75)</b> A severe thunderstorm dropped large hail and produced some damaging winds across southern Macoupin County. Hail up to 2 inches in diameter was reported from Brighton to Gillespie. Trees and some power lines were also downed in Brighton and Bunker Hill.
<b>Madison County Williamson</b>	12	1620CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm wind gusts downed trees and power lines.
<b>Calhoun County Brussels</b>	12	1620CST			0	0			<b>Hail (1.75)</b> A severe thunderstorm producing golfball size hail severely damaged several peach orchards in the area. It was estimated that 90% of the peach crop was destroyed by the storm.
<b>Madison County Livingston</b>	12	1625CST			0	0			<b>Thunderstorm Wind (G60)</b> The Illinois State Police reported that some highway signs along Interstate 70 near Livingston were damaged by thunderstorm winds.
<b>Bond County 2 S Pocahontas to 3.5 SE Pocahontas</b>	12	1625CST	2.5	100	0	0			<b>Tornado (F1)</b> A tornado tracked east across open farmland south of Pocahontas. A storm chaser photographed the tornado which grew to a large wedge shape at its peak. However there was little evidence of damage, except for a few trees down in the area.
<b>Bond County Mulberry Grove</b>	12	1655CST			0	0			<b>Hail (1.75)</b>
<b>Bond County 2 N Smithboro</b>	12	1655CST			0	0			<b>Hail (1.00)</b> Hail up to golfball size fell in the Mulberry Grove and Smithboro areas.
<b>Madison County Edwardsville</b>	12	1701CST			0	0			<b>Hail (1.75)</b>
<b>Madison County Edwardsville</b>	12	1703CST			0	0			<b>Hail (1.00)</b>
<b>Madison County Troy</b>	12	1710CST			0	0			<b>Hail (1.00)</b>
<b>Madison County Edwardsville</b>	12	1715CST			0	0			<b>Hail (1.00)</b> Hail up to golfball size fell in the Edwardsville area. The Edwardsville police reported that at one point hail covered the ground at the intersection of I-270 and Illinois Route 159.
<b>Randolph County Ellis Grove</b>	12	1715CST			0	0			<b>Thunderstorm Wind (G52)</b> Randolph County Emergency Services reported trees down in Ellis Grove.
<b>Madison County Glen Carbon</b>	12	1727CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm winds downed some power lines.
<b>Randolph County Evansville</b>	12	1730CST			0	0			<b>Hail (1.00)</b>
<b>Randolph County Evansville</b>	12	1730CST			0	0			<b>Thunderstorm Wind (G52)</b> County Emergency Services reported trees and power lines down in Evansville. One inch hail also fell.
<b>Clinton County New Memphis</b>	12	1740CST			0	0			<b>Thunderstorm Wind (G57)</b>
<b>Clinton County Albers</b>	12	1747CST			0	0			<b>Thunderstorm Wind (G57)</b>
<b>Clinton County Huey</b>	12	1800CST			0	0			<b>Thunderstorm Wind (G57)</b> The Clinton County Sheriff reported wind damage across parts of the county. A truck was blown off I-64 near New Memphis. Numerous trees and power lines were also downed.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
<b>Randolph County</b> Chester	12	1745CST			0	0			<b>Thunderstorm Wind (G55)</b>
	County Emergency Management reported numerous trees and power lines down.								
<b>Marion County</b> Centralia	12	1750CST			0	0			<b>Thunderstorm Wind (G58)</b>
<b>Marion County</b> Odin	12	1755CST			0	0			<b>Thunderstorm Wind (G58)</b>
<b>Marion County</b> Salem	12	1800CST			0	0			<b>Thunderstorm Wind (G58)</b>
	Wind gusts estimated at 65 to 70 mph caused damage in Marion County. In Centralia trees and power lines were downed blocking several roads. Several cars were also damaged by downed trees and broken limbs. The situation in Salem was similar. Numerous trees and power lines were downed, and the roof at the Salem Fire Protection District building was damaged. Over 1500 hundred customers of Illinois Power were without electricity through the next morning. At one point, the entire town of Odin was without power.								
<b>Montgomery County</b> Hillsboro	14	0610CST			0	0			<b>Thunderstorm Wind (G55)</b>
	Thunderstorm wind gusts uprooted a 2 foot diameter tree which fell on a house. The house sustained minor damage.								
<b>Jersey County</b> Grafton to New Delhi	14	0625CST 0635CST			0	0			<b>Thunderstorm Wind (G70)</b>
	A severe thunderstorm laid down a swath of damage from Grafton east to near New Delhi. Most of the damage occurred near the intersection of State Highways 109 and 3. The roads had to be closed due to numerous downed trees.								
<b>Madison County</b> Alton	14	0630CST 0640CST			0	0			<b>Thunderstorm Wind (G80)</b>
<b>Madison County</b> Godfrey	14	0630CST 0640CST			0	0			<b>Thunderstorm Wind (G80)</b>
<b>Madison County</b> Roxana	14	0630CST 0640CST			0	0			<b>Thunderstorm Wind (G70)</b>
<b>Madison County</b> Wood River	14	0630CST 0640CST			0	0			<b>Thunderstorm Wind (G70)</b>
<b>Madison County</b> Bethalto	14	0635CST			0	0			<b>Thunderstorm Wind (G80)</b>
	Wind gusts approaching 100 mph caused some of the worst damage seen in the River Bend area in 50 years. Most of the damage was to trees and power lines, with some scattered structural damage. More than 100,000 customers were without electricity, some of them for 5 days. Two 138,000 volt transmission lines going into the Mississippi Sub-station that serves part of the Alton/Godfrey areas were knocked down. Hundreds of major power distribution lines were also downed as were the power poles supporting them. Some roof damage occurred in the Godfrey area. A church completely lost its roof, 5 nearby homes lost part of their roofs as did the Lewis and Clark Elementary School. Vehicles were also damaged by the flying debris.								
<b>Madison County</b> Collinsville	14	0645CST 0650CST			0	0			<b>Thunderstorm Wind (G65)</b>
	Thunderstorm winds downed several trees and power lines mainly on the north side of Collinsville.								
<b>Adams County</b> 2.5 SSW Quincy to 1 S Quincy	14	1500CST 1506CST	3	75	0	1			<b>Tornado (F1)</b>
	A damaging tornado struck the Quincy, Illinois area, first downing some trees about 400 pm to the south southwest of town. The tornado weakened and moved northeast causing only minor tree damage. About 404 pm the tornado strengthened reaching F1 intensity about 1 mile south of Quincy near 24th St. and Payson Road. Two walls of the building housing the indoor pool of the Sheridan Swimming Club were blown away. The tornado had been spotted by lifeguards as it approached enabling all occupants to be moved to shelter areas. Only 1 minor injury occurred when a lifeguard was struck in the leg by flying glass. Numerous trees were downed in the area and a few storage sheds were destroyed. A nearby church suffered minor roof damage.								
<b>Calhoun County</b> 1.8 E Bellevue to 3 ENE Bellevue	14	1520CST 1523CST	1.2	75	0	0			<b>Tornado (F1)</b>
	The Illinois State Police reported that a small tornado struck the Bellevue area about 420 pm. Numerous trees were snapped off or								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
uprooted along Sterns Hollow Road. One home had minor damage caused by flying tree limbs. The tornado moved east northeast and struck again along Johnson Hollow Road. Numerous trees were downed, one garage was destroyed, and a couple of homes suffered minor roof damage.									
<b>Macoupin County Bunker Hill</b>	14	1645CST			0	0			<b>Hail (0.75)</b>
<b>Macoupin County Bunker Hill</b>	14	1650CST			0	0			<b>Hail (0.75)</b>
<b>Macoupin County Mt Clare</b>	14	1655CST			0	0			<b>Hail (1.00)</b>
<b>Macoupin County Staunton</b>	14	1702CST			0	0			<b>Hail (1.75)</b>
Amateur radio spotters reported hail ranging from quarter to golfball size.									
<b>Madison County 2 E Livingston to 3 E Livingston</b>	14	1710CST 1712CST	1	100	0	0			<b>Tornado (F0)</b>
The Illinois State Police reported a short lived tornado east of Livingston in open farmland. Trees were uprooted in the area but there was no other damage. A storm chaser photographed the tornado which quickly became rain-wrapped and dissipated. However the storm produced a damaging tornado a few minutes later that moved into Bond County, IL.									
<b>Madison County .2 E New Douglas to .6 E New Douglas</b>	14	1715CST 1716CST	0.5	75	0	0			<b>Tornado (F0)</b>
<b>Bond County 5 SSW Sorento to 3 SE Sorento</b>	14	1716CST 1726CST	5	150	0	4			<b>Tornado (F1)</b>
A damaging tornado occurred in Madison and Bond counties in southwest Illinois, starting about 615 pm in Madison County just east of New Douglas and moving east into Bond County. This tornado has an almost continuous damage path of nearly 6 miles and a maximum width of 150 yards. Four mobile homes in far northwest Bond County near the Gilmore community were destroyed with 4 people suffering minor injuries. Two farm houses sustained roof damage and 4 farm implement buildings were also destroyed. Numerous trees were also downed along the path.									
<b>Bond County Old Ripley</b>	14	1748CST			0	0			<b>Hail (1.75)</b>
Amateur radio spotters reported golfball size hail.									
<b>Fayette County Vandalia</b>	14	1819CST			0	0			<b>Thunderstorm Wind (G60)</b>
Thunderstorm wind gusts estimated near 70 mph downed trees and power lines in Vandalia.									
<b>Bond County Smithboro</b>	14	1830CST			0	0			<b>Thunderstorm Wind (G60)</b>
The County Sheriff reported large trees down by high winds in Smithboro.									
<b>Fayette County 1 E Vandalia</b>	14	1834CST			0	0			<b>Hail (0.75)</b>
<b>Montgomery County 2 NW Farmersville</b>	14	1900CST			0	0			<b>Thunderstorm Wind (G60)</b>
Thunderstorm wind gusts downed large trees on a farm northwest of Farmersville.									
<b>Greene County Carrollton</b>	18	1900CST			0	0			<b>Thunderstorm Wind (G53)</b>
<b>Greene County White Hall</b>	18	1915CST			0	0			<b>Thunderstorm Wind (G53)</b>
Thunderstorm wind gusts downed trees and utility lines.									
<b>Jersey County Jerseyville</b>	18	1930CST			0	0			<b>Thunderstorm Wind (G52)</b>
Thunderstorm winds caused scattered damage across Jerseyville. Most of the damage was west of State Street around Hollow Avenue and Cleveland Street. Some garages, sheds, and trailers sustained damage. Trees and utility lines were downed with most power restored by the next morning.									
<b>Macoupin County Girard</b>	18	1955CST			0	0			<b>Thunderstorm Wind (G51)</b>
Amateur radio spotters and emergency management personnel reported wind gusts around 60 mph.									
<b>Macoupin County Scottville</b>	18	2010CST			0	0			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
<b>Macoupin County</b>									
Girard	18	2016CST			0	0			Thunderstorm Wind (G53)
									Thunderstorm wind gusts downed some power lines in Girard. 3/4 inch hail was reported in Scottville.
<b>Montgomery County</b>									
Waggoner	18	2014CST			0	0			Thunderstorm Wind (G52)
<b>Montgomery County</b>									
Litchfield	18	2030CST			0	0			Thunderstorm Wind (G52)
<b>Montgomery County</b>									
Raymond	18	2053CST			0	0			Hail (1.00)
<b>Montgomery County</b>									
Raymond	18	2053CST			0	0			Thunderstorm Wind (G52)
									A couple of severe thunderstorms produced wind damage across Montgomery County. Trees and utility lines were downed and some outbuildings were damaged.
<b>Montgomery County</b>									
2 NW Farmersville	18	2100CST			0	0			Thunderstorm Wind (G55)
<b>Montgomery County</b>									
1 N Farmersville	18	2100CST			0	0			Thunderstorm Wind (G55)
<b>Montgomery County</b>									
Farmersville	18	2100CST			0	0			Thunderstorm Wind (G55)
<b>Montgomery County</b>									
2.5 W Waggoner	18	2100CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts caused damage across the Montgomery County panhandle. Trees and power lines were downed in and around Farmersville. Part of the roof and siding were also blown off one home.
<b>Montgomery County</b>									
Butler	18	2100CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts downed a few trees in Butler.
<b>Monroe County</b>									
Maeystown	18	2100CST			0	0			Thunderstorm Wind (G55)
<b>Monroe County</b>									
Waterloo	18	2101CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm winds downed trees and power lines in Maeystown and Waterloo.
<b>St. Clair County</b>									
Freeburg	18	2104CST			0	0			Thunderstorm Wind (G64)
<b>St. Clair County</b>									
Mascoutah	18	2110CST			0	0			Thunderstorm Wind (G60)
									Thunderstorm wind gusts around 75 mph were recorded at the Freeburg Emergency Operations Center. Trees and utility lines were downed across town. The City's communication tower was also bent by the wind. In Mascoutah, some power poles were downed along Highway 177. A tractor-trailer was blown over at the Belle Valley Industrial Park.
<b>Randolph County</b>									
Prairie Du Rocher	18	2105CST			0	0			Thunderstorm Wind (G61)
<b>Randolph County</b>									
Sparta	18	2115CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm wind gusts around 70 mph downed numerous trees and utility lines across northern Randolph County.
<b>Clinton County</b>									
Albers	18	2120CST			0	0			Thunderstorm Wind (G60)
<b>Clinton County</b>									
Bartelso	18	2130CST			0	0			Thunderstorm Wind (G60)
<b>Clinton County</b>									
Carlyle	18	2140CST			0	0			Thunderstorm Wind (G60)
<b>Clinton County</b>									
Hoffman	18	2145CST 2150CST			0	0			Thunderstorm Wind (G60)
									Thunderstorm wind gusts downed numerous trees and utility lines, primarily across the southern part of the county along Highway 161.
<b>Washington County</b>									
Okawville	18	2130CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
<b>Washington County Okawville</b>	18	2130CST			0	0			<b>Thunderstorm Wind (G65)</b>
<b>Washington County Nashville</b>	18	2140CST			0	1			<b>Thunderstorm Wind (G65)</b>
<b>Washington County Irvington</b>	18	2145CST			0	0			<b>Thunderstorm Wind (G65)</b>
<b>Washington County Richview</b>	18	2145CST			0	0			<b>Thunderstorm Wind (G65)</b>
Thunderstorm wind gusts downed trees and power lines across the eastern half of Washington County. Highway 15 west of Nashville was closed for a short time due to downed trees. At least 300 residents lost power in the Okawville/Nashville areas. In Irvington, trees were snapped off and outbuildings destroyed. A truck driver suffered minor injuries when his truck was blown over on Interstate 64, 5 miles west of Illinois Route 127.									
<b>Marion County Sandoval</b>	18	2155CST			0	0			<b>Thunderstorm Wind (G59)</b>
Amateur radio spotters reported some trees and utility lines down.									
<b>Marion County Centralia to Central City</b>	18	2240CST			0	0			<b>Thunderstorm Wind (G58)</b>
Thunderstorm wind gusts downed trees and utility lines. About 1000 residents were without power at various times. A couple of homes and automobiles were damaged by falling trees.									
<b>Monroe County Waterloo</b>	19	2358CST			0	0			<b>Thunderstorm Wind (G55)</b>
The County Sheriff reported several signs blown down by thunderstorm winds.									
<b>Monroe County Waterloo</b>	20	0005CST			0	0			<b>Thunderstorm Wind (G55)</b>
The County Sheriff reported trees down.									
<b>St. Clair County Smithton</b>	20	0025CST			0	0			<b>Hail (0.75)</b>
<b>St. Clair County Marissa</b>	20	0030CST			0	0			<b>Thunderstorm Wind (G55)</b>
The County Sheriff reported 3/4 inch hail at Smithton. Storm spotters reported trees down near Marissa.									
<b>Randolph County 3 SE Sparta</b>	20	0052CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Randolph County Sparta</b>	20	0055CST 0105CST			0	0			<b>Hail (0.75)</b>
<b>Randolph County Sparta</b>	20	0100CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Randolph County Tilden</b>	20	0105CST			0	0			<b>Thunderstorm Wind (G55)</b>
A severe thunderstorm dropped 3/4 inch hail for about 10 minutes in Sparta. Thunderstorm winds gusts also downed trees around Sparta and Tilden.									
<b>Clinton County 2 SE New Memphis to 2 SW New Memphis</b>	20	0100CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Washington County 1 NW Venedy Station</b>	20	0100CST			0	0			<b>Thunderstorm Wind (G55)</b>
Thunderstorm wind gusts downed quite a few trees and some power lines along the Clinton/Washington County border, along the Kaskaskia River.									
<b>Brown County Mt Sterling</b>	22	0600CST			0	0			<b>Thunderstorm Wind (G53)</b>
Thunderstorm wind gusts downed a few utility lines.									
<b>ILZ074-095-100&gt;101</b>		<b>Washington - Adams - Madison - St. Clair</b>							
	23	1200CST			1	122			<b>Excessive Heat</b>
	30	1200CST							
The first heat wave of the summer caused 1 death and over 120 heat related injuries. The bulk of the injuries in Madison County occurred at an NHRA drag racing event that was held at Gateway International Raceway June 25-28. The 1 death occurred in East St. Louis, St. Clair County. M71PH									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>ILLINOIS, Southwest</b>									
<b>Brown County</b> Mt Sterling	29	1540CST			0	0			Thunderstorm Wind (G54)
									Thunderstorm wind gusts caused scattered tree and power line damage across town.
<b>Adams County</b> Quincy	29	1545CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts caused scattered tree and power line damage across town.
<b>Pike County</b> 2 E Pittsfield	29	1620CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts downed several trees east of Pittsfield.
<b>Montgomery County</b> 2 NW Farmersville	29	1700CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts downed large trees on a farm northwest of Farmersville.
<b>Greene County</b> 3 W Carrollton	29	1705CST			0	0			Thunderstorm Wind (G55)
									Thunderstorms wind gusts downed several trees west of Carrollton.
<b>Montgomery County</b> Hillsboro	29	1720CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts uprooted several large trees.
<b>Bond County</b> 2 S Greenville	29	1810CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts downed several trees which blocked a road south of Greenville.
<b>Fayette County</b> Vandalia	29	1810CST			0	0			Thunderstorm Wind (G60)
<b>Fayette County</b> Ramsey	29	1820CST			0	0			Thunderstorm Wind (G60)
									A line of thunderstorms caused scattered damage across Fayette County. Wind gusts downed numerous trees and power lines in Ramsey. A machine shed and utility barn were also destroyed. In Vandalia, trees and utility lines were downed.
<b>Fayette County</b> 2 NE Farina to 2.2 NE Farina	29	1820CST 1822CST	0.2	75	0	0	80K		Tornado (F1)
									A small tornado caused damage at a farm northeast of Farina. The roof was ripped off a large machine shed, a grain bin destroyed, trees uprooted and large limbs broken off others. A house suffered minor damage to the siding and a broken window.
<b>Brown County</b> 2 W Mt Sterling	29	1835CST			0	0			Thunderstorm Wind (G55)
									Thunderstorm wind gusts downed some trees and power lines.
<b>INDIANA, Central</b>									
<b>Marion County</b> Indianapolis	02	0730EST 0745EST			0	0	5K		Thunderstorm Wind
									Storm struck between 38th and 56th and N College and Sherman on NE side knocking down trees and power lines.
<b>Jackson County</b> Seymour	02	2220EST			0	0	4K		Thunderstorm Wind
									Thunderstorm winds blew down trees and power lines. One tree crushed a pickup truck.
<b>Carroll County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Clinton County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Delaware County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Fountain County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Hamilton County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Hancock County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Howard County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Marion County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Montgomery County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Parke County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Randolph County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Rush County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Shelby County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Tippecanoe County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Tipton County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Vermillion County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
<b>Warren County</b> Countywide	11	0800EST 1700EST			0	0			Urban/Sml Stream Fld
Heavy rainfall from storms preceding a warm front resulted in 2 to 4 inch rain accumulations that resulted in many roads being covered by water. Many streams in these counties also reached or exceeded bankfull.									
<b>Carroll County</b> Countywide	11	1000EST 1700EST			0	0			Flash Flood
<b>Clinton County</b> Countywide	11	1000EST 1700EST			0	0			Flash Flood
<b>Howard County</b> Countywide	11	1000EST 1700EST			0	0			Flash Flood
<b>Tippecanoe County</b> Countywide	11	1000EST 1700EST			0	0			Flash Flood
<b>Tipton County</b> Countywide	11	1000EST 1700EST			0	0			Flash Flood

Heavy rains continued in these counties of North Central Indiana into the early afternoon resulting in rainfall totals of 4 to 6 inches in less than 8 hours. This resulted in widespread significant road flooding across all the counties. This also affected Wildcat Creek, the main drainage stream for these counties. The Wildcat rose nearly 10 feet during the day and in some cases was the highest since 1990.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Marion County</b> Beech Grove	11	1808EST 1809EST			0	0	10K		Thunderstorm Wind
			Supercell rear flank downdraft damaged several buildings near same time same storm spun up tornado in Cumberland.						
<b>Marion County</b> Cumberland	11	1809EST 1820EST	1	400	0	3	1.5M		Tornado (F3)
<b>Hancock County</b> 10 W Greenfield to 4 NE Greenfield	11	1820EST 1840EST	12.2	500	0	1	1.1M		Tornado (F4)
			A tornado initially touched down on Indianapolis' far east side in Cumberland destroying six buildings and damaging nearly eighty. The tornado continued east-northeast into Hancock County before dissipating just east of Maxwell at 640 PM EST. In Hancock County, the tornado destroyed approximately five buildings and damaged nearly 40 others. The supercell storm that generated this tornado also produced three other tornadoes in east central Indiana that evening. These tornadoes will be described below.						
<b>Hancock County</b> 1 SE Eden to 7.5 NE Eden	11	1845EST 1850EST	7.5	300	0	0	400K		Tornado (F2)
<b>Madison County</b> 2 SW Markleville to 2 SE Markleville	11	1850EST 1857EST	3	300	0	0	5K		Tornado (F2)
			Tornado from NE Hancock Co traversed SE Madison Co causing mainly tree damage.						
<b>Henry County</b> 10 NW New Castle to 5 NW New Castle	11	1857EST 1910EST	5.5	200	0	0	5K		Tornado (F2)
			Second tornado from supercell began in NC Hancock County and tracked ENE into extreme SE Madison County and then ended in NW Henry county NW of New Castle. This tornado traversed mainly open country causing mostly tree damage on farms along the path. This same supercell will produce two more tornadoes further east in Henry and Randolph Counties. These tornadoes will be described below.						
<b>Howard County</b> 7.5 SW Greentown to 7.5 NE Greentown	11	1903EST 1921EST	12.5	800	0	8	5M		Tornado (F3)
			This strong tornado originated from a supercell which initially produced several funnel clouds beginning northeast of Crawfordsville, passing over Frankfort to Kokomo's south side. This supercell finally produced its tornado just south of Kokomo near Oakford and Center. The tornado damaged a school near Center and caused its most extensive damage in Greentown where over two dozen buildings were destroyed and nearly 200 buildings were damaged. The tornado continued tracking ENE along the N & W train tracks and into WC Grant County west of Swayzee.						
<b>Randolph County</b> 2 E Winchester to 1 W Union City	11	1920EST 1925EST	5	150	0	0	10K		Tornado (F0)
			The fourth and final tornado (in Indiana) spawned from a single supercell initially touched down just east of Winchester and lifted just west of Union City which is on the Ohio state line. This final tornado destroyed a trailer and damaged numerous trees.						
<b>Knox County</b> Freelandville	11	1920EST 1921EST			0	0	1K		Thunderstorm Wind
			Thunderstorm winds blew down numerous trees.						
<b>Henry County</b> 1 N Mt Summit to 1.5 NE Blountsville	11	1922EST 1935EST	9.5	200	0	0	800K		Tornado (F1)
			Third tornado from single supercell four buildings and damaged nearly 10 others.						
<b>Randolph County</b> 11 SW Winchester to 9.5 SW Winchester	11	1935EST 1937EST	1.5	100	0	0	5K		Tornado (F1)
			Third tornado from supercell crossed into Randolph County farmfields east of Blountsville before dissipating.						
<b>Madison County</b> 1 N Elwood to 2.5 NE Summitville	11	1941EST 1958EST	13	500	0	0	1M		Tornado (F1)
			Supercell produced tornado touching down near Elwood which then tracked NE to just north of Summitville before traversing into SC Grant County before dissipating near Fowlerton. Along its track in northern Madison County this tornado destroyed approximately 9 buildings and damaged about 10 others. Nearly all these buildings were on farms as the tornado passed through farm country before crops emerged.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Hendricks County</b> 5 NE Brownsburg	11	2003EST 2004EST			0	0			Thunderstorm Wind (G50)
<b>Randolph County</b> Parker City	11	2120EST 2121EST			0	0			Thunderstorm Wind (G61)
<b>Randolph County</b> 2 N Winchester	11	2140EST 2141EST			0	0			Thunderstorm Wind (G51)
<b>Jackson County</b> Bobtown	11	2230EST 2231EST			0	0	50K		Thunderstorm Wind
		Thunderstorm winds damaged several barns and dozens of trees.							
<b>Tippecanoe County</b> Battle Ground	12	1645EST			0	0	0.50K		Thunderstorm Wind
		Thunderstorm winds blew down several trees.							
<b>Carroll County</b> Flora	12	1720EST			0	0	0.50K		Thunderstorm Wind
		Thunderstorm winds blew down several trees.							
<b>Howard County</b> Kokomo	12	1756EST 1757EST			0	0	0.50K		Thunderstorm Wind
		Thunderstorm winds blew down large tree.							
<b>Boone County</b> Advance	12	1806EST 1807EST			0	0			Thunderstorm Wind (G51)
<b>Boone County</b> Lebanon	12	1816EST 1817EST			0	0	0.50K		Thunderstorm Wind
		Thunderstorm winds blew down several trees.							
<b>Marion County</b> Oaklandon	12	1830EST 1850EST			0	0	0.50K		Thunderstorm Wind
		Thunderstorm winds blew down a tree and a large limb.							
<b>Sullivan County</b> Countywide	12	1835EST			0	0	1.5K		Thunderstorm Wind
		Thunderstorm winds blew down trees and power lines across north part of county.							
<b>Vigo County</b> Terre Haute	12	1836EST 1845EST			0	0	20K		Thunderstorm Wind (G61)
		Thunderstorm winds to 70 mph blew down several dozen trees and numerous power lines in the Terre Haute area.							
<b>Hancock County</b> Mt Comfort	12	1838EST 1839EST			0	0			Thunderstorm Wind (G55)
<b>Hancock County</b> 2 E Maxwell	12	1855EST 1857EST			0	0			Thunderstorm Wind (G54)
<b>Madison County</b> Alexandria	12	1856EST 1857EST			0	0			Thunderstorm Wind (G52)
<b>Henry County</b> 6 W Kennard	12	1902EST			0	0			Thunderstorm Wind (G52)
<b>Randolph County</b> Central Portion	12	1910EST			0	0			Thunderstorm Wind (G52)
<b>Morgan County</b> Lewisville	12	1920EST			0	0			Thunderstorm Wind (G52)
<b>Shelby County</b> Countywide	12	1930EST 1935EST			0	0	2K		Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
			Thunderstorm winds knocked out power to 1000 homes in the county.						
<b>Rush County</b>									
Rushville	12	1955EST 1956EST			0	0	1K		Thunderstorm Wind
			Thunderstorm winds blew down power lines.						
<b>Johnson County</b>									
Franklin	12	2000EST 2002EST			0	0			Thunderstorm Wind (G52)
<b>Rush County</b>									
Carthage	12	2114EST			0	0	0.50K		Thunderstorm Wind
			Thunderstorm winds blew down trees.						
<b>INZ021-028&gt;031- 035&gt;041-043&gt;044- 047&gt;049-051-053&gt;057- 060&gt;061-064-067&gt;071</b>			<b>Carroll - Warren - Tippecanoe - Clinton - Howard - Fountain - Montgomery - Boone - Tipton - Hamilton - Madison - Delaware - Vermillion - Parke - Marion - Hancock - Henry - Vigo - Owen - Morgan - Johnson - Shelby - Rush - Sullivan - Greene - Bartholomew - Knox - Daviess - Martin - Lawrence - Jackson</b>						
	12 17	2200EST 2359EST			0	0			Flood
			Heavy rains of 3 to 7 inches occurring during severe and tornadic storms on June 11 and 12th resulted in nearly all streams and rivers in central Indiana to exceed bankfull and cause flooding. River levels reached 3 to 7 feet above flood stage in some locations causing many river roads to be closed. Crops had yet to emerge so no crop losses occurred.						
<b>Vermillion County</b>									
Cayuga	14	1800EST 1802EST			0	0	1K		Thunderstorm Wind
			Thunderstorm winds blew down trees and power lines.						
<b>Bartholomew County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Boone County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Fountain County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Hendricks County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Johnson County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Marion County</b>									
South Portion	14	1910EST 2359EST			0	0			Flash Flood
<b>Montgomery County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Parke County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Putnam County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Rush County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood
<b>Shelby County</b>									
Countywide	14	1910EST 2359EST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Tippecanoe County Countywide</b>	14	1910EST 2359EST			0	0			Flash Flood
<b>Vermillion County Countywide</b>	14	1910EST 2359EST			0	0			Flash Flood
Strong and severe thunderstorms producing 1 to 4 inch rainfalls in a few hours produced rapid flooding of roads in these counties which were already saturated with high water from storms occurring on June 11 and June 12. In some cases, a few bridges and culverts were washed out such as in Putnam County. In most cases, rapidly flooded roads were the main danger but these levels receded within five hours.									
<b>Hendricks County 2 NW Danville</b>	14	1959EST 2000EST			0	0			Thunderstorm Wind (G56)
<b>Warren County Williamsport</b>	18	2215EST			0	0	30K		Thunderstorm Wind
Thunderstorm winds blew roof off apartment building.									
<b>Fountain County Attica</b>	18	2218EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down trees on cars and power lines.									
<b>Parke County Countywide</b>	18	2234EST 2235EST			0	0	1K		Thunderstorm Wind
Thunderstorm winds blew down trees.									
<b>Montgomery County Bowers</b>	18	2234EST 2235EST			0	0	0.50K		Thunderstorm Wind
Thunderstorm winds blew down trees.									
<b>Clay County Brazil</b>	18	2240EST 2242EST			0	0	0.50K		Thunderstorm Wind
Trees blown down.									
<b>Vigo County 10 S Terre Haute</b>	18	2242EST 2244EST			0	0			Thunderstorm Wind (G52)
<b>Montgomery County Darlington</b>	18	2250EST 2252EST			0	0	0.50K		Thunderstorm Wind
Thunderstorm winds blew down trees.									
<b>Vermillion County Newport</b>	18	2304EST 2305EST			0	0	1.5K		Thunderstorm Wind
Trees and power lines blown down.									
<b>Putnam County Countywide</b>	18	2315EST 2316EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down dozens of trees countywide.									
<b>Morgan County Little Pt</b>	18	2320EST 2321EST			0	0	1K		Thunderstorm Wind
Trees blown down across road.									
<b>Hendricks County Countywide</b>	18	2343EST 2344EST			0	0	0.50K		Thunderstorm Wind
Trees blown down.									
<b>Hamilton County Sheridan to Noblesville</b>	18	2345EST 2350EST			0	0	3K		Thunderstorm Wind
Trees and power lines blown down.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Madison County</b> Central Portion	18	2350EST			0	0	1K		Thunderstorm Wind
		Six trees blown down.							
<b>Johnson County</b> Central Portion	18	2355EST			0	0	0.50K		Thunderstorm Wind
		Trees and power lines blown down.							
<b>Greene County</b> 1 E Bloomfield	18	2356EST 2357EST			0	0	1K		Thunderstorm Wind
		Trees down on highway.							
<b>Monroe County</b> Ellettsville	18	2358EST 2359EST			0	0	0.50K		Thunderstorm Wind
		Few trees down.							
<b>Hancock County</b> Countywide	19	0000EST 0005EST			0	0	1K		Thunderstorm Wind
		Trees and power lines blown down.							
<b>Shelby County</b> Shelbyville	19	0000EST 0003EST			0	0	8K		Thunderstorm Wind
		Downed trees and power lines partially damaged a house roof.							
<b>Rush County</b> Countywide	19	0010EST			0	0	3K		Thunderstorm Wind
		Trees and power lines downed causing some roof and park damage.							
<b>Morgan County</b> Waverly	19	0010EST 0015EST			0	0	20K		Thunderstorm Wind
		Thunderstorm winds damaged a trucking building and blew a worker out of the building. He was not reported to be injured.							
<b>Madison County</b> Alliance	19	0015EST			0	0	1K		Thunderstorm Wind
		Trees and power lines downed near i-69.							
<b>Brown County</b> Spearsville	19	0015EST			0	0	1K		Thunderstorm Wind
		Trees blown down.							
<b>Marion County</b> Lawrence	19	0025EST			0	0	1K		Thunderstorm Wind
		Power lines downed.							
<b>Delaware County</b> Central Portion	19	0030EST			0	0	1K		Thunderstorm Wind
		Trees downed.							
<b>Henry County</b> Central Portion	19	0037EST			0	0	1K		Thunderstorm Wind
		Trees downed.							
<b>Bartholomew County</b> Countywide	19	0040EST			0	0	1K		Thunderstorm Wind
		Trees downed.							
<b>Randolph County</b> Countywide	19	0040EST 0048EST			0	0	2K		Thunderstorm Wind
		Trees and power lines downed.							
<b>Decatur County</b> Greensburg	19	0045EST			0	0	1K		Thunderstorm Wind
		Trees downed.							
<b>Knox County</b> Vincennes	19	0045EST			0	0	20K		Thunderstorm Wind
		A large open building at the Tractor Supply center was destroyed by high winds. Trees and power lines were also blown down by the thunderstorm.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Delaware County</b>									
Muncie	19	0050EST			0	0	1K		Thunderstorm Wind
									Trees downed.
<b>Randolph County</b>									
Farmland	19	0052EST			0	0	20K		Lightning
									Lighning caused fire partially destroying home.
<b>Morgan County</b>									
Brooklyn	19	0100EST			0	0	1K		Thunderstorm Wind
									Trees blown down.
<b>INZ028&gt;029-035-043&gt;044-051-053-060&gt;061-064-067&gt;071</b>			<b>Warren - Tippecanoe - Fountain - Vermillion - Parke - Vigo - Owen - Sullivan - Greene - Bartholomew - Knox - Daviess - Martin - Lawrence - Jackson</b>						
	19	0700EST			0	0			Flood
	30	0700EST							
									Widespread 2 to 4 inch rains occurring on June 18-19, June 22, and June 28-29, resulted in widespread river and stream flooding across central and southwest Indiana. In most cases, waters reached 3 to 5 feet above flood stage, temporarily falling back below flood stage a day or two before exceeding flood stage again as the next round of significant rains came. These floods impacted agricultural lands in most cases resulting in flooded and destroyed corn crops for the second year in a row. A 6 to 11 inch rain occurred in Owen County on the 28th (described earlier here) resulted in keeping the lower stretches of the White and Wabash Rivers above flood stage into early July across Sullivan, Knox and Daviess Counties. These floods will be continued in July Storm Data. Note the hours for beginning/ending times for floods are guesses...the day of beginning/ending of the floods are good.
<b>Monroe County</b>									
Bloomington	22	1232EST 1233EST			0	0			Thunderstorm Wind (G54)
<b>Monroe County</b>									
Bloomington	22	1247EST 1255EST			0	0	60K		Thunderstorm Wind (G61)
									Thunderstorm winds to 70 mph blew down dozens of trees and power lines. Up to four homes and several vehicles were damaged by fallen trees.
<b>Knox County</b>									
Decker	22	1300EST			0	0	1K		Thunderstorm Wind
									Trees and power lines blown down.
<b>Madison County</b>									
Anderson Jessup Arprt	22	1316EST 1326EST			0	0			Thunderstorm Wind (G65)
<b>Bartholomew County</b>									
Waymansville	22	1353EST 1354EST			0	0	0.50K		Thunderstorm Wind
									Tree limbs blown down.
<b>Bartholomew County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Brown County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Clay County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Decatur County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Greene County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Jackson County</b>									
Countywide	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Jennings County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Johnson County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Lawrence County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Monroe County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Morgan County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Owen County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Vigo County Countywide</b>	22	1400EST 2300EST			0	0			Urban/Sml Stream Fld
<b>Henry County Mt Summit</b>	22	1405EST 1407EST			0	0	0.50K		Thunderstorm Wind
		Tree limbs blown down.							
<b>Decatur County Greensburg</b>	22	2300EST 2305EST			0	0	65K		Lightning
		A barn, house, and nursing home were struck by lightning causing fire to each structure. In one case, a truck and boat in the barn was destroyed by the fire.							
<b>Owen County Freedom</b>	28	1850EST 1852EST			0	0			Hail (1.75)
<b>Owen County 1 W Spencer</b>	28	2002EST 2004EST			0	0			Hail (1.75)
<b>Owen County Spencer</b>	28	2108EST			0	0	1K		Thunderstorm Wind
		Trees blown down.							
<b>Vigo County Prairieton</b>	28	2115EST 2126EST			0	0	1K		Thunderstorm Wind
		Trees blown down.							
<b>Owen County Central Portion</b>	28 29	2130EST 0045EST			0	0	4M		Flash Flood
		Six to 12 inch rains in about four hours between Freedom and Spencer resulted in extreme flash flooding. Flood waters washed out 9 bridges, 8 culverts, one road, and several houses.							
<b>INZ053</b>	<b>Owen 29</b>	<b>0045EST 0900EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		Flooding of local stream and rivers continued through the night causing no significant additional damage beyond flash flood mentioned above.							
<b>Fountain County Countywide</b>	29	1845EST 1850EST			0	0	5K		Thunderstorm Wind
<b>Warren County Countywide</b>	29	1845EST 1850EST			0	0	3K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Central</b>									
<b>Parke County</b> Countywide	29	1850EST 1852EST			0	0	5K		Thunderstorm Wind
<b>Vermillion County</b> Clinton	29	1850EST 1852EST			0	0	10K		Thunderstorm Wind
<b>Clay County</b> Billville	29	1905EST 1908EST	1	75	0	0	25K		Tornado (F0)
<b>Putnam County</b> Putnamville	29	1925EST 1927EST			0	0			Thunderstorm Wind (G51)
<b>Clay County</b> Countywide	29	1930EST 1935EST			0	0	5K		Thunderstorm Wind
<b>Hendricks County</b> Clayton to Plainfield	29	1930EST 2008EST			0	0	15K		Thunderstorm Wind (G65)
<b>Vigo County</b> Countywide	29	1930EST 1935EST			0	0	10K		Thunderstorm Wind
<b>Greene County</b> Countywide	29	1945EST 2010EST			0	0	8K		Thunderstorm Wind
<b>Marion County</b> 5 SW (Ind)Indnpls Intl Ar	29	1949EST 1952EST			0	0	3K		Thunderstorm Wind
<b>Marion County</b> (Ind)Indnpls Intl Ar	29	1957EST			0	0			Thunderstorm Wind (G53)
<b>Knox County</b> Edwardsport to .5 SE Edwardsport	29	1958EST 2000EST	0.7	75	0	0	5K		Tornado (F0)
<b>Daviess County</b> 2.5 W Plainville to 2 W Plainville	29	2000EST 2002EST	0.5	75	0	0	5K		Tornado (F0)
<b>Knox County</b> Vincennes	29	2000EST 2005EST			0	0	5K		Thunderstorm Wind
<b>Monroe County</b> Countywide	29	2000EST 2015EST			0	0	8K		Thunderstorm Wind
<b>Morgan County</b> Martinsville	29	2000EST 2010EST			0	0	5K		Thunderstorm Wind
<b>Owen County</b> Countywide	29	2000EST 2010EST			0	0	3K		Thunderstorm Wind
<b>Johnson County</b> Greenwood to Trafalgar	29	2002EST 2015EST			0	0	8K		Thunderstorm Wind
<b>Marion County</b> 7 SE Indianapolis	29	2005EST			0	0			Thunderstorm Wind (G64)
<b>Daviess County</b> Countywide	29	2010EST 2030EST			0	0	10K		Thunderstorm Wind
<b>Shelby County</b> Fountaintown	29	2015EST 2017EST			0	0	3K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## INDIANA, Central

<b>Bartholomew County</b> Columbus Arpt	29	2020EST 2021EST			0	0			Thunderstorm Wind (G60)
<b>Marion County</b> Southport	29	2024EST 2025EST			0	0	1K		Thunderstorm Wind
<b>Bartholomew County</b> Countywide	29	2032EST 2045EST			0	0	8K		Thunderstorm Wind
<b>Jackson County</b> Spraytown	29	2042EST 2045EST			0	0	3K		Thunderstorm Wind
<b>Jennings County</b> Vernon	29	2050EST 2052EST			0	0	2K		Thunderstorm Wind
<b>Decatur County</b> Countywide	29	2054EST 2100EST			0	0	10K		Thunderstorm Wind
<b>Greene County</b> Lyons	29	2300EST 2305EST			0	0	5K		Thunderstorm Wind

A large and powerful squall line known as a Derecho originated in Iowa the morning of the 29th, slammed through Central Illinois the afternoon of the 29th and swept across Central Indiana the evening of the 29th. This squall line produced wind gusts of 40 to nearly 80 mph across central Indiana causing damage in nearly every central Indiana County. A weak tornado briefly touched down near Brazil around 7 PM while another weak tornado briefly touched down near Edwardsport around 9 PM. These tornadoes caused minor house damage and major tree damage. Otherwise, most wind damage resulted in widespread tree and powerline damage across central Indiana, and in a handful of cases, trees fell on houses and/or cars causing additional damage. Hardest hit areas included the Indianapolis area near Plainfield where hundreds of trees were mowed down by 70 mph straightline winds. Also hard hit was the Bedford area with hundreds of trees being toppled. And the Columbus area also experienced widespread tree and powerline damage in addition to two semitractor trucks being blown off I-65.

## INDIANA, Northeast

<b>Pulaski County</b> Medaryville	11	1803EST TIME ESTIMATED			0	0			Hail (1.75)
<b>Pulaski County</b> 4 S Denham	11	1815EST			0	0			Hail (0.75)
<b>Pulaski County</b> Ripley to Monterey	11	1828EST	9	100	0	1	1M	100K	Tornado (F2)
4 TRAILER HOMES DESTROYED, SEVERAL OTHERS SUFFERED MINOR TO MAJOR DAMAGE, ONE HOME AND BARN DESTROYED, SEVERAL OTHER HOMES SUFFERED MODERATE DAMAGE. TORNADO STARTED IN RIPLEY AND TRACKED EAST NORTHEAST TO MONTEREY BEFORE IT LIFTED. EXTENSIVE TREE DAMAGE OCCURRED ALONG THE TORNADOES PATH.									
<b>Starke County</b> 2 S Bass Lake	11	1834EST			0	0	0		Thunderstorm Wind
NUMEROUS TREE LIMBS DOWN									
<b>Marshall County</b> 3 SW Plymouth	11	1903EST			0	0	0		Thunderstorm Wind
NUMEROUS TREE LIMBS DOWN									
<b>Grant County</b> 2.5 SW Swayzee	11	1921EST	6	100	0	0	500K		Tornado (F1)
THIS TORNADO WAS A CONTINUATION OF THE GREENTOWN TORNADO IN HOWARD COUNTY. THE TORNADO WAS WEAKENING AS IT CROSSED INTO GRANT COUNTY BUT CAUSED EXTENSIVE TREE DAMAGE ALONG ITS PATH AND SEVERLY DAMAGED SEVERAL HOMES IN SWAYZEE. MANY OF THE HOMES SUFFERED DAMAGE FROM UPROOTED TREES FALLING ON THEM. MANY TREES AND POWER LINES WERE REPORTED DOWN FROM THIS SERIES OF STORMS. IN ADDITION...VERY HEAVY RAIN CAUSED FLASH FLOODING ACROSS THE COUNTY WITH MANY COUNTY ROADS WASHED OUT OR UNDER WATER.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed    Injured		Estimated Damage Property    Crops		Character of Storm
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## INDIANA, Northeast

### **Kosciusko County**

3 NE Etna Green to  
5 NE Etna Green

11	1933EST	2	100	0	4	800K		<b>Tornado (F1)</b>
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THIS WAS ANOTHER TORNADO SPAWNED FROM THE SAME TORNADIC SUPERCELL THAT CAUSED DAMAGE IN PULASKI COUNTY EARLIER IN THE EVENING. 30 MOBILE HOMES AT THE MIKEL MOBILE ESTATES WERE DAMAGED, MANY SEVERELY. SOME WERE SIMPLY OVERTURNED WHILE OTHERS WERE COMPLETELY FLATTENED. 4 PEOPLE SUSTAINED MINOR INJURIES.

### **Elkhart County**

New Paris

11	1949EST			0	0	0		<b>Thunderstorm Wind</b>
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NUMEROUS TREE LIMBS DOWN

### **Grant County**

3 SE Fairmount

11	1958EST	4	200	0	0	1M		<b>Tornado (F1)</b>
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THIS TORNADO TRACK WAS A CONTINUATION OF THE TORNADO WHICH BEGAN NEAR THE TOWN OF ELWOOD IN MADISON COUNTY. THE TORNADO WAS WEAKENING AS IT CROSSED INTO GRANT COUNTY BUT CAUSED EXTENSIVE DAMAGE TO SEVERAL FARMS. ONE FARMSTEAD SUFFERED A DESTROYED BARN AND AN OVERTURNED JUNK BUS. ANOTHER FARMSTEAD HAD A VERY LARGE METAL OUTBUILDING DESTROYED AND 3 LARGE SILOS WERE BLOWN INTO THE FARM HOUSE WHICH SUFFERED MAJOR DAMAGE. ANOTHER FARM LOST MOST OF ITS OUTBUILDINGS WITH THE ROOF OF THE HOUSE DAMAGED. ANOTHER FARM NEAR FAIRMOUNT SUFFERED SEVERE DAMAGE WITH 2 BARNES DESTROYED AND THE HOUSE LOST ITS ROOF. MANY TREES AND OUTBUILDINGS IN FOWLERTON WERE DAMAGED WERE THE TORNADO FINALLY LIFTED.

### **Wells County**

1.5 SW Poneto to  
.5 SW Poneto

11	2134EST	1	50	0	0	150K		<b>Tornado (F1)</b>
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THIS WAS ONE OF SEVERAL TORNADOES PRODUCED FROM THE SAME SUPERCELL THAT DEVELOPED ACROSS HOWARD COUNTY. THIS BRIEF SPINUP CAUSED EXTENSIVE DAMAGE TO ALL OUTBUILDINGS ON ONE FARM, 2 FARM HOMES SUFFERED EXTENSIVE DAMAGE, 5 OTHER HOMES SUFFERED MINOR TO MODERATE STRUCTURAL DAMAGE.

### **Jay County**

2 SW Boundary City to  
Boundary City

11	2140EST	2	50	0	0	300K		<b>Tornado (F1)</b>
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THIS TORNADO COMPLETELY DESTROYED A NEW MODULAR HOME. RIGHT ACROSS THE ROAD...TWO OTHER HOUSES WERE DAMAGED AND A BARN WAS DESTROYED. SEVERAL OTHER HOMES, AN OLD SCHOOL, AND A CHURCH SUFFERED MINOR TO MODERATE DAMAGE. MANY TREES AND POWER LINES WERE DOWN AS A RESULT OF THIS STORM.

### **Adams County**

Monroe

11	2155EST			0	0			<b>Hail (0.75)</b>
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### **Adams County**

Monroe

11	2155EST			0	0	30K		<b>Thunderstorm Wind</b>
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HIGH WINDS DESTROYED A BARN AND DESTROYED SEVERAL TREES

Synoptic and mesoscale conditions for June 11, 1998...

Morning sfc and upper air analysis revealed a potent upper short wave trough across North Dakota with an intensifying area of sfc low pressure across southwest Kansas. An unseasonably strong 140 knot jet streak was ejecting out of this trough across Kansas with the left front exit region progged into central Indiana after 18Z. Increasing moisture convergence and theta-e advection along the northward lifting warmfront was seen as 850 mb winds were forecast to increase to 55 knots. By 21Z, the sfc low had moved into eastern Iowa and deepened to 994 mb. The prestorm environment was characterized by moderate to extreme instability (LI values -7 to -9 and CAPE values in excess of 2000 J/kg) with temperatures in the lower 80s and dewpoints in the low/mid 70s. This combined with a dry punch at 700mb and deep layer shear along the warm front, where storm relative helicity values increased to 400 M2/S2, lay the foundation for an outbreak of damaging tornadoes across Indiana.

### **Starke County**

North Judson

12	1504EST			0	0			<b>Thunderstorm Wind (G61)</b>
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### **Noble County**

Wolflake

12	1505EST			0	0			<b>Hail (1.75)</b>
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### **Noble County**

5 E Rome City

12	1510EST			0	0			<b>Hail (0.75)</b>
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### **Noble County**

Burr Oak

12	1512EST			0	0			<b>Hail (1.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Northeast</b>									
<b>Marshall County</b>									
Bourbon	12	1513EST			0	0			Hail (1.00)
<b>Starke County</b>									
Knox	12	1544EST			0	0			Hail (0.75)
<b>Steuben County</b>									
Hamilton	12	1545EST			0	0			Hail (0.75)
<b>Whitley County</b>									
Tri Lakes	12	1545EST			0	0			Hail (1.00)
<b>De Kalb County</b>									
Auburn	12	1549EST			0	0			Hail (0.75)
<b>Kosciusko County</b>									
6 SE North Webster	12	1550EST			0	0			Hail (1.00)
<b>Whitley County</b>									
Churubusco	12	1556EST			0	0			Hail (1.75)
<b>Grant County</b>									
2 S Marion	12	1600EST			0	0			Hail (1.75)
<b>Noble County</b>									
Merriam	12	1603EST			0	0			Hail (1.75)
<b>Whitley County</b>									
Tri Lakes	12	1605EST			0	0			Hail (4.00)
<b>Noble County</b>									
5 S Albion	12	1615EST			0	0			Hail (1.75)
<b>La Porte County</b>									
6 S Westville	12	1617EST	0.1	50	0	0	50K		Tornado (F0)
									WEAK TORNADO TOUCHED DOWN NEAR U.S. 421 AND U.S. 30. A FEW FARMHOUSES SUFFERED SLIGHT ROOF DAMAGE.
<b>St. Joseph County</b>									
South Bend	12	1622EST			0	0			Hail (1.75)
<b>Kosciusko County</b>									
Mentone	12	1630EST			0	0			Hail (1.00)
<b>Kosciusko County</b>									
Mentone	12	1630EST			0	0	250K		Thunderstorm Wind
									MANY LARGE TREES WERE BLOWN DOWN THROUGHOUT TOWN. SEVERAL HOUSES SUSTAINED MINOR TO MODERATE STRUCTURAL DAMAGE.
<b>Whitley County</b>									
2 E South Whitley to South Whitley	12	1634EST			0	0			Hail (1.75)
<b>Allen County</b>									
Wallen	12	1635EST			0	0			Hail (1.75)
<b>Elkhart County</b>									
1 S Elkhart	12	1640EST			0	0			Hail (0.75)
<b>Allen County</b>									
Wallen	12	1648EST			0	0			Thunderstorm Wind (G65)
<b>Elkhart County</b>									
Elkhart	12	1703EST			0	0			Hail (1.25)
									ALONG COUNTY ROAD 30.
<b>Allen County</b>									
Ft Wayne	12	1725EST			0	0			Hail (0.75)
<b>Allen County</b>									
Ft Wayne	12	1735EST			0	0			Hail (0.75)
<b>La Porte County</b>									
Michigan City	18	2155EST			0	0	0		Thunderstorm Wind
									LARGE TREES BLOWN DOWN
<b>La Porte County</b>									
Michigan City	18	2156EST			0	0			Thunderstorm Wind (G55)
									COAST GUARD STATION REPORT

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Northeast</b>									
<b>La Porte County</b>									
La Porte	18	2205EST			0	0	0		Thunderstorm Wind
			LARGE TREES BLOWN DOWN						
<b>St. Joseph County</b>									
New Carlisle	18	2206EST			0	0	0		Thunderstorm Wind
			LARGE TREES BLOWN DOWN						
<b>St. Joseph County</b>									
South Bend	18	2235EST			0	0	0		Thunderstorm Wind
			TREES DOWN						
<b>Marshall County</b>									
Plymouth	18	2240EST			0	0	25K		Thunderstorm Wind
			NUMEROUS TREES DOWN IN TOWN AND ACROSS THE COUNTY. SEVERAL ROADS WERE BLOCKED DUE TO FALLEN TREES AND DOWNED POWER LINES.						
<b>Elkhart County</b>									
Wakarusa	18	2255EST			0	0			Thunderstorm Wind (G52)
<b>Kosciusko County</b>									
Barbee	18	2255EST			0	0	0		Thunderstorm Wind
			TREE LIMBS AND POWER LINES DOWN.						
<b>Wabash County</b>									
North Manchester	18	2340EST			0	0			Thunderstorm Wind (G61)
<b>Huntington County</b>									
Huntington	19	0015EST			0	0			Thunderstorm Wind (G55)
			SEVERAL TREES DOWN WITH MINOR ROOF DAMAGE TO SEVERAL HOMES.						
<b>Wells County</b>									
Ossian	19	0025EST			0	0	10K		Thunderstorm Wind
			SEVERAL LARGE TREES WERE TOPPLED IN TOWN.						
<b>Allen County</b>									
Ft Wayne	19	0035EST			0	0			Hail (0.75)
<b>Blackford County</b>									
Hartford City	19	0045EST			0	0	0		Thunderstorm Wind
			NUMEROUS TREES DOWN ACROSS COUNTY						
<b>Adams County</b>									
Berne	19	0050EST			0	0	100K		Thunderstorm Wind (G52)
			MANY TREES AND POWER LINES WERE DOWN ACROSS THE COUNTY. ONE TREE FLATTENED TWO CARS IN DECATUR WITH THE LIBRARY IN BERNE LOSING PART OF ITS ROOF.						
<b>Jay County</b>									
Portland	19	0050EST			0	0	0		Thunderstorm Wind
			NUMEROUS TREES DOWN ACROSS COUNTY						
<b>Steuben County</b>									
Angola	26	0115EST			0	0			Hail (0.75)
<b>INZ004</b>									
			<b>St. Joseph</b>						
	26	0150EST			0	0	0		Flood
			BRIDGE REPORTED UNDER WATER IN NEW CARLISLE.						
<b>Allen County</b>									
Poe	26	1735EST			0	0			Hail (0.75)
<b>Adams County</b>									
Decatur	26	1803EST			0	0			Thunderstorm Wind (G52)
<b>Fulton County</b>									
Leiters Ford to Rochester	28	2115EST			0	0			Hail (1.75)
<b>Fulton County</b>									
Talma	28	2115EST			0	0			Hail (1.00)
<b>INZ034</b>									
			<b>Jay</b>						
	29	0120EST			0	0			Flood
			SEVERAL ROADS WERE REPORTED UNDER WATER IN THE TOWN OF PORTLAND.						
<b>Jay County</b>									
Portland	29	0120EST			0	0	0		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>INDIANA, Northeast</u></b>									
NUMEROUS TREES WERE BLOWN DOWN IN THE CITY.									
<b>La Porte County</b>									
La Porte	29	1900EST			0	0			Hail (1.00)
<b>Elkhart County</b>									
Elkhart	29	1922EST			0	0			Hail (0.75)
<b>St. Joseph County</b>									
Osceola	29	1922EST			0	0			Hail (1.00)
SEVERAL TREES DOWN IN TOWN.									
<b>Lagrange County</b>									
Mongo	29	1934EST			0	0			Hail (0.75)
<b>Marshall County</b>									
Culver	29	1945EST			0	0	0		Thunderstorm Wind
NUMEROUS TREES BLOWN DOWN IN TOWN WITH SEVERAL POWER OUTAGES REPORTED.									
<b>Kosciusko County</b>									
Warsaw	29	2035EST			0	0	0		Thunderstorm Wind
SEVERAL TREES AND POWER LINES DOWN IN CITY.									
<b>Allen County</b>									
Ft Wayne	29	2045EST			0	0			Thunderstorm Wind (G50)
<b><u>INDIANA, Northwest</u></b>									
<b>Lake County</b>									
Gary	18	2100EST			0	0			Thunderstorm Wind (G50)
A cooperative observer at Trump Casino at Buffington Harbor in Gary recorded a 58 mph wind gust.									
<b><u>INDIANA, South Central</u></b>									
<b>Dubois County</b>									
Jasper	12	2103EST			0	0	10K		Thunderstorm Wind (G60)
<b>Crawford County</b>									
English	12	2115EST			0	0			Thunderstorm Wind (G50)
<b>Harrison County</b>									
Palmyra to New Boston	12	2130EST 2155EST			0	0			Thunderstorm Wind (G50)
<b>Washington County</b>									
Freddricksburg	12	2130EST			0	0			Thunderstorm Wind (G50)
<b>Clark County</b>									
Underwood to Clarksville	12	2135EST 2150EST			0	0			Thunderstorm Wind (G62)
<b>Floyd County</b>									
Greenville to New Albany	12	2145EST 2150EST			0	0			Thunderstorm Wind (G62)
<b>Perry County</b>									
Leopold	12	2145EST 2200EST			0	0	10K		Thunderstorm Wind (G50)
A squall line produced widespread damage across south central Indiana. Several roofs were blown off houses in Jasper, while a tree fell on a car in Leopold. Spotters reported 70 mph winds on the Floyd/Clark county line as well. Otherwise, although the damage was widespread across the area, most of the damage was fallen trees and power lines.									
<b>Washington County</b>									
Campbellsburg	22	1340EST			0	0			Thunderstorm Wind (G50)
<b>Scott County</b>									
Scottsburg	22	1409EST			0	0			Hail (0.75)
<b>Scott County</b>									
1 S Vienna	22	1415EST			0	0			Hail (1.75)
<b>Orange County</b>									
2 S Paoli	22	1420EST			0	0			Thunderstorm Wind (G50)
<b>Clark County</b>									
Sellersburg	22	1440EST			0	0			Thunderstorm Wind (G50)
<b>Harrison County</b>									
Corydon	22	1450EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## INDIANA, South Central

<b>Floyd County</b> Floyds Knobs	22	1454EST			0	0			<b>Thunderstorm Wind (G50)</b> An area of thunderstorms moved southeast across south central Indiana producing widespread areas of wind damage with numerous trees and power lines down. A few spots also received dime size to golfball size hail. Reports were from state police, spotters and DES.
<b>Washington County</b> Fredericksburg	23	0005EST			0	0			<b>Thunderstorm Wind (G50)</b> Sheriff's office reported trees down.
<b>Crawford County</b> Taswell	23	0030EST			0	0			<b>Thunderstorm Wind (G50)</b> Dispatch reported trees down on state road 64.
<b>Orange County</b> French Lick	29	2025EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Orange County</b> Orleans	29	2025EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Dubois County</b> Huntingburg	29	2045EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Washington County</b> Salem	29	2100EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Crawford County</b> Milltown	29	2104EST			0	0			<b>Thunderstorm Wind (G60)</b>
<b>Scott County</b> Austin	29	2105EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Jefferson County</b> Madison	29	2110EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Clark County</b> Sellersburg	29	2120EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Harrison County</b> Corydon	29	2120EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Floyd County</b> Georgetown	29	2125EST			0	0			<b>Thunderstorm Wind (G52)</b> DES, spotters and state police reported trees and power lines down as a squall line moved through south central Indiana.

## INDIANA, Southeast

<b>Fayette County</b> Harrisburg to Connersville	02	0910EST 0922EST			0	0			<b>Hail (1.75)</b>
<b>Union County</b> Liberty	02	0922EST			0	0			<b>Hail (0.75)</b>
<b>Franklin County</b> Countywide	11	0920EST 1545EST			0	0	5K		<b>Flood</b> Roads flooded due to heavy rainfall.
<b>Wayne County</b> Countywide	11	1040EST 1600EST			0	0	5K		<b>Flood</b> Roads closed due to heavy rainfall.
<b>INZ058-066-074</b> <b>Fayette - Franklin - Dearborn</b>	11 13	1100EST 1730EST			0	0			<b>Flood</b> The West Fork of the Whitewater River came out of its banks at both Alpine and downstream from Brookville. At Alpine, the river reached a crest of 15.2 feet on the 11th at 500 PM EST. Low-lying areas and some county roads near Alpine and Nulltown were flooded. Flood stage is 12.0 feet. At Brookville, the river reached a crest of 16.1 feet around 1100 PM EST on the 12th. Some recreational areas were flooded near Cedar Grove and New Trenton and some low land flooding occurred near West Harrison. Official flood stage is 20.0 feet at Brookville, but areas downstream of Brookville experience flooding above 14.0 feet.
<b>Union County</b> Countywide	11	1100EST 1545EST			0	0	5K		<b>Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Southeast</b>									
			Heavy rainfall caused several roads to be closed.						
<b>Fayette County Countywide</b>	11	1115EST 1545EST			0	0	5K		<b>Flood</b>
			Roads closed due to heavy rainfall.						
<b>Ripley County Batesville</b>	11	2130EST 2135EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Numerous large limbs downed.						
<b>Wayne County Richmond</b>	12	1945EST 1955EST			0	0	5K		<b>Thunderstorm Wind (G50)</b>
			Numerous trees and power lines downed.						
<b>Fayette County Connersville</b>	12	1950EST 1955EST			0	0	5K		<b>Thunderstorm Wind (G50)</b>
			Trees and power lines downed.						
<b>Franklin County Brookville</b>	12	2015EST 2020EST			0	0	5K		<b>Thunderstorm Wind (G50)</b>
			Numerous trees and power lines.						
<b>Union County 5 N Liberty</b>	12	2015EST 2020EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Wayne County Countywide</b>	14	2200EST 2300EST			0	0			<b>Flood</b>
			Heavy rainfall caused water to flood across county roads.						
<b>Wayne County Countywide</b>	15	1257EST 1700EST			1	0			<b>Flood</b>
			The second batch of heavy rainfall in less than 24 hours caused county creeks and streams to rise out of their banks. A boy was killed when he was swept into Clear Creek. M12OU						
<b>Dearborn County Aurora</b>	16	1100EST 1105EST			0	0			<b>Hail (0.75)</b>
<b>Fayette County Connersville</b>	19	0050EST 0155EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
			Numerous trees and power lines downed.						
<b>Wayne County Richmond</b>	19	0052EST 0100EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
			Numerous trees and power lines downed.						
<b>Union County Liberty</b>	19	0057EST 0105EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
			Many trees downed by thunderstorm winds.						
<b>Franklin County Metamora</b>	19	0100EST 0105EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
			Trees downed.						
<b>Ripley County Holton</b>	22	2350EST 2355EST			0	0	5K		<b>Thunderstorm Wind (G50)</b>
			Trees and power lines downed.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA, Southeast</b>									
<b>Ripley County Countywide</b>	23	0100EST 0110EST			0	0	10K		<b>Thunderstorm Wind (G50)</b>
			Numerous trees were downed across the county.						
<b>Dearborn County Countywide</b>	23	0125EST			0	0			<b>Flood</b>
			Persistent heavy rainfall caused numerous roads to be flooded.						
<b>Ripley County Holton</b>	23	0125EST 0225EST			0	0	15K		<b>Flash Flood</b>
			Numerous roads flooded by heavy rainfall. One road was washed out.						
<b>Fayette County Connersville</b>	29	2050EST 2055EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Ripley County Napoleon</b>	29	2115EST 2120EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Dearborn County Lawrenceville</b>	29	2130EST 2135EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Switzerland County Vevay</b>	29	2133EST 2135EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>INDIANA, Southwest</b>									
<b>Gibson County Princeton to Oakland City</b>	12	1929CST 1942CST			0	2	500K		<b>Thunderstorm Wind</b>
			Very damaging thunderstorm winds in excess of 70 MPH affected a narrow swath of Gibson County from near Princeton to Oakland City. Two trailers were destroyed, numerous trees were downed, and 40 to 50 homes were damaged. About 90 percent of the town of Princeton was without power. Midnight curfews were enacted in Oakland City and Patoka. Indiana Route 64 was closed due to debris on the roadway. Grain bins were blown over near Princeton. Most of the house damage was a result of falling trees. A few houses had roofs ripped off. Oakland City was hit very hard, with hundreds of trees blown down, some on houses and vehicles.						
<b>Pike County Petersburg to Winslow</b>	12	2000CST 2015CST			0	0	10K		<b>Thunderstorm Wind (G57)</b>
			Numerous trees were down across the county. State police reported trees across State Routes 56 and 57. Wind gusts to 65 MPH were clocked in Winslow.						
<b>Warrick County Lynnville</b>	12	2015CST 2030CST			0	0	5K		<b>Thunderstorm Wind (G52)</b>
			Thunderstorm winds downed numerous trees and power lines in northern Warrick County, mainly around Lynnville.						
<b>Spencer County Dale to St Meinrad</b>	12	2030CST 2043CST			0	0	40K		<b>Thunderstorm Wind (G55)</b>
			Numerous trees and tree limbs were downed across northern Spencer County. Homes and buildings were damaged by toppled tree limbs near Dale and Santa Claus. A roof was torn off a home near St. Meinrad.						
<b>Vanderburgh County Evansville to 3 E Evansville</b>	14	1822CST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Several trees were blown down in Evansville. Emergency management officials reported wind gusts to 58 MPH just east of Evansville near the Warrick County line.						
<b>Warrick County Paradise to Newburgh</b>	14	1830CST			0	0	25K		<b>Thunderstorm Wind (G61)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## INDIANA, Southwest

A wind gust to 70 MPH was recorded at Newburgh Lock and Dam on the Ohio River. Trees and power lines were reported down in Newburgh, Paradise, Boonville, and Chandler. Indiana Route 62 was blocked by a fallen tree near Chandler.

### **INZ082**

#### **Pike**

<b>16</b>	<b>0200CST</b>			<b>1</b>	<b>0</b>	<b>50K</b>	<b>Flood</b>
<b>28</b>	<b>2200CST</b>						

The White River rose well out of its banks, closing portions of some roads, including Indiana Route 257, about 4 miles northeast of Algiers in Pike County. A 29-year-old male drove his vehicle around barricades on Route 257 and drowned while attempting to cross flooded portions of the road. The incident occurred about 1/4 mile south of the east fork of the White River shortly after noon on June 22. At Petersburg, where flood stage is 16 feet, the river crested around 24 feet around June 23.

M29VE

### **INZ081-085**

#### **Gibson - Posey**

<b>19</b>	<b>0800CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>	<b>Flood</b>
<b>30</b>	<b>2359CST</b>						

The Wabash River crested at New Harmony at 19.8 feet on June 25. Flood stage there is 15 feet. This resulted in extensive flooding of agricultural bottomland, and some local farm levees were topped. In addition, campgrounds of New Harmony State Park were flooded.

#### **Gibson County**

##### **Princeton**

<b>22</b>	<b>2215CST</b>			<b>0</b>	<b>0</b>	<b>2K</b>	<b>Thunderstorm Wind (G52)</b>
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Wind gusts up to 60 MPH occurred at Princeton.

#### **Pike County**

##### **Petersburg**

<b>22</b>	<b>2240CST</b>			<b>0</b>	<b>1</b>		<b>Lightning</b>
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A trained storm spotter was injured by lightning. The injuries were not life-threatening.

#### **Gibson County**

##### **Haubstadt**

<b>22</b>	<b>2259CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>	<b>Thunderstorm Wind (G52)</b>
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Power poles were down.

#### **Pike County**

##### **Winslow**

<b>22</b>	<b>2305CST</b>			<b>0</b>	<b>0</b>	<b>4K</b>	<b>Thunderstorm Wind (G69)</b>
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Wind gusts to 80 MPH downed trees.

#### **Vanderburgh County**

##### **Evansville**

<b>22</b>	<b>2315CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Thunderstorm Wind (G52)</b>
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A tree was down, along with numerous limbs and power lines.

#### **Warrick County**

##### **Boonville**

<b>22</b>	<b>2322CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>	<b>Thunderstorm Wind (G50)</b>
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Power lines were down.

#### **Vanderburgh County**

##### **Evansville**

<b>23</b>	<b>0005CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>	<b>Flash Flood</b>
	<b>0230CST</b>						

#### **Gibson County**

##### **Princeton**

<b>23</b>	<b>0015CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Flash Flood</b>
	<b>0230CST</b>						

#### **Warrick County**

##### **Boonville**

<b>23</b>	<b>0015CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Flash Flood</b>
	<b>0230CST</b>						

#### **Spencer County**

##### **Rockport**

<b>23</b>	<b>0040CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Flash Flood</b>
	<b>0230CST</b>						

Slow-moving thunderstorms produced very heavy rainfall. Amounts were estimated to range up to 2 inches per hour, with totals over 3 inches. State police reported numerous flooded roadways, some of which were closed. Interstate 164 southbound near mile marker 19 was under water as was U.S. 41 near Stacer Road.

#### **Gibson County**

##### **Princeton**

<b>29</b>	<b>1920CST</b>			<b>0</b>	<b>0</b>	<b>3K</b>	<b>Thunderstorm Wind (G54)</b>
	<b>1930CST</b>						

Wind gusts estimated between 60 and 65 MPH downed a few trees.





# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
entered Iowa. Winds of 70 MPH swept through New Market in Taylor County, knocking over trees and breaking power lines. One house was set on fire as the power line was pulled from the landing of the house and a fire started. Wind damage was also reported in Bedford in Taylor County, and also in Creston of Union County. One farm southwest of Diagonal in Ringgold County received significant damage as 75 MPH winds blasted the area.									
<b>Cass County</b>									
Atlantic	14	0600CST 1500CST			0	0	2M	1.2M	Flood
<b>Audubon County</b>									
Audubon	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Boone County</b>									
Boone	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Dallas County</b>									
Dallas Center	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Greene County</b>									
Jefferson	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Guthrie County</b>									
Guthrie Center	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Marshall County</b>									
Marshalltown	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Story County</b>									
Ames	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Tama County</b>									
Tama	14	1100CST 2200CST			0	0	100K	75K	Urban/Sml Stream Fld
<b>Adair County</b>									
Greenfield	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Clarke County</b>									
Osceola	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Jasper County</b>									
Newton	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Lucas County</b>									
Chariton	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Madison County</b>									
Winterset	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Mahaska County</b>									
Oskaloosa	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Marion County</b>									
Knoxville	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Monroe County</b>									
Albia	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld
<b>Polk County</b>									
Des Moines	14	1600CST 2200CST			0	0	50K	30K	Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **IOWA, Central**

**Poweshiek County  
Grinnell**

14	1600CST 2200CST				0	0	50K	30K	Urban/Sml Stream Fld
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**Wapello County  
Ottumwa**

14	1600CST 2200CST				0	0	50K	30K	Urban/Sml Stream Fld
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**Warren County  
Indianola**

14	1600CST 2200CST				0	0	50K	30K	Urban/Sml Stream Fld
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A strong upper level system combined with a warm front located to the south of Iowa set the stage for a major flood event. Iowa soils were already saturated before the event took began. The severe thunderstorms mentioned above were only the beginning. They moved off to the northeast during the night as the upper level low pressure system became nearly stacked over southwest Iowa. A small cluster of thunderstorms formed over the southwest counties during the early morning hours. There was little movement and heavy rainfall ensued over Cass County. Cass County was the hardest hit as 13.18 inches of rain fell during the morning into early afternoon hours. Seven inches of it fell in a 4.5 hours period between 0830 and 1300 CST. This amount of rainfall set a state record for the greatest 24 hour rainfall total from an official site. Cass County became cut off as the flood waters rose rapidly. Entire towns were evacuated as houses were covered with water in some places. The Governor of Iowa declared the county a disaster area by evening. Flooding was not limited to Cass County. During the morning, a deformation zone formed from west central into central Iowa. Bands of heavy thunderstorms moved up from the south and became stationary in an east to west band from west central into central Iowa. Rainfall of one to two inches in less than 2 hours was common, with many areas receiving three inches or more of additional rainfall. Urban and small stream flooding was widespread with considerable ponding and lowland flooding reported. During the late afternoon and evening hours, the deformation zone shifted south and expanded as the upper low drifted off to the east. The flooding was not as bad as that experienced earlier in the day, but did set the stage for major river flooding to follow. Many areas reported river stages at record or near record highs following this event. Thoughts of the "Flood of '93" were heard around the state. In Lake Panorama area, saturated soil around the lake began to slide into the lake by late in the afternoon. Three homes began to slide with the soil and began cracking as the earth sank some 12 to 18 inches. The three houses were said to be damaged beyond repair. In the town of Atlantic, 21 houses were destroyed by flooding. As the flood crest caused by the heavy rains moved down the Raccoon River, the town of DeSoto was left without water for a few days. The water treatment plant there is located next to the river and was engulfed by floodwaters. MidAmerica Energy shut off natural gas service to the town of Atlantic as the flood waters crested as a precautionary measure. In addition to the property losses, wildlife losses were great. Millions of Pheasants, rabbits, and other ground nesting wildlife perished in the high waters. Damage to highways and secondary roads was extensive. Some of the preliminary estimates received were: \$560,000 in Guthrie County, \$380,000 in Audubon County, and \$400,000 in Dallas County. At the time of this writing, the worst damage...which was in Cass County, was still not known.

**IAZ034-037-045>046-048>050-057>061-070-074>075-083>084**    **Calhoun - Hardin - Carroll - Greene - Story - Marshall - Tama - Audubon - Guthrie - Dallas - Polk - Jasper - Cass - Marion - Mahaska - Clarke - Lucas**

14	0900CST				0	0	5.4M	655K	Flood
16	0600CST								

After a brief lull from the rain on the 12th, a large mesoscale convective system developed near the center of an upper level low pressure center over southwest Iowa during the early morning hours of the 14th. Extremely heavy rain fell over southwest and central Iowa from this storm. The rain gage at Atlantic had a 24 hour total rainfall of 13.18 inches. This established a new official record for the greatest amount of rainfall in a 24 hour period. Cass County was covered by a large area of 4 to 8 inch rains, which essentially submerged the entire county. The east Fork of the Nishnabotna at Atlantic 5 SW crested on the 15th at 22.36 feet, missing the all-time record set in September, 1972 by about one half foot. Very heavy rains also fell on the Raccoon and South Skunk river basins, with widespread 2 to 4 inches rains resulting in widespread flooding. Many areas within these basins were under flash flood warnings which subsequently evolved into river flooding. Both the north and south branches of the Raccoon River flooded. The crest at Redfield was the 4th highest crest on record. The flood waves from both rivers merged on the mainstem Raccoon to create the 2nd highest crest on record at both Van Meter and at Fleur Drive. Only the great floods of 1993 created higher crests. In addition, the Des Moines River at SE 6th St. in Des Moines crested at the 4th highest crest of record. Damage was widespread across the state with numerous basements flooded and crops washed out. At this point, thoughts of the flood of '93 were on many peoples minds as Iowa had not experienced flooding of this magnitude since the great floods of '93. The main rivers affected by this flood episode were the Iowa, Squaw Creek, Raccoon, Beaver Creek, Chariton, and East Nishnabotna.

**Hancock County  
Britt**

15	1200CST 1700CST				0	0	50K	25K	Flash Flood
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A weak flow pattern was located Iowa. Abundant low level moisture combined with the strong solar heating and passage of a weak trough of low pressure resulted in thunderstorm development. The storms were not severe, but they also were not moving very fast. A fairly small cell developed over Hancock County and dumped very heavy rain and caused a flash flood. Six inches of rain fell in just over one hour south of the city of Britt. Highways were under water for a time and agricultural flooding was widespread.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Dallas County</b> Dallas Center	15	1800CST 2100CST			0	0	20K	5K	Urban/Sml Stream Fld
Thunderstorms dropping heavy rainfall developed over Dallas County. The rain area was very slow to move and as a result dropped excessive amounts of rain on already saturated soil. Two to four inches of rain fell in a little over an hour causing urban and lowland flooding. Once the rain stopped, the flooding subsided fairly quickly.									
<b>Guthrie County</b> Panora	17	0805CST			0	0		2K	Hail (0.75)
<b>Dallas County</b> Dallas Center	17	1100CST 1300CST			0	0	25K		Urban/Sml Stream Fld
<b>Mahaska County</b> Oskaloosa	17	1100CST 1300CST			0	0	25K		Urban/Sml Stream Fld
<b>Polk County</b> Des Moines	17	1100CST 1300CST			0	0	50K		Urban/Sml Stream Fld
<b>Warren County</b> Indianola	17	1100CST 1300CST			0	0	30K		Urban/Sml Stream Fld
Thunderstorms developed early in the morning ahead of an approaching warm front. Very little in the way of severe weather occurred with them, however dime size hail was reported during the initial development stage. The main problem was the heavy rainfall that occurred on saturated ground. Urban flooding was reported as one to two inches of rain fell in one to one and one half hours time. This caused some property damage.									
<b>IAZ023&gt;024-027-035-037-047&gt;050-059&gt;061-072&gt;075</b>	<b>Pocahontas - Humboldt - Butler - Webster - Hardin - Boone - Story - Marshall - Tama - Dallas - Polk - Jasper - Madison - Warren - Marion - Mahaska</b>								
	18 20	0200CST 2100CST			0	0	8.7M	460K	Flood
Following a brief break from the rain on the 16th, rainfall resumed on the 17th and 18th. Heavy rain fell over just about the entire state on both days, with the heaviest amounts of 1 to 3 inches on the first night in the Nishnabotna River basin, the Upper Des Moines and Iowa basins, and the lower parts of the South Skunk basin. These rains fell on already saturated soils and resulted on considerable runoff. On the 18th, the Des Moines metropolitan area was blitzed with a massive flooding event. Local rains in the city ranged from 1 to 4 inches, much of it falling in one to two hours. Much of this water was quickly added to the flows on the already high Raccoon River. The Raccoon crested again on the afternoon of the 18th with the 11th highest crest of record and the 2nd highest since 1993. Four Mile Creek in Des Moines crested at the 3rd highest crest on record, and numerous evacuations were conducted as a result. Cleanup and repair of the damages from this event alone were estimated at \$12 million. Numerous rivers south of Des Moines flooded as well. The rivers effected from this event were the Iowa, Squaw Creek, Cedar Creek south of Des Moines, Skunk, Raccoon, Walnut Creek in Des Moines, Beaver Creek in Des Moines, Four Mile Creek in Des Moines, the North, Middle, and South. The situation had become very serious across much of Iowa by this point. In early July, 10 counties were declared major disaster areas by President Clinton and a few days later another 16 counties were added to this list by Vice President Gore. Much of the damage was due to flooding, although severe weather played a major role as well. Damage was very widespread across the state. Many people had water in their basements. Some said they had water even though they did not have water during the flood of '93, suggesting the water table in many areas was as high or higher than during the great flood of '93. Many crop fields were drown out by high water. The true extent of the damage will not be known until the harvest in the fall.									
<b>Kossuth County</b> Whittemore	18	0300CST			0	0	10K		Thunderstorm Wind (G56)
<b>Hamilton County</b> Blairsburg	18	0352CST			0	0	3K		Thunderstorm Wind (G52)
<b>Hardin County</b> Iowa Falls	18	0400CST			0	0	25K	2K	Thunderstorm Wind (G61)
<b>Crawford County</b> Charter Oak	18	0500CST			0	0	5K		Thunderstorm Wind (G50)
Thunderstorms moved across northern and western Iowa during the late night and early morning hours. Though most were not severe, one cell did produce high winds as it crossed Hardin County. Numerous trees were downed in the city of Iowa Falls as the storm moved through. Another storm produced high winds in the Charter Oak area of Crawford County, downing trees there.									
<b>Lucas County</b> Chariton	18	0700CST			0	0	50K	5K	Thunderstorm Wind (G56)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Wayne County</b> Corydon	18	0700CST			0	0	10K		Thunderstorm Wind (G56)
<b>Lucas County</b> Russell	18	0710CST			0	0	20K	2K	Thunderstorm Wind (G56)
<b>Lucas County</b> Chariton	18	0830CST			0	0	15K	2K	Thunderstorm Wind (G54)
<b>Dallas County</b> Dallas Center	18	0900CST 1200CST			0	0	30K		Urban/Sml Stream Fld
<b>Polk County</b> Des Moines	18	0900CST 1200CST			0	0	50K		Urban/Sml Stream Fld
<b>Warren County</b> Indianola	18	0900CST 1400CST			0	0	50K		Urban/Sml Stream Fld
<b>Webster County</b> Gowrie	18	0900CST			0	0		2K	Hail (0.75)
<b>Webster County</b> 2 SE Callender	18	0904CST			0	0		2K	Hail (0.75)
<b>Webster County</b> 1 S Ft Dodge	18	0915CST			0	0		2K	Hail (0.75)
<b>Webster County</b> Vincent	18	0928CST			0	0	30K	5K	Thunderstorm Wind (G61)
<b>Madison County</b> Earlham	18	0932CST			0	0	1K	4K	Hail (1.00)
<b>Hamilton County</b> Blairsburg	18	0940CST			0	0	200K	20K	Thunderstorm Wind (G69)
<b>Boone County</b> 3 NW Boone	18	0943CST			0	0	5K	5K	Hail (1.75)
<b>Marion County</b> Melcher	18	0952CST			0	0	2K		Thunderstorm Wind (G50)
<b>Boone County</b> 2 NE Boxholm	18	0955CST			0	0		2K	Hail (0.75)
<b>Marion County</b> Melcher	18	0955CST			0	0	2K		Thunderstorm Wind (G50)
<b>Webster County</b> 2 SW Dayton	18	0958CST			0	0		2K	Hail (0.75)
<b>Boone County</b> Boone	18	1000CST			0	0	40K		Urban/Sml Stream Fld
<b>Marion County</b> Knoxville	18	1000CST 1300CST			0	0	40K		Urban/Sml Stream Fld
<b>Polk County</b> Altoona	18	1002CST			0	0	5K		Thunderstorm Wind (G50)
<b>Marion County</b> Knoxville	18	1003CST			0	0		2K	Hail (0.75)
<b>Polk County</b> Des Moines	18	1013CST			0	0	40K		Thunderstorm Wind (G69)
<b>Polk County</b> Des Moines	18	1014CST 1016CST			0	0	10K		Thunderstorm Wind (G56)
<b>Polk County</b> Urbandale	18	1020CST			0	0	5K		Thunderstorm Wind (G50)
<b>Warren County</b> Carlisle	18	1022CST			0	0	10K	1K	Thunderstorm Wind (G56)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Lucas County</b>									
Lucas	18	1023CST			0	0	2K		Thunderstorm Wind (G52)
<b>Polk County</b>									
Altoona	18	1024CST			0	0	5K		Thunderstorm Wind (G50)
<b>Polk County</b>									
West Des Moines	18	1038CST			0	0	75K	3K	Thunderstorm Wind (G69)
<b>Story County</b>									
Huxley	18	1041CST			0	0	45K	5K	Thunderstorm Wind (G65)
<b>Polk County</b>									
Altoona	18	1045CST			0	0	15K	1K	Thunderstorm Wind (G56)
<b>Poweshiek County</b>									
Grinnell	18	1050CST			0	0	5K		Lightning
<b>Polk County</b>									
Urbandale	18	1051CST			0	0	5K		Thunderstorm Wind (G50)
<b>Boone County</b>									
Boone	18	1055CST			0	0	3K		Thunderstorm Wind (G52)
<b>Warren County</b>									
Milo	18	1058CST			0	0	5K		Thunderstorm Wind (G52)
<b>Jasper County</b>									
Newton	18	1100CST			0	0	3K		Thunderstorm Wind (G50)
<b>Story County</b>									
Kelley	18	1133CST			0	0	5K		Thunderstorm Wind (G56)
<b>Dallas County</b>									
Dallas Center	18	1200CST 1600CST			0	0	150K	10K	Flash Flood
<b>Marion County</b>									
Knoxville	18	1200CST 1630CST			0	0	100K	10K	Flash Flood
<b>Polk County</b>									
Des Moines	18	1200CST 1630CST			0	0	1M	25K	Flash Flood
<b>Story County</b>									
Ames	18	1200CST 1630CST			0	0	250K	15K	Flash Flood
<b>Warren County</b>									
Indianola	18	1200CST 1630CST			0	0	350K	20K	Flash Flood
<b>Taylor County</b>									
Bedford	18	1205CST			0	0	10K	5K	Hail (1.75)
<b>Cerro Gordo County</b>									
Mason City	18	1208CST			0	0	5K		Thunderstorm Wind (G52)
<b>Worth County</b>									
Hanlontown	18	1224CST			0	0	1K		Thunderstorm Wind (G50)
<b>Dallas County</b>									
Dallas Center	18	1240CST			0	0	10K	5K	Hail (1.75)
<b>Union County</b>									
Creston	18	1240CST			0	0	5K		Thunderstorm Wind (G52)
<b>Hardin County</b>									
Garden City	18	1250CST			0	0	25K	2K	Thunderstorm Wind (G56)
<b>Madison County</b>									
Patterson	18	1250CST			0	0	10K		Thunderstorm Wind (G54)
<b>Hardin County</b>									
Iowa Falls	18	1300CST			0	0	15K		Thunderstorm Wind (G52)
<b>Warren County</b>									
Martensdale to 4 NE Norwalk	18	1304CST 1325CST	13	35	0	0	5K	2K	Tornado (F1)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
		Intermittent track							
Jasper County 3 S Colfax	18	1310CST			0	0	40K	5K	Thunderstorm Wind (G61)
Jasper County Newton	18	1339CST			0	0	5K		Thunderstorm Wind (G52)
Lucas County Chariton Muni Arpt	18	1345CST			0	0	2K		Thunderstorm Wind (G53)
Marshall County State Center	18	1345CST			0	0	20K	3K	Thunderstorm Wind (G56)
Jasper County Monroe	18	1347CST			0	0	3K		Thunderstorm Wind (G50)
Jasper County Sully	18	1400CST			0	0	75K	10K	Thunderstorm Wind (G65)
Mahaska County Oskaloosa	18	1415CST			0	0	5K		Thunderstorm Wind (G52)
Marion County Pella	18	1415CST			0	0	5K		Thunderstorm Wind (G52)
Monroe County Hiteman	18	1417CST			0	0	8K	1K	Thunderstorm Wind (G56)
Mahaska County Oskaloosa	18	1420CST			0	0	50K	3K	Thunderstorm Wind (G59)
Tama County Montour	18	1421CST			0	0	50K	5K	Thunderstorm Wind (G78)
Mahaska County Oskaloosa	18	1425CST			0	0	10K		Thunderstorm Wind (G53)
Grundy County Beaman	18	1428CST			0	0	2K		Thunderstorm Wind (G50)
Tama County Tama	18	1428CST			0	0	2K		Thunderstorm Wind (G52)
Poweshiek County 5 W Montezuma	18	1430CST			0	0	200K	10K	Thunderstorm Wind (G74)
Poweshiek County Grinnell	18	1432CST			0	0	25K	2K	Thunderstorm Wind (G63)
Tama County Dysart	18	1435CST			0	0	15K		Thunderstorm Wind (G52)
Poweshiek County 1 NE Grinnell	18	1438CST			0	0	25K	3K	Thunderstorm Wind (G64)
Poweshiek County 1 W Montezuma	18	1438CST			0	0	40K	5K	Thunderstorm Wind (G69)
Black Hawk County 5 SE Waterloo	18	1440CST			0	0	50K	1K	Thunderstorm Wind (G61)
Black Hawk County Gilbertville	18	1445CST			0	0	20K	1K	Thunderstorm Wind (G61)
Poweshiek County Brooklyn	18	1448CST			0	0	75K	5K	Thunderstorm Wind (G65)
Wapello County 4 NW Ottumwa	18	1456CST			0	0	3K		Thunderstorm Wind (G52)
Davis County Mark	18	1500CST			0	0	35K	3K	Thunderstorm Wind (G61)
Mahaska County Oskaloosa Muni Arpt	18	1500CST			0	0	5K		Thunderstorm Wind (G52)
Davis County 3 W Pulaski	18	1504CST			0	0	3K		Thunderstorm Wind (G50)
Davis County Troy	18	1504CST			0	0	3K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## IOWA, Central

A warm front extended from a low pressure area over northeast Nebraska, southeast through central into southeast Iowa. A cold front extended south from the low into Kansas. South of the warm front, dew point temperatures were in the low 70s. A speed max passed to the northwest of the state, placing Iowa in the right rear entrance region of the speed max. This set the stage for thunderstorm development. A strong low level jet was in place with speeds in excess of 50 knots. Initially, a small like of strong, but not severe, thunderstorms formed from southwest into north central Iowa. As the morning progressed, the storms initially produced hail of three quarters inch up to golf ball in size. The hail event quickly turned into a wind event as the storms accelerated along the line. Wind damage was widespread. A roof was taken off of a house in Des Moines as one of the cells moved through. A later storm took a roof off of a building in West Des Moines later in the morning. Wind damage was also significant in Webster and Hamilton Counties as the storms moved through. Numerous reports of sheds blown over were received. Some of the pieces from the sheds were found over a mile downwind. A school roof was 40 percent removed in Blairsburg by high winds. Damage to the building was placed at \$150,000. The next problem was with the storms training over the same areas. The cells moved northeast along the line with little eastward progress of the line itself. This caused urban and small stream flooding over a several county area as widespread rainfall of one to two inches occurred in several central Iowa counties. The situation became more serious in a several county area. Rainfall of three to five inches was recorded in parts of Dallas, Madison, Polk, Story, and Warren Counties. This resulted in flash flooding as all creeks and streams swelled over their banks. The situation became very serious in the larger cities. In Des Moines, a state of emergency was declared as water of 6 feet or greater in depth choked many of the city intersections. Hundreds of cars were stalled in the streets and many basements were flooded. Between the high winds and water, electricity was knocked out to 15000 homes in Des Moines during the height of the storm. Damage estimates were in the hundreds of thousands of dollars in all of the flash flood counties, and over one million dollars in Polk County, where the Governor declared a state disaster. A disaster declaration was also made for Dallas County. Reports indicated that in the Des Moines metropolitan area, up to 10,000 homes had water in the basement. The city of Des Moines reported that infrastructure losses alone around \$1 million. Crop damage estimates from this event, combined with the event of just a few days earlier, totalled around \$100 million. During the early afternoon hours, the cold front over Nebraska began moving east, resulting in a change in the thunderstorm configuration. Several bow echo elements formed along the line which caused another round of high winds and also began shifting the line east. From Des Moines east, numerous places reported winds of 60 to 75 MPH, along with considerable damage. Seventy two MPH winds buffeted Grinnell in Poweshiek County, breaking out windows in homes there. Winds approached 85 MPH west of Montezuma causing extensive damage on several farms there. Two semi-tractortrailer trucks were blown off of I-380 southeast of Waterloo in Black Hawk County. The highest wind reported was in Tama County, at Montour where 90 MPH winds struck the city, resulting in widespread damage. One tornado touched down south of Des Moines. The tornado was small and rain wrapped and produced an intermittent track of minor damage from near Martensdale to northeast of Norwalk in Warren County. Scattered thunderstorms formed ahead of the main area of thunderstorms during the late morning hours. Initially, they were not severe, but one did produce a lightning stroke in Grinnell that touched off a minor fire in a house there.

<b>Winnebago County</b> Scarville	20	1200CST 1600CST			0	0	150K	15K	Flash Flood
<b>Cerro Gordo County</b> Mason City	20	1400CST 1800CST			0	0	150K	10K	Urban/Sml Stream Fld
<b>Hancock County</b> Kanawha	20	1400CST 1800CST			0	0	75K	10K	Urban/Sml Stream Fld
<b>Worth County</b> Northwood	20	1400CST 1800CST			0	0	75K	10K	Urban/Sml Stream Fld
<b>Wright County</b> Clarion	20	1400CST 1800CST			0	0	75K	10K	Urban/Sml Stream Fld
<b>Black Hawk County</b> Waterloo	20	1615CST 1930CST			0	0	75K	5K	Urban/Sml Stream Fld
<b>Bremer County</b> Waverly	20	1615CST 1930CST			0	0	50K	5K	Urban/Sml Stream Fld
<b>Butler County</b> New Hartford	20	1615CST 1930CST			0	0	50K	5K	Urban/Sml Stream Fld
<b>Cerro Gordo County</b> Mason City	20	1615CST 1930CST			0	0	50K	5K	Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Franklin County</b> Hampton	20	1615CST 2300CST			0	0	100K	15K	Urban/Sml Stream Fld
<b>Grundy County</b> Grundy Center	20	1615CST 1930CST			0	0	50K	5K	Urban/Sml Stream Fld
<b>Hancock County</b> Britt	20	1615CST 1930CST			0	0	50K	5K	Urban/Sml Stream Fld
<b>Story County</b> Ames	20	1737CST			0	0		1K	Hail (0.75)
<b>Hardin County</b> Iowa Falls	20	1900CST 2300CST			0	0	70K	5K	Urban/Sml Stream Fld
<b>Story County</b> Ames	20	1900CST 2300CST			0	0	70K	5K	Urban/Sml Stream Fld
<b>Winnebago County</b> 2 N Lake Mills	20	1915CST			0	0		1K	Hail (0.80)
<p>A cold front to the west of Iowa moved into the state during the day. Initially, the airmass was quite capped and thunderstorms had a hard time getting going. Thunderstorms formed on the north edge of the cap over Minnesota, with the tail end of the storms reaching into north central Iowa. There was very little severe weather associated with the storms in Iowa. Heavy rain was the major concern as the ground was already saturated over a large part of the state. Heavy rain of 3 to 5 inches fell over north central Iowa. Five inches of rain was recorded in Scarville, in Winnebago County. Flash flooding was reported around the county with several roads flooded. The line of thunderstorms became more widespread during the later afternoon hours. Rainfall amounts of 2 to 4 inches in a two hour timeframe were reported over a several county area. The city of Iowa Falls reported 4.33 inches of rainfall in about two hours time. Urban flooding was reported over several counties from central into northeast Iowa. The only severe reports were from relatively small hail. Three quarter inch diameter hail fell in Story County at Ames, and north of Lake Mills in Winnebago County.</p>									
<b>IAZ016&gt;017-027-037-049&gt;050-061-074&gt;075 Hancock - Cerro Gordo - Butler - Hardin - Marshall - Tama - Jasper - Marion - Mahaska</b>									
	21	0600CST			0	0	900K	180K	Flood
	23	1800CST							
<p>Another round of a seemingly endless series of mostly nocturnal mesoscale convective systems hit iowa on the 20th and 21st. Fortunately, it shifted to the northeast part of the HSA, avoiding almost completely the saturated basins in the central part of the state. Rainfall of 2 to 5 inches was widespread across the upper Iowa and Cedar River basins, causing the first flooding of the month on these basins. Beaver Creek at New Hartford reached a crest of 11.9 feet on the 22nd, which would have flooded a large part of the town if not for the levee control system built after the 1993 floods. At Marshalltown, the Iowa River crested on the 22nd with the 7th highest crest on record. Meanwhile, runoff from earlier storms caused the South Skunk River at Oskaloosa in Mahaska County to crest at the 3rd highest crest of record. Once again, flooding of basements and agricultural flooding was widespread over the northeast half of Iowa. The major rivers affected were the Winnebago, West Fork of the Cedar, Beaver Creek at New Hartford, and the Skunk. By this point in the month it became difficult to separate all of the flooding events. To give at least some idea of extent of crop damage to this point, it was estimated losses for the state were in excess of \$100 million dollars.</p>									
<b>Palo Alto County</b> Emmetsburg	23	2000CST			0	0	60K	7K	Flash Flood
	24	0015CST							
<b>Sac County</b> 4 N Odebolt	23	2019CST			0	0	2K	5K	Hail (1.25)
<b>Sac County</b> Schaller	23	2040CST			0	0	30K	3K	Thunderstorm Wind (G57)
<b>Kossuth County</b> 5 N Algona	23	2100CST			0	0	2K	5K	Hail (1.25)
<b>Calhoun County</b> 1 S Rockwell City	23	2106CST			0	0	1K		Thunderstorm Wind (G50)
<b>Sac County</b> 1 S Sac City	23	2106CST			0	0	10K	15K	Thunderstorm Wind (G69)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Calhoun County</b> 3 W Manson	23	2112CST			0	0	200K	40K	Thunderstorm Wind (G75)
<b>Calhoun County</b> Rockwell City	23	2113CST			0	0	1K		Thunderstorm Wind (G52)
<b>Calhoun County</b> 5 NE Lytton	23	2115CST	0.1	25	0	0		0.50K	Tornado (F0)
<b>Sac County</b> Lake View	23	2118CST			0	0	25K		Thunderstorm Wind (G52)
<b>Calhoun County</b> Manson	23	2130CST			0	0	3K	1K	Thunderstorm Wind (G56)
<b>Hancock County</b> 1 N Britt	23	2130CST			0	0	200K	40K	Thunderstorm Wind (G74)
<b>Humboldt County</b> Humboldt	23	2130CST			0	0	10K	5K	Thunderstorm Wind (G65)
<b>Kossuth County</b> Algona	23 24	2130CST 0200CST			0	0	120K	30K	Flash Flood
<b>Pocahontas County</b> Pocahontas	23 24	2130CST 0200CST			0	0	40K	10K	Flash Flood
<b>Pocahontas County</b> Palmer	23	2138CST			0	0	15K	5K	Thunderstorm Wind (G69)
<b>Webster County</b> Ft Dodge	23	2152CST			0	0	20K	1K	Thunderstorm Wind (G65)
<b>Crawford County</b> Denison	23 24	2200CST 0600CST			0	0	100K	25K	Flash Flood
<b>Hamilton County</b> Webster City	23 24	2200CST 0330CST			0	0	75K	10K	Flash Flood
<b>Sac County</b> Lytton	23 24	2200CST 0530CST			0	0	100K	20K	Flash Flood
<b>Webster County</b> Ft Dodge	23 24	2200CST 0330CST			0	0	75K	10K	Flash Flood
<b>Winnebago County</b> Forest City	23 24	2200CST 0230CST			0	0	75K	10K	Flash Flood
<b>Hancock County</b> Kanawha	23	2215CST			0	0	25K	5K	Thunderstorm Wind (G61)
<b>Calhoun County</b> Lytton	23 24	2230CST 0300CST			0	0	75K	10K	Flash Flood
<b>Cerro Gordo County</b> Thornton	23	2233CST			0	0	5K	3K	Thunderstorm Wind (G61)
<b>Cerro Gordo County</b> Mason City	23	2236CST			0	0	25K	3K	Thunderstorm Wind (G63)
<b>Cerro Gordo County</b> Clear Lake	23	2250CST			0	0	250K	25K	Thunderstorm Wind (G69)
<b>Carroll County</b> Glidden	23	2300CST			0	0	15K		Lightning
<b>Black Hawk County</b> Waterloo	24	0020CST			0	0	3K		Thunderstorm Wind (G52)
<b>Grundy County</b> Grundy Center	24	0100CST 0400CST			0	0	30K	3K	Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **IOWA, Central**

### **Marshall County Marshalltown**

<b>24</b>	<b>0100CST</b>				<b>0</b>	<b>0</b>	<b>30K</b>	<b>3K</b>	<b>Urban/Sml Stream Fld</b>
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Once again, a warm frontal boundary was located to the south of Iowa with very warm and unstable air just to the south of the front. Dew point temperatures were in the low 70s in the warm air. This moisture was drawn north over the frontal boundary, into Iowa. A large mesoscale convective system developed over northwest Iowa and moved east during the evening hours. Initially, the system produced hail over an inch in diameter, but the main severe weather associated with the storms was high winds. Some building damage was reported in Palmer in Pocahontas County. A grain bin was damaged by high winds in Humboldt in Humboldt County. Windows were blown out at a mall department store in Webster County at Fort Dodge. Winds of 65 to 80 MPH were common in many areas. Wind damage on a farm near Clear Lake allowed a herd of cattle to escape. A man driving a van on U.S. highway 18 hit and killed six of the cattle. Damage from around the Clear Lake area was placed at nearly \$1,000,000. High winds in Hancock County caused extensive damage on a farmstead north of Britt. The barn, several out buildings, and two cars were destroyed along with damage to the farm house as well. There was also one brief tornado touchdown in Calhoun County northeast of Lytton. Little damage occurred as it touched down in open country. As the storm advanced, high winds blew toward the Manson area. Damage was extensive from west of the town into the city of Manson. Numerous buildings were damaged by the high winds and several outbuildings and barns were nearly destroyed. The other major concern was with flooding. Iowa soil was nearly saturated at the time when heavy rainfall ensued. Rainfall of 3 to 4 inches in less than two hours was reported in Calhoun County. Numerous roads were closed by high water and knee deep water was reported in much of the town. Three to five inches of rain occurred in Sac and parts of Kossuth Counties as well. Most of the other areas where flash flooding was reported received 2 to 3 inches of rain in less than three hours. As thunderstorms moved across Carroll County, lightning struck a house in the town of Glidden. Appliances were damaged, power was knocked out, and part of the house was knocked off of its foundation.

### **IAZ004>005-016>017-023>024-027-034>037-045>046-049>050-059**

#### **Emmet - Kossuth - Hancock - Cerro Gordo - Pocahontas - Humboldt - Butler - Calhoun - Webster - Hamilton - Hardin - Carroll - Greene - Marshall - Tama - Dallas**

<b>24</b>	<b>0300CST</b>				<b>0</b>	<b>0</b>	<b>1.2M</b>	<b>320K</b>	<b>Flood</b>
<b>27</b>	<b>1800CST</b>								

Heavy rainfall once again visited north central Iowa on the 23rd and 24th. The heaviest rains fell in the upper North Raccoon, Iowa, and upper Des Moines river basins. This initiated a new round of flooding within these basins. Jefferson in the North Raccoon basin crested 5.66 feet above flood stage on the 27th. Other crests were not as great with most 2 to 3 feet above flood stage. The rainfall in the Des Moines River drainage above Saylorville reservoir caused increased inflows into the lake and pushed the elevation to over 870 feet. This caused some problems for recreational activities around the lake and also limited the USGS ability to control future rainfall. Once again, flooding was quite widespread, especially in agricultural lands where damage will not truly be known until the fall harvest. The main rivers affected by this event were the Winnebago, Beaver Creek at New Hartford, Iowa, North Raccoon, Boone, and Des Moines.

### **Sac County 3 SE Schaller**

<b>24</b>	<b>2213CST</b>				<b>0</b>	<b>0</b>	<b>1K</b>		<b>Thunderstorm Wind (G52)</b>
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### **Sac County Lake View**

<b>24</b>	<b>2229CST</b>				<b>0</b>	<b>0</b>	<b>15K</b>	<b>2K</b>	<b>Thunderstorm Wind (G61)</b>
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### **Pocahontas County 3 NE Varina**

<b>24</b>	<b>2238CST</b>				<b>0</b>	<b>0</b>	<b>5K</b>		<b>Hail (0.75)</b>
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A warm front moved north across much of Iowa during the day on the 24th. During the evening, a short wave moved northeast out of the central Rockies. Thunderstorms fired to the southwest of Iowa and eventually spread into the west central and northwest counties of the state. There was not a great deal of severe weather with the storms, however many did produce winds above 50 MPH. High winds struck Sac County. A porch was blown off of a house in Lake View. Widespread tree damage was reported at Denison Beach in Lake View as well. As the storms moved farther northeast, the winds tapered off. Dime size hail fell in Pocahontas County northeast of Varina.

### **IAZ081>082-092>093**

#### **Adams - Union - Taylor - Ringgold**

<b>25</b>	<b>0100CST</b>				<b>0</b>	<b>0</b>	<b>50K</b>	<b>10K</b>	<b>High Wind (G54)</b>
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Following the passage of the thunderstorms mentioned in the prior report, high winds blew into southwest Iowa. There were numerous reports of winds around 60 MPH or higher. Creston reported a gust of 61 MPH at 0125 CST along with several trees and power lines down. Along with the gusty winds, temperatures rose to the upper 80s to low 90s in the area. The winds subsided rather quickly after they began.

### **Dallas County Perry**

<b>25</b>	<b>0408CST</b>				<b>0</b>	<b>0</b>	<b>20K</b>	<b>3K</b>	<b>Thunderstorm Wind (G57)</b>
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### **Carroll County Coon Rapids**

<b>25</b>	<b>0430CST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind (G52)</b>
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An area of thunderstorms developed over west central and central Iowa. Thunderstorms moved across Carroll County. They were

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## IOWA, Central

weakening as they did and what appears to be a downburst from one of the weakening storms swept through the town of Coon Rapids. Trees were downed by the winds with one landing on a house there. Another apparent downburst case took place in Dallas County at Perry when high winds downed numerous trees in the city.

<b>Emmet County</b> 8 S Estherville	26	0951CST			0	0		1K	Hail (0.75)
<b>Emmet County</b> 6 S Estherville	26	1006CST			0	0		1K	Hail (0.75)
<b>Emmet County</b> Estherville	26	1010CST			0	0			Hail (0.75)
<b>Emmet County</b> 3 NE Dolliver	26	1015CST			0	0	25K	5K	Hail (3.00)
<b>Emmet County</b> Estherville	26	1015CST			0	0	1K		Hail (1.00)
<b>Emmet County</b> 6 SE Estherville	26	1019CST			0	0	5K	150K	Hail (1.75)
<b>Emmet County</b> Estherville Arpt	26	1021CST 1025CST			0	0	5K		Hail (1.75)
<b>Emmet County</b> Estherville	26	1026CST			0	0	1K		Hail (1.00)
<b>Emmet County</b> 5 SE Estherville	26	1030CST			0	0	15K	10K	Hail (1.75)
<b>Emmet County</b> Gruver	26	1032CST			0	0	10K	10K	Hail (1.75)
<b>Emmet County</b> Dolliver	26	1043CST			0	0	1K	5K	Hail (1.25)
<p>A warm front was located east to west across Iowa during the early morning hours. The front separated mild air from very unstable air to the south of the front. As the unstable air over ran the front and the front lifted north, thunderstorms erupted to the north of the front. Most of the storms produced gusty winds and hail, but only one was severe. Hail up to golf ball in size pelted Emmet County. At times, reports indicated the hail was falling so hard one could not see across the yard. There were reports of enough hail to completely cover the ground in places. Extensive crop damage was reported southeast of Estherville as a result of the hail. Golf ball size hail shredded fibreglass panels at a home southeast of Estherville. The largest hail report came from northeast of Dolliver in the Tuttle Lake area.</p>									
<b>Winnebago County</b> 6.5 NE Lake Mills	27	1730CST			0	0	150K	30K	Thunderstorm Wind (G65)
<b>Hancock County</b> 5 N Britt	27	1739CST			0	0	0.50K	5K	Hail (1.00)
<b>Winnebago County</b> Forest City	27	1759CST			0	0		5K	Hail (0.75)
<b>Worth County</b> Northwood	27	1805CST			0	0	3K		Thunderstorm Wind (G52)
<b>Worth County</b> 5 W Kensett	27	1815CST			0	0	20K		Lightning
<b>Worth County</b> 2 N Manly	27	1834CST			0	0	1K	5K	Hail (1.25)
<b>Worth County</b> 2 SW Manly	27	1840CST			0	0	0.50K	5K	Hail (1.00)
<b>Cerro Gordo County</b> 4 NW Thornton to 5 S Clear Lake	27	1846CST 1857CST	7.5	50	0	0	50K	2K	Tornado (F2)
<b>Cerro Gordo County</b> Swaledale to 8 SE Mason City	27	1922CST 1947CST	12.5	50	0	0	125K	10K	Tornado (F2)
<b>Cerro Gordo County</b> Dougherty	27	1930CST			0	0	25K	2K	Thunderstorm Wind (G56)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Cerro Gordo County</b> Mason City	27	1930CST 2230CST			0	0	100K	25K	Flash Flood
<b>Greene County</b> Grand Jet	27	2120CST			0	0	5K		Thunderstorm Wind (G52)
<b>Butler County</b> 1 E Austinville to 3.5 SE Shell Rock	27	2123CST 2157CST	20.5	75	0	0	10K	2K	Tornado (F2)
<b>Wright County</b> Belmond	27	2123CST			0	0	15K	1K	Thunderstorm Wind (G61)
<b>Franklin County</b> Hampton	27	2143CST			0	0	30K	5K	Thunderstorm Wind (G56)
<b>Bremer County</b> 6 SW Waverly to 2 S Waverly	27	2157CST 2205CST	5	75	0	0	3K	0.50K	Tornado (F2)
<b>Boone County</b> 3 SW Boone	27	2205CST			0	0	25K	5K	Thunderstorm Wind (G61)
<b>Boone County</b> Madrid	27	2205CST			0	0	1K		Thunderstorm Wind (G50)
<b>Bremer County</b> Waverly	27	2205CST			0	0	25K	1K	Thunderstorm Wind (G56)
<b>Bremer County</b> Waverly	27	2207CST			0	0	25K	5K	Hail (1.75)
<b>Dallas County</b> Perry	27	2210CST			0	0	5K	1K	Thunderstorm Wind (G56)
<b>Story County</b> Ames	27	2210CST			0	0	20K	1K	Thunderstorm Wind (G56)
<b>Dallas County</b> Adel	27	2213CST			0	0	1K		Thunderstorm Wind (G50)
<b>Adams County</b> 3 E Prescott	27	2230CST			0	0	2K		Thunderstorm Wind (G56)
<b>Black Hawk County</b> Waterloo	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Bremer County</b> Waverly	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Butler County</b> New Hartford	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Cerro Gordo County</b> Mason City	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Franklin County</b> Hampton	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Grundy County</b> Grundy Center	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Grundy County</b> Reinbeck	27	2230CST			0	0	1K		Thunderstorm Wind (G52)
<b>Hardin County</b> Iowa Falls	27 28	2230CST 0100CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Black Hawk County</b> Waterloo	27	2240CST			0	0	5K		Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **IOWA, Central**

<b>Marshall County</b> 1 W State Center	27	2245CST			0	0	3K		Thunderstorm Wind (G56)
<b>Marshall County</b> 2 W State Center	27	2245CST			0	0	5K	0.50K	Thunderstorm Wind (G56)
<b>Union County</b> Lorimor	27	2245CST			0	0	25K	2K	Thunderstorm Wind (G52)
<b>Jasper County</b> Monroe	27	2315CST 2325CST			0	0	10K		Thunderstorm Wind (G52)
<b>Tama County</b> Chelsea	27	2320CST	0.1	20	0	0			Tornado (F0)
<b>Poweshiek County</b> Montezuma	28	0000CST			0	0	25K	2K	Thunderstorm Wind (G56)

Iowa was located in the warm sector of a developing storm system to the west. The warm front had moved to the northern Iowa border during the afternoon of the 27th with dew point temperatures in the mid 70s to around 80 blanketing the state in the warm sector. Initially, the airmass was capped, preventing thunderstorms from forming during the afternoon. Slightly cooler air moved in during the evening hours. In addition to the slightly cooler air moving in aloft, a cold front was poised over eastern Nebraska ready to move east into the state. Thunderstorms erupted rapidly by early evening with hail and high winds reported over northern Iowa. There were numerous reports of hail of an inch or larger in diameter, with a few reports of golf ball size hail. High winds were also a problem with many of the storms producing 60 to 70 MPH wind gusts. Reports of tree and power line damage were widespread. There were a few tornadoes as well. One tracked across open country in Cerro Gordo County before damaging a house south of Clear Lake. Another tornado touched down near Swaledale in Cerro Gordo County and passed southeast of Mason City. Much of the track was over open country, however one house was destroyed near Swaledale by this tornado. The longest track tornado moved across Butler and Bremer Counties. It also passed through open country, causing damage to crops and out buildings. In addition to these, there were a few brief touchdowns reported. Iowa soil remained very saturated with numerous rivers at or near flood stage. Heavy rainfall of near 4 inches in a couple hours time caused flash flooding in Cerro Gordo County. A widespread area of north central into northeast Iowa received heavy rainfall. Many areas picked up two to four inches of rain in a few hour period. This resulted in urban and small stream flooding, and ultimately general river flooding in the days that followed. As the storms moved through Worth County, lightning struck an outbuilding west of Kensett. The building was set on fire and destroyed.

## **IAZ016>017-023>024-027-035-037-047-049>050-059>060 Hancock - Cerro Gordo - Pocahontas - Humboldt - Butler - Webster - Hardin - Boone - Marshall - Tama - Dallas - Polk**

28	0600CST			0	0	900K	240K	Flood
30	1800CST							

The month of June had to give Iowa one last gasp of heavy rainfall. Since the soil was already saturated, it did not take much rainfall to cause renewed flooding. Moderate rains of 1 to 2 inches occurred on the 27th through the 29th. The Des Moines area was again the focus for severe weather and some heavy rainfall on the 29th. Much heavier amounts were observed over northeast Iowa, just east of the HSA in the upper Cedar River Basin. As the month went, this flood event was not as serious as most. Damage did occur, but many of the things that could be damage, both in property and agricultural, had been damaged or destroyed by earlier flooding. The main rivers effected by this event were the Winnebago, Beaver Creek in Des Moines, Walnut Creek in Des Moines, Four Mile Creek in Des Moines, Iowa, Racoon, and Des Moines.

<b>Calhoun County</b> Rockwell City	29	1130CST			0	0	2K		Thunderstorm Wind (G52)
<b>Calhoun County</b> 5 E Rockwell City	29	1135CST			0	0	0.20K	3K	Hail (1.00)
<b>Carroll County</b> Carroll	29	1140CST			0	0	250K	40K	Thunderstorm Wind (G69)
<b>Carroll County</b> Glidden	29	1145CST			0	0	30K	5K	Thunderstorm Wind (G57)
<b>Hamilton County</b> 2 S Blairsburg	29	1145CST			0	0	40K	5K	Thunderstorm Wind (G65)
<b>Hamilton County</b> Ellsworth	29	1150CST			0	0	35K	5K	Thunderstorm Wind (G65)
<b>Crawford County</b> 1 S Dow City to 11 E Dow City	29	1152CST 1209CST	11	55	0	0	500K	50K	Tornado (F2)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Hamilton County</b> 2 SW Williams	29	1154CST			0	0	35K	5K	Thunderstorm Wind (G56)
<b>Calhoun County</b> Rockwell City	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Crawford County</b> Manilla	29	1200CST			0	0	3K		Thunderstorm Wind (G50)
<b>Franklin County</b> Hampton	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Hardin County</b> Iowa Falls	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Humboldt County</b> Dakota City	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Pocahontas County</b> Laurens	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Webster County</b> Ft Dodge	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Wright County</b> Clarion	29	1200CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Boone County</b> Madrid	29	1210CST			0	0	50K	10K	Thunderstorm Wind (G69)
<b>Dallas County</b> Perry	29	1215CST			0	0	100K	25K	Thunderstorm Wind (G74)
<b>Hardin County</b> Hubbard	29	1215CST			0	0	1K		Thunderstorm Wind (G50)
<b>Boone County</b> 2.5 SE Berkley to 8.5 SE Berkley	29	1220CST 1227CST	5.3	50	0	0	75K	5K	Tornado (F1)
<b>Grundy County</b> Conrad	29	1223CST			0	0	40K	5K	Thunderstorm Wind (G61)
<b>Story County</b> Story City	29	1225CST			0	0	50K	5K	Thunderstorm Wind (G61)
<b>Dallas County</b> 10.5 NW Granger to Granger	29	1227CST 1241CST	10.5	100	0	2	500K	20K	Tornado (F2)
<b>Boone County</b> Madrid	29	1229CST			0	0	10K	1K	Thunderstorm Wind (G61)
<b>Marshall County</b> Marshalltown Arpt	29	1233CST			0	0	10K	1K	Thunderstorm Wind (G57)
<b>Marshall County</b> Marshalltown	29	1235CST			0	0	20K	1K	Thunderstorm Wind (G56)
<b>Story County</b> Colo	29	1235CST			0	0	10K		Thunderstorm Wind (G52)
<b>Dallas County</b> Granger	29	1240CST			0	0	5M	400K	Thunderstorm Wind (G87)
<b>Grundy County</b> Beaman	29	1240CST			0	0	10K	1K	Thunderstorm Wind (G61)
<b>Tama County</b> Gladbrook	29	1240CST			0	0	30K	3K	Thunderstorm Wind (G56)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Polk County</b> 5.5 N Grimes to 1 E Des Moines	29	1241CST 1305CST	18.3	150	0	83	10M	75K	Tornado (F2)
<b>Jasper County</b> Lynnville	29	1242CST			0	0	40K		Thunderstorm Wind (G56)
<b>Dallas County</b> 2 NW De Soto to De Soto	29	1243CST 1246CST	2	40	0	0	250K	5K	Tornado (F1)
<b>Polk County</b> 4 N Johnston	29	1243CST			0	0	25K	5K	Thunderstorm Wind (G69)
<b>Marshall County</b> 5 SW Marshalltown	29	1245CST			0	0	75K	10K	Thunderstorm Wind (G69)
<b>Tama County</b> Traer	29	1245CST			0	0	15K	1K	Thunderstorm Wind (G56)
<b>Jasper County</b> Sully	29	1246CST			0	0	120K	25K	Thunderstorm Wind (G70)
<b>Polk County</b> Ankeny	29	1246CST			0	0	120K	20K	Thunderstorm Wind (G61)
<b>Polk County</b> Johnston	29	1247CST			0	0	10M	25K	Thunderstorm Wind (G104)
<b>Polk County</b> West Des Moines	29	1247CST			0	0	2M		Thunderstorm Wind (G61)
<b>Polk County</b> Urbandale	29	1248CST			0	0	2M		Thunderstorm Wind (G61)
<b>Polk County</b> Saylorville	29	1249CST			0	0	2M		Thunderstorm Wind (G69)
<b>Marshall County</b> 1 E Marshalltown to 2 E Marshalltown	29	1250CST 1252CST	1	45	0	0	20K	5K	Tornado (F1)
<b>Polk County</b> Des Moines	29	1250CST			0	40	40M		Thunderstorm Wind (G104)
<b>Marshall County</b> Marshalltown	29	1253CST			0	0	50K	1K	Thunderstorm Wind (G61)
<b>Polk County</b> Des Moines Arpt	29	1254CST			0	0	10K		Thunderstorm Wind (G55)
<b>Polk County</b> Urbandale	29	1255CST			0	0	500K		Thunderstorm Wind (G61)
<b>Tama County</b> Tama	29	1257CST			0	0	200K	40K	Thunderstorm Wind (G69)
<b>Dallas County</b> Dallas Center	29	1300CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Jasper County</b> Newton	29	1300CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Marshall County</b> Marshalltown	29	1300CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Polk County</b> Altoona	29	1300CST			0	0	3M	150K	Thunderstorm Wind (G80)
<b>Polk County</b> Des Moines	29	1300CST			0	0	500K		Thunderstorm Wind (G80)
<b>Polk County</b> Des Moines	29	1300CST 1500CST			0	0	75K	10K	Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Story County</b> Ames	29	1300CST 1500CST			0	0	50K	10K	Urban/Sml Stream Fld
<b>Story County</b> Nevada	29	1300CST			0	0	25K	2K	Thunderstorm Wind (G56)
<b>Tama County</b> Toledo	29	1300CST			0	0	1M	150K	Thunderstorm Wind (G69)
<b>Tama County</b> Tama	29	1303CST			0	0	20K	2K	Thunderstorm Wind (G54)
<b>Polk County</b> 2 E Des Moines	29	1305CST			0	0	4M	200K	Thunderstorm Wind (G87)
<b>Polk County</b> 4 N Johnston	29	1310CST			0	0	150K		Lightning
<b>Warren County</b> Carlisle	29	1310CST			0	0	100K	5K	Thunderstorm Wind (G56)
<b>Poweshiek County</b> Grinnell Arpt	29	1312CST			0	0	5K		Thunderstorm Wind (G52)
<b>Jasper County</b> Colfax	29	1315CST			0	0	3K		Thunderstorm Wind (G52)
<b>Warren County</b> Hartford	29	1315CST			0	0	50K	10K	Thunderstorm Wind (G65)
<b>Jasper County</b> Prairie City	29	1316CST			0	0	30K	2K	Thunderstorm Wind (G56)
<b>Marion County</b> Knoxville	29	1320CST			0	0	15K	3K	Thunderstorm Wind (G61)
<b>Marion County</b> Pleasantville	29	1320CST			0	0	50K	10K	Thunderstorm Wind (G65)
<b>Jasper County</b> Newton	29	1322CST			0	0	60K	5K	Thunderstorm Wind (G65)
<b>Marion County</b> Pella	29	1324CST			0	0	10K		Thunderstorm Wind (G50)
<b>Poweshiek County</b> Brooklyn	29	1325CST			0	0	150K	25K	Thunderstorm Wind (G74)
<b>Marion County</b> Pella	29	1326CST			0	0	25K	2K	Thunderstorm Wind (G61)
<b>Mahaska County</b> 3 S New Sharon	29	1328CST			0	0	90K	5K	Thunderstorm Wind (G69)
<b>Jasper County</b> Monroe	29	1330CST			0	0	15K		Thunderstorm Wind (G52)
<b>Poweshiek County</b> Hartwick	29	1330CST			0	0	75K	10K	Thunderstorm Wind (G69)
<b>Mahaska County</b> Oskaloosa Muni Arpt	29	1335CST			0	0	15K	5K	Thunderstorm Wind (G65)
<b>Poweshiek County</b> Montezuma	29	1335CST			0	0	50K	5K	Thunderstorm Wind (G65)
<b>Mahaska County</b> Oskaloosa	29	1338CST			0	0	40K	10K	Thunderstorm Wind (G69)
<b>Wapello County</b> Eddyville	29	1340CST			0	0	5K		Thunderstorm Wind (G52)
<b>Wapello County</b> Ottumwa Arpt	29	1346CST			0	0	25K	3K	Thunderstorm Wind (G62)
<b>Appanoose County</b> 11 N Centerville	29	1400CST			0	0	3K		Thunderstorm Wind (G50)
<b>Monroe County</b> Albia	29	1400CST			0	0	3K		Thunderstorm Wind (G52)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Central</b>									
<b>Wapello County</b> Eddyville	29	1400CST			0	0	10K	1K	Thunderstorm Wind (G57)
<b>Dallas County</b> Waukee	29	1415CST			0	0	5K		Thunderstorm Wind (G52)
<b>Dallas County</b> De Soto	29	1435CST			0	0	50K	5K	Thunderstorm Wind (G65)
<b>Polk County</b> Clive	29	1443CST			0	0	40K		Hail (1.75)
<b>Guthrie County</b> 6 S Guthrie Center	29	1445CST			0	0	5K	10K	Hail (1.75)
<b>Polk County</b> West Des Moines	29	1445CST			0	0	5K		Hail (1.00)
<b>Polk County</b> Clive	29	1447CST			0	0			Hail (0.75)
<b>Polk County</b> Des Moines Arpt	29	1450CST			0	0	100K	10K	Hail (2.50)
<b>Warren County</b> Norwalk	29	1450CST	0.1	25	0	0		0.10K	Tornado (F0)
<b>Polk County</b> 1 S Des Moines Arpt	29	1500CST			0	0	30K	10K	Hail (1.75)
<b>Warren County</b> Carlisle	29	1503CST			0	0	5K	10K	Hail (1.25)
<b>Warren County</b> Indianola	29	1505CST			0	0	75K	10K	Hail (1.75)
<b>Marion County</b> Knoxville	29	1518CST			0	0	150K	10K	Thunderstorm Wind (G69)
<b>Warren County</b> 2.5 S Norwalk	29	1543CST	0.2	30	0	0		0.50K	Tornado (F0)
<b>Ringgold County</b> Diagonal	29	1715CST			0	0	25K	10K	Hail (1.75)
<b>Wayne County</b> 12 NE Corydon	29	1730CST			0	0	3K	10K	Hail (1.75)

A complex weather situation was set up over the central U.S. as a mesoscale convective system passed to the south of Iowa during the overnight hours and early morning of the 29th. Initially, the surface warm front was located to the south of this system. That was not actually the case aloft however. During the predawn hours the surface front surged north and by sunrise was located across northeast Nebraska across northern Iowa. The airmass was very unstable to the south of the front with dew point temperatures well in the 70s F. The initial development of thunderstorms took place during the early part of the day over northeast Nebraska. The storms became severe quickly as they moved and developed eastward into Iowa. By mid morning, the storms had formed a nearly east to west line. Storm relative inflow into the line was around 40 knots. The storms produced a variety of severe weather across Iowa. They initially moved east across the northern and central counties, but then began sinking southeast. The dominant severe weather with the storms was extremely high winds. Damage was very widespread across the state. Winds in excess of 100 MPH were reported with one unofficial wind speed measured at 126 MPH in the town of Washington at 1405 CST. In one unusual story, high winds hit Mahaska County. Three miles south of New Sharon, a puppy was tied to its dog house which was picked up by the wind. The dog house and puppy were lifted over the top of a two car garage and a corn crib. Both were deposited in the farm yard. When found the dog house was upside down and the puppy, though scared, was fine. There were several tornadoes during the event. One of the longer track well defined tornadoes was the initial tornado. It was on the ground for about 11 miles as it swept across Crawford County. Several residences, outbuildings, grain bins, and trees were damaged along its path. Reports indicate that between 30 and 50 residences were damaged by this tornado. There were several small tornadoes in central Iowa. They had short tracks and only touched down briefly. One cut a mile long path east of Marshalltown through a corn field and a grove of trees. Another in Dallas County was on the ground through mostly open country for two miles. High winds were a major problem with these storms. Many places reported winds over 80 MPH with incredible tree damage and numerous buildings damaged or destroyed. At least 38 counties were declared disaster areas by the Federal Government due to the severe damage and flooding. A final total will not be available before publication deadlines, however preliminary data have been included. In the Des Moines County Warning Area these included: Wright, Franklin, Butler, Bremer, Hamilton, Hardin, Grundy, Crawford, Carroll, Greene, Boone, Story, Marshall, Audubon, Guthrie, Dallas, Polk, Jasper, Cass, Adair, Madison, Warren, Marion, Adams, and Taylor. One of the hardest hit Counties was Polk County. Damage appeared to be from straight line winds based on a storm survey that was done following the event. The damage occurred over the southwest semicircle of a large meso low in contact with the ground. Due to the rapid translational speed of 50 to 75 MPH, winds were enhanced on the southwest semicircle of the meso low.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
				Killed	Injured	Property	Crops	

## IOWA, Central

Smaller scale winds could have been embedded within this circulation as well. There was little evidence of small scale convergent tornadic damage, however aerial surveys did make some suggestion and eye witness accounts of sightings were quite numerous in the metro Des Moines area. All trees and debris were laid down to the south or southeast. The major damage swath as 3 to 7 miles wide northwest of Camp Dodge, with a widening into a full blown derecho after that. The event was born a few miles northwest of Perry, between Rippey and Berkley in southwest Boone County. The mile wide damage path expanded to over 3 miles by the time it reached full intensity near highway 169 between Woodward and Perry. The path continued through Granger, Camp Dodge, and Johnston. The path was nearly 7 miles wide near Granger. A second, smaller, meso low passed near Madrid, downing power lines. This meso low matured near Jester Park Golf Course, causing significant structural damage to houses. The two meso lows merged near the NWS Forecast Office in Johnston, with two miles of power poles snapped off between Johnston and Granger. Much of the damage along the most severe track was in the F1 intensity category, with speeds in the 75 to 110 MPH range. A few spots along the path, such as in the Granger and Camp Dodge area, sustained sufficient damage to justify F2 winds, 110 to 155 MPH. It appears a tornado or family of tornadoes touched down southeast of Berkley and moved southeast into the Pleasant Hill area just east of Des Moines. The track was intermittent, indicating either one tornado touching down occasionally, or one or more weak tornadoes rotating around the meso circulation. The worst effected metro areas were the Granger area, Johnston, and the northeast side of Des Moines proper. A duplex in Granger was flattened by the winds. There were several reports of roofs being ripped off of stores and houses in the metropolitan Des Moines area. Several small private planes were flipped at a small air field north of Des Moines. There were also several reports of semi-tractortrailer trucks being blown over on Interstate 35. Heavy construction equipment was overturned on Interstate 35/80 just north of Des Moines. Damage was extensive to the east side of Des Moines proper. To make matters worse, following the passage of the main line of thunderstorms, a second line of severe thunderstorms developed and moved across the same areas already hit. The storms were smaller, but did produce brief tornado touch downs and hail up to 2.5 inches in diameter. The second line of storms did eventually combine with the first and moved southeast across the rest of the state. Damage was widespread across the state and it will be months before final numbers are in. Estimates from Polk County alone are near \$100 million in damage including cleanup. Totals were still being tallied at this writing, however a few include over \$11 million in damage from initial claims in Johnston and \$726,000 from West Des Moines just to city buildings and systems. West Des Moines was on the far west edge of the major damage however. In addition to the property damage, at least 125 people were injured during the storm. Most of the injuries were caused by flying debris and many were not serious. Fortunately there were no fatalities. Heavy damage was reported by MidAmerica Energy. On a state wide report, they indicated 200,000 homes were without electricity, effecting over 500,000 people, at one time during the storm. In the metropolitan Des Moines area, 100,000 homes were without electricity at the height of the storm. That number was reduced to around 25,000 36 hours later. The worst damaged areas were without power for 5 to 6 days. Heavy damage was also reported by local telephone and cable systems. In Polk County, the worst damage extended from the Camp Dodge area into the northeast parts of Des Moines. At least 462 homes in the metro Des Moines area sustained significant damage. Statewide, 80 homes were destroyed, 559 sustained severe damage, with 1416 others receiving moderate damage. In the Camp Dodge area, 80 to 90 percent of the brick buildings were damaged with the roofs removed from many of them. Lightning from the storms struck the WSR-88D in the midst of the storm. The radar was taken out of service for more than 24 hours because of this. In addition to the severe weather, flooding quickly became a problem. Iowa soil was nearly saturated as the weather pattern had been very wet for six weeks previous. Although rainfall was not extreme, one to three inches of rain fell over a several county area. This caused widespread urban flooding across north central into central Iowa, though damage from the flooding was not serious. Crop damage was very difficult to determine and will not likely be clear until the fall harvest. Reports from some of the local extension agents say damage to the corn ranged up to 75% destroyed in areas with the highest wind, such as the swath that went through central Iowa in association with the tornado there. No doubt losses will be in the hundreds of thousands of dollars if not in the millions. Accounts of damage were of course too numerous to document here as the areal extent of the storms was very large. Countless reports of parts of crop fields being flattened were received. Semi-tractortrailer trucks were overturned by the high winds both in the Des Moines metro area as well as in Newton. Trees were found on houses over a large part of the state. One news reported wrote "there is not a power pole standing between Fort Dodge and Oskaloosa". Though not figuratively true, this statement does point out the extensive damage that occurred with these storms.

## IOWA, East Central and Southeast

**Linn County**  
Cedar Rapids

12	1905CST	0	0	1K	<b>Thunderstorm Wind</b>
Gusty thunderstorm winds downed trees and knocked out power in sections of Cedar Rapids. The outages affected 1,700 homes.					

**Linn County**  
1 E Cedar Rapids

14	1800CST 1900CST	0	0	2K	<b>Urban/Sml Stream Fld</b>
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Over three inches of rain falling on saturated ground resulted in flooding at the Indian Creek Nature Center. Flood waters washed out portions of the 7.2 mile Sac and Fox trail, and hundreds of ground nesting birds and animals were drowned in their nests.

**Buchanan County**  
Jesup to  
Lamont

18	1430CST 1445CST	20	25	0	0	800K	<b>Tornado (F2)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **IOWA, East Central and Southeast**

A farm south of Jesup sustained massive damage from a tornado and severe thunderstorm winds which passed across Buchanan County. Most of the out buildings were damaged or destroyed and every tree on the farm was lost. A double car garage was blown into a cornfield, the tool shed was pushed off it's foundation, gas barrels were gone, and a Morton Building was destroyed. There was also serious damage to the barn roof. In the home glass was driven into the woodwork. Closet doors and the access door to the attic were blown off, and attic insulation was driven down into the house. At another farm three grain wagons were lifted off the ground. One landed vertically across the road in a ditch and another landed in a ditch near the farmhouse. Shingles and shutters were blown off this house, and 60 feet of roof was torn off the cattle shed. At the Cedar Crest and St Athanasius Cemeteries east of Jesup 46 trees were destroyed.

### **Buchanan County Brandon to Winthrop**

18	1440CST 1450CST	15	10	0	0	35K	<b>Tornado (F1)</b>
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Several farms sustained damage from a tornado and strong thunderstorm winds topping 75 miles an hour. Near Winthrop a grain bin, barn, and machine shed were destroyed. A man was inside the barn during the storm, but was uninjured when the barn collapsed.

### **Buchanan County Countywide**

18	1440CST			0	0	1.8M	<b>Thunderstorm Wind</b>
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Severe thunderstorms blasted Buchanan county with 75 to 80 mph straight-line winds. Widespread damage was reported across the county. Three homes were completely destroyed, 75 farmsteads sustained \$500 to \$10,000 damage, 50 farmsteads had damage in the \$10,000 to \$100,000 range and 25 farmsteads sustained damages totaling \$100,000 to \$150,000. These figures included damage to hog houses, barns, grain bins and sheds, and also farm equipment damaged by the storm. Numerous large trees were destroyed including 46 trees at Cedar Crest Cemetery.

### **Buchanan County Fairbank**

18	1458CST			0	0		<b>Thunderstorm Wind (G52)</b>
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### **Benton County 2 N Vinton to 3 S Vinton**

18	1500CST 1505CST			0	0	1K	<b>Tstm Wind/Hail</b>
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Power was knocked out at Virginia Fay Hospital in Vinton after several large trees were blown down by strong thunderstorm winds. To the East of Vinton large doors were blown off a barn and a heavy wooden playset was blown over.

### **Buchanan County 1 E Otterville to Independence**

18	1500CST			0	0		<b>Thunderstorm Wind (G61)</b>
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Trees and limbs downed by strong winds.

### **Benton County Shellsburg**

18	1505CST			0	0		<b>Hail (1.75)</b>
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### **Linn County Lisbon**

18	1540CST	0.1	.2	0	0		<b>Tornado (F0)</b>
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### **Cedar County 2 W Mechanicsville**

18	1541CST	0.1	.2	0	0		<b>Tornado (F0)</b>
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### **Van Buren County Countywide**

18	1510CST 1600CST			0	0	15K	<b>Thunderstorm Wind</b>
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Thunderstorms roared through Van Buren County leaving a trail of destruction. Numerous trees were downed across the county including 20 trees, valued at \$4000, at Harmony Middle School in Farmington. Also in Farmington, the roof at Harmony High School was damaged, a light fixture at the front of the building was broken, and high winds blew down the outfield fence of the baseball field. A large maple tree, uprooted by the winds, fell against the corner of a home in Farmington causing major damage to the roof and eaves. A bar and an adjacent building were closed due to possible structural damage after windows were blown out of the buildings. At least 14 power lines were downed across the Farmington area, and a large machine shed was destroyed by the thunderstorms. In Mt. Sterling an aluminum building blown onto a road knocked down a power line. A funnel cloud was reported near Douds along with damages reports of downed trees or power lines in Douds, Bonaparte, Cantril, Milton, Stockport and Mt Sterling.

### **Delaware County Countywide**

18	1515CST 1545CST			0	0		<b>Thunderstorm Wind (G52)</b>
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Strong thunderstorm winds with gusts up to 60 mph downed trees and power lines across the county.

### **Delaware County 2 N Dundee**

18	1515CST			0	0	2.5K	<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **IOWA, East Central and Southeast**

Strong thunderstorm winds uprooted, shattered and splintered nearly two acres of trees at Backbone State Park. Between 50 and 100 oaks, maples, and basswood trees were destroyed. Campgrounds were also damaged by the high winds and one tent was flattened by a falling tree. No injuries were reported to the occupants of the tent. They sought shelter in a campground shower house before the tree fell.

### **Delaware County Manchester**

18	1515CST 1530CST					0	0	2K	Thunderstorm Wind
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Buildings were damaged by strong thunderstorm winds.

### **Iowa County West Amana**

18	1520CST					0	0		Hail (1.00)
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### **Jefferson County Countywide**

18	1520CST 1600CST					0	0	15K	Thunderstorm Wind
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High winds from strong thunderstorms buffeted Jefferson County, causing damage to Fairfield and surrounding areas. The wind measuring equipment at Fairfield Flying Service, and a large sign at Fesler Auto Mall were destroyed by thunderstorm winds. Northwestern and western parts of Fairfield suffered the substantial property damage. A roof was blown off the GTE warehouse and a section of roof was ripped off Winfrey Storage. Numerous trees were blown down. One maple fell on a vacant house and another fallen tree destroyed a gas meter, broke windows and damaged eaves on another home. Streets around the area were blocked until the gas leak was repaired. A motorist driving a pickup had a brush with death when a large ash tree fell and part of the tree hit the truck's bed and dented the sidewalls. Another tree dropped on a four wheel drive Scout and boat. South of Fairfield a horse barn on Middle Glasgow Road was destroyed and a double car garage on Glasgow Road was blown down. High winds also flattened a grain storage bin near Libertyville.

### **Johnson County Oxford**

18	1520CST					0	0	0.20K	Hail (1.75)
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Windshields were broken by golf ball size hail.

### **Linn County Coggon**

18	1520CST					0	0	14K	Hail (2.00)
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There were numerous reports of damage caused by the hail.

### **Delaware County Hopkinton to 1 NE Hopkinton**

18	1530CST					0	0	8K	Hail (4.50)
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Large hail fell through the roof of a home causing extensive damage.

### **Johnson County Coralville**

18	1530CST					0	0		Hail (1.75)
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### **Johnson County Iowa City**

18	1530CST 1547CST					0	0		Hail (2.75)
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Baseball size hail falling for more than 15 minutes caused widespread damage to homes and vehicles across the Iowa City area. Numerous windshields were broken and vehicles dented. Several reports of hail breaking through fiberglass awnings and lightweight shelters were also received.

### **Linn County Cedar Rapids**

18	1530CST					0	1		Thunderstorm Wind (G56)
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A line of fast moving thunderstorms downed numerous tree limbs and power lines across Cedar Rapids leaving 12,000 customers of Alliant-IES Utilities without power. Wind peeled the outer membrane from a roof of a business allowing water to soak the suspended-ceiling tiles. The waterlogged tiles then gave way damaging portions of the carpet, but missing showcases and merchandise. One man was injured when strong winds lifted then flattened the large beer tent he was in at Hiawatha's Hog Wild Days.

### **Dubuque County Countywide**

18	1533CST 1615CST					0	0	100K	Thunderstorm Wind
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## IOWA, East Central and Southeast

Strong thunderstorm winds downed trees and power lines across the tri-state area of Northeast Iowa, Northern Illinois, and Southwest Wisconsin. Approximately 2000 customers of Alliant Utilities lost power during the storm.

In the city of Dubuque numerous trees blocked streets with one tree falling on a pickup truck. At Sacred Heart Church the wind broke the face of the steeple clock, and at Loras College damage was sustained when lightning struck the boiler smokestack in the maintenance building. There was some basement flooding in the Loras College fieldhouse. Also in Dubuque, the roof was ripped off the Harbor Place Mall leaving 2 to 3 inches of standing water in the building, and another \$5000 worth of damage was reported at the airport when strong gusts peeled panels off a hanger roof. Near Worthington a roof was blown off a large barn and seven other farm buildings were damaged by strong winds. Northeast of Luxemburg a farm received substantial damage when thunderstorm winds damaged a hog building, cattle shed, and several other farmsheds. One shed, used for storing vehicles and farm equipment, was ripped apart resulting in major damage to the vehicles inside the shed. The family home also sustained minor damage.

### **Henry County Countywide**

<b>18</b>	<b>1540CST 1600CST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G52)</b>
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A storm system blasting across Southeast Iowa produced 60 mph thunderstorm winds and dumped 1 to 2 inches of heavy rain across central Henry County. Damage caused by falling trees and lightning resulted in power outages across 10 counties served by Southeast Iowa Rural Electric Cooperative. On U.S. highway 218 near Salem a semi was blown over by the high winds and in Geode State Park a camper trailer was blown over.

### **Jones County Anamosa**

<b>18</b>	<b>1540CST 1545CST</b>			<b>0</b>	<b>0</b>	<b>16K</b>			<b>Thunderstorm Wind</b>
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### **Dubuque County Farley**

<b>18</b>	<b>1550CST</b>			<b>0</b>	<b>0</b>				<b>Hail (0.75)</b>
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### **Dubuque County Worthington**

<b>18</b>	<b>1550CST 1600CST</b>			<b>0</b>	<b>0</b>				<b>Hail (0.75)</b>
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### **Lee County Ft Madison**

<b>18</b>	<b>1550CST 1620CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>			<b>Thunderstorm Wind</b>
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City residents and businesses were left without electricity after strong thunderstorms raced across Lee county. Numerous trees and power lines downed by the storm blocked streets and caused damage in Fort Madison. Several vehicles were smashed by fallen trees and branches, and 911 dispatchers had difficulty routing calls due to power problems. Heavy rains associated with the thunderstorms also resulted in minor street flooding between 21st Street and 26th Street in Fort Madison. A major historical landmark was destroyed when winds blew off the roof then caused walls to collapse at the old Fort Madison depot. This building had been recognized as the oldest surviving railway station in the State of Iowa. High winds toppled two fifteen foot steeples at the historic St Mary's Church. Major damage was sustained to the copper roof and gutters, and water leaking through the damaged roof caused additional damage to restrooms inside the church.

### **Cedar County .5 S Rochester**

<b>18</b>	<b>1600CST</b>			<b>0</b>	<b>0</b>				<b>Hail (1.00)</b>
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### **Dubuque County Peosta**

<b>18</b>	<b>1600CST 1610CST</b>			<b>0</b>	<b>0</b>				<b>Hail (1.00)</b>
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### **Louisa County .2 SW Oakville to .5 NE Oakville**

<b>18</b>	<b>1600CST 1610CST</b>	<b>1</b>	<b>100</b>	<b>0</b>	<b>1</b>	<b>180K</b>			<b>Tornado (F1)</b>
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Two homes were destroyed and trees were uprooted when a tornado touched down near Oakville. One minor injury was reported when the tornado rolled and damaged a mobile home. Twelve other residences sustained \$130,000 in damages. Besides the two homes which were destroyed, two others were moved off their foundations. Roofs were torn off, and four garages were demolished.

### **Jones County 3 N Oxford Jct**

<b>18</b>	<b>1605CST</b>			<b>0</b>	<b>0</b>				<b>Hail (1.75)</b>
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### **Louisa County 2 SE Grandview**

<b>18</b>	<b>1610CST</b>	<b>0.1</b>	<b>.5</b>	<b>0</b>	<b>0</b>	<b>2K</b>			<b>Tornado (F0)</b>
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A brief tornado touchdown resulted in tree and roof damage and a missing boat at a home near Grandview.

### **Clinton County Clinton**

<b>18</b>	<b>1615CST</b>			<b>0</b>	<b>0</b>				<b>Hail (0.75)</b>
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### **Des Moines County Burlington**

<b>18</b>	<b>1615CST 1640CST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G54)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, East Central and Southeast</b>									
About 5000 utility customers were without power after thunderstorms roared across Des Moines County. Several parked cars were damaged after strong winds blew out windows of buildings in the 300 block of Valley Street. Across Burlington numerous reports of downed trees were received, and the main outdoor stage at the Burlington Steamboat Days was damaged after a large scaffolding fell on top of the sound mixer.									
<b>Benton County</b> Van Horne	18	1620CST			0	0			Hail (1.75)
<b>Jackson County</b> 2 NW Maquoketa	18	1630CST			0	0			Hail (1.00)
<b>Linn County</b> Mt Vernon	18	1630CST			0	0	5K		Thunderstorm Wind
A new grain bin and several older farm buildings were damaged by strong winds.									
<b>Muscatine County</b> Muscatine	18	1630CST			0	0			Hail (1.75)
<b>Scott County</b> Davenport to Bettendorf	18	1630CST 1650CST			0	0			Tstm Wind/Hail
High winds, rain, and hail whipped through Eastern Scott County leaving widespread damage. A wind gust of 80 mph was measured on the east side of Davenport and reports of one inch diameter hail were also received. Numerous trees and limbs were downed by the storm causing power outages to nearly 31,000 customers of MidAmerican Energy Company.									
<b>Scott County</b> 1 SW Walcott	18	1630CST			0	0	8K		Thunderstorm Wind
Strong thunderstorm winds toppled trees in the Walcott area. One large maple tree smashed a corn crib full of soybeans. About 3,000 bushels of beans were spilled and a farm wagon on the lower level of the corn crib was crushed by the falling building.									
<b>Dubuque County</b> Farley to Dyersville	18	1632CST			0	0			Hail (1.00)
<b>Jackson County</b> 2 N La Motte	18	1640CST			0	0	100K		Thunderstorm Wind
Strong thunderstorm winds destroyed a dairy barn and ripped the roof off another barn in Northeastern Jackson county. One home was destroyed as strong winds drove barn beams through the walls, shattered glass and spread dirt and debris inside the home.									
<b>Dubuque County</b> Graf to Dubuque	18	1655CST 1700CST			0	0			Hail (0.75)
<b>Linn County</b> Fairfax	18	1700CST			0	0			Thunderstorm Wind (G65)
Widespread tree damage was reported due to strong thunderstorm winds.									
<b>Buchanan County</b> Winthrop	24	0100CST			0	0	30K		Thunderstorm Wind
Gusty thunderstorm winds ripped portions of the roof off a building supply company causing extensive damage to the building, office equipment, and building materials. Nearly all of the office equipment was ruined due to water damage along with the wind damage.									
<b>Benton County</b> Van Horne	24	0115CST			0	0	2K		Thunderstorm Wind
Strong thunderstorm winds downed numerous large trees across the town of Van Horne.									
<b>Iowa County</b> Millersburg to North English	24	0115CST 0200CST			0	0	0.50K		Thunderstorm Wind
<b>Keokuk County</b> Keswick to South English	24	0115CST 0200CST			0	0	0.50K		Thunderstorm Wind
<b>Johnson County</b> Iowa City	24	0130CST			0	0	4.5K		Thunderstorm Wind
Thunderstorm winds blew a door off of a lumber company and destroyed parts of the lawn and garden center. A freestanding green house housing bedding plants was shredded by the winds									
<b>Delaware County</b> 4 NW Greeley	24	0145CST			0	0			Thunderstorm Wind (G75)
Gusty thunderstorm winds estimated at 50 mph damaged trees and ripped siding off homes in northern Keokuk and Southern Iowa counties.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, East Central and Southeast</b>									
<b>Delaware County</b> Delaware	27	0005CST			0	0			Hail (0.75)
<b>Buchanan County</b> Independence	27	2323CST			0	0			Hail (0.75)
<b>Delaware County</b> Manchester	27	2340CST 2343CST			0	0			Hail (0.75)
<b>Delaware County</b> Delhi	28	0005CST			0	0			Hail (0.75)
<b>Dubuque County</b> Farley	28	0015CST			0	0			Thunderstorm Wind (G52)
<b>Jones County</b> Anamosa	28	0018CST			0	0			Thunderstorm Wind (G61)
<b>Johnson County</b> Iowa City	28	0020CST			0	0	1K		Thunderstorm Wind Trees were blown down by thunderstorm winds.
<b>Washington County</b> Washington	28	0050CST			0	0	1.5K		Thunderstorm Wind Thunderstorm winds toppled trees across the city.
<b>Clinton County</b> Dewitt	28	0101CST			0	0	3K		Thunderstorm Wind Strong winds downed trees and power lines in Dewitt.
<b>Clinton County</b> Clinton Muni Arpt to Clinton	28	0110CST			0	0			Thunderstorm Wind (G59)
<b>Scott County</b> Princeton	28	0125CST			0	0	1K		Thunderstorm Wind Wires were downed by gusty thunderstorm winds.
<b>Clinton County</b> Clinton	28	0115CST			0	0	1.4K		Thunderstorm Wind A strong thunderstorm downed trees and power lines across the city. At one point seven trees were blocking streets. No major damage was reported to homes. However, many residents were without power for more than 12 hours due to the storm.
<b>Benton County</b> Countywide	29	1253CST 1400CST			0	0	50K		Thunderstorm Wind (G70)
<b>Iowa County</b> Countywide	29	1253CST 1400CST			0	9	800K		Thunderstorm Wind (G70)
<b>Keokuk County</b> Countywide	29	1311CST 1416CST			0	0	100K		Thunderstorm Wind (G65)
<b>Benton County</b> Keystone to 4 SW Keystone	29	1320CST 1321CST			0	0	8K		Thunderstorm Wind (G61)
<b>Johnson County</b> Countywide	29	1330CST 1500CST			0	12	30.7M	14M	Thunderstorm Wind
<b>Washington County</b> Countywide	29	1346CST 1500CST			0	0	21M		Thunderstorm Wind (G83)
<b>Johnson County</b> 1 W Tiffin	29	1405CST			0	0			Funnel Cloud
<b>Linn County</b> Cedar Rapids Arpt	29	1405CST			0	0			Thunderstorm Wind (G63)
<b>Washington County</b> Washington	29	1405CST			0	0			Thunderstorm Wind (G107)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, East Central and Southeast</b>									
<b>Henry County</b> Countywide	29	1407CST 1550CST			0	2			Thunderstorm Wind (G52)
<b>Louisa County</b> Countywide	29	1407CST 1530CST			1	1	1M		Thunderstorm Wind (G70)
		F3OUT							
<b>Muscatine County</b> Countywide	29	1407CST 1530CST			0	10	1.5M		Thunderstorm Wind (G78)
<b>Linn County</b> Cedar Rapids Arpt	29	1409CST			0	0			Thunderstorm Wind (G68)
<b>Linn County</b> Cedar Rapids	29	1410CST			0	0			Thunderstorm Wind (G60)
<b>Cedar County</b> West Branch	29	1420CST			0	0			Thunderstorm Wind (G52)
<b>Des Moines County</b> Countywide	29	1422CST 1530CST			0	0			Thunderstorm Wind (G56)
<b>Lee County</b> Countywide	29	1422CST 1530CST			0	0			Thunderstorm Wind (G52)
<b>Clinton County</b> Countywide	29	1426CST 1530CST			0	0			Thunderstorm Wind (G52)
<b>Washington County</b> 1 S Washington to Washington	29	1432CST			0	0			Funnel Cloud
<b>Des Moines County</b> West Burlington	29	1437CST			0	0			Funnel Cloud
<b>Muscatine County</b> West Liberty	29	1438CST			0	0			Thunderstorm Wind (G61)
<b>Lee County</b> Ft Madison	29	1440CST			0	0			Thunderstorm Wind (G70)
<b>Louisa County</b> 1 E Wapello	29	1444CST			0	0			Thunderstorm Wind (G70)
<b>Muscatine County</b> Muscatine	29	1446CST			0	0			Thunderstorm Wind (G70)
<b>Scott County</b> Mc Causland	29	1450CST			0	0			Thunderstorm Wind (G56)
<b>Lee County</b> Wever	29	1718CST 1757CST			0	0			Funnel Cloud

Supercell thunderstorms developed over Central Iowa and rapidly intensified into a long squall line which raced southeast over Eastern Iowa into Central Illinois. Numerous funnel clouds were sited along the leading edge of the storm and a few non-supercell tornadoes were masked within a large area of damaging winds. Straightline winds from 60 to over 120 mph produced the most serious damage with these storms and 8 counties in Eastern Iowa were declared disaster areas. School-net stations measured winds at 69 mph in Cedar Rapids and 123 mph at Washington. Across the county warning area sustained winds of 70 to 80 mph ripped down trees, power lines, and windmills, and knocked over farm buildings, grain bins and silos.

One barn in Benton County housing a cargo van and thousands of dollars worth of antiques was blown on it's side. At another property 40 pine trees standing 30 feet high were snapped off. Widespread crop damage was also reported as the winds snapped off brittle corn stalks. Three large Co-operative grain bins in Belle Plaine (Benton County) and two more at Lost Nation and Clarence (Clinton County) were destroyed, and at Wapello (Louisa County) a half million bushel grain bin was crumpled. Serious damage was also received at 5 other Co-op grain bin sites. Churches in Hills, and Marengo had their steeples ripped off. Near Marengo substantial damage occurred to a large two story home after winds blew the roof off and then the entire outside wall gave way. A horse barn collapsed on 7 adult horses and 5 colts. The four horses that died were valued \$18,000.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## IOWA, East Central and Southeast

In Iowa and Keokuk counties nine persons were treated for weather related injuries. Near Homestead a barn collapsed killing an undetermined number of cattle and at Amana the entire third floor was blown off the Amana Woolen Mill. One rural electric company reported only 5 of 21 substations were left on line after the storm. In Ladora the National Guard helped restore water by supplying generator power. The city of Keota was left without water service for several weeks after strong winds peeled the top off the city's water tower and left the city without pumps to operate the tower. Also, in and around Keota 20 power lines were destroyed and 8 miles of new poles from Sigourney to Keswick were snapped like matchsticks by the winds.

In Washington County storm damages added up to \$21 million after strong thunderstorm winds raced across the county downing trees, power lines, and causing widespread damage. Damage to rural buildings and structures topped \$15 million. Fifteen homes were destroyed, 50 homes sustained major damage and minor damage occurred to 200 others. Ten businesses received major damage and another 50 reported minor damage. About 30,000 acres of corn were destroyed in the main path of the storm with widespread agricultural damage reported across the remainder of the county. The lost corn crop was valued at \$5.5 million by U.S. Dept. of Agriculture representatives. Also destroyed were 70 barns, grain bins, and other ag buildings. One utility company replaced over 450 poles and restored over 100 miles of wire downed by the storm.

In rural Johnson county 30 barns were destroyed, crops were devastated, and more than 330 wooden sign posts were snapped by the wind. Across the county 50 homes (most of them mobile homes) were destroyed, another 60 suffered major damage and 170 sustained minor damage. Approximately 100 families sent the night in emergency shelters. In Iowa City winds and rain caused substantial damage at the University of Iowa Campus. An indoor football practice facility was flattened, trees, some more than a century old, were destroyed, and a medical facility was flooded. Two of 3 university radio towers were knocked to the ground. Initial damage estimates for the U of I topped \$1.5 million. High schools in Williamsburg and Lone Tree reported \$5,000 to \$8,000 in damages to baseball and softball fields while \$30,000 in damage was done to school facilities at Oxford. The city of Oxford also had their fire station destroyed, and their city hall and post office damaged. Strong winds derailed a train crossing a railroad bridge at Iowa City leaving nine cars dangling over the Iowa River. Long term power outages were common with over 70,000 homes in the Iowa City area without power overnight.

Campgrounds and parks were closed across Linn, Johnson, and Benton Counties due to wind and water damage. The F.W. Kent Park near Tiffin was closed due to storm damage after thousands of trees in the 1010-acre park were blown down. Trees were blown onto the tennis and horseshoe courts at North Park in Lone Tree. Recreational facilities were also affected by the storm and at least 15 sporting events were cancelled. In Iowa City two men sought refuge in a walk-in freezer at a bowling alley after the roof was ripped off and the I-beams collapsed. The falling beams and heavy rain caused substantial damage to the bowling lanes.

Across Muscatine County Kimberly Park, Wapsi Park and the Oakridge Cemetery all lost several large trees. Some damage was also noted to headstones at the cemetery. About 30 percent of the trees were destroyed at Weed Park in Muscatine, and of those remaining 80 percent were damaged. Many of the trees were 200 year old oaks. A motel suffered hundreds of thousands of dollars in damage when a portion of the roof was torn away and rain inundated the convention center, kitchen, and restaurant areas. Preliminary figures had 65 homes suffering \$150,000 in damage while seven business sustained \$900,000 in losses. The roof at Muscatine High School received \$75,000 worth of damage and rain pooled on the gym floor with a unspecified amount of damage noted. At Muscatine General Hospital several people were treated for cuts and other minor weather related injuries. In the Conesville and Nichols areas some farms lost 90 percent or more of their corn crop. Barns, homes, grain bins, automobiles, trees and powerlines were damaged or destroyed across the county.

One hundred eighty homes in Louisa County were either damaged or destroyed. At least 11 of these were mobile homes which were destroyed. Major trees were down in all sections of the county and the entire county was without power overnight. Numerous buildings throughout the county were damaged to differing degrees. Crop and agricultural damage was extreme especially around Letts. Also at Letts, over 9 tons of food spoiled due to long term power outages. At the Louisa County Fairgrounds the poultry barn was destroyed. A woman was killed near Columbus Junction when she left her car to run for cover and was hit by a falling tree. Another woman was injured by stepping on broken glass.

In Henry County most of the damage consisted of downed trees and a few weather related accidents. A woman in Winfield was injured when the wind broke a window she was attempting to close, and north of Olds the driver of a semi was injured after his truck was blown into a ditch. Across Lee County and in the city of Keokuk fierce winds downed additional trees and lines. Three trees caught fire and several homes had minor damage. Some urban and small stream flooding was also reported in Keokuk. A correctional officer, admitted to Fort Madison Hospital for observation, appeared to be uninjured after lightning struck the observation tower he occupied at the Iowa State Penitentiary. In Des Moines County strong winds flattened thousands of acres of corn, damaged and destroyed buildings, tore down trees and lines, and left 10,500 electric customers without power.

## IOWA, Northeast

**Clayton County  
Mc Gregor**

	18	0952CST	0	0	Hail (0.88)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Northeast</b>									
Nickel size hail reported by off-duty sheriff deputy.									
Chickasaw County Nashua	18	1417CST			0	1	500K	40K	Thunderstorm Wind (G100)
Chickasaw County 2 N Nashua	18	1420CST			0	0	150K	35K	Thunderstorm Wind (G96)
Chickasaw County North Washington	18	1433CST			0	0	60K	45K	Thunderstorm Wind (G95)
Chickasaw County Alta Vista	18	1445CST			0	0	8.9K		Thunderstorm Wind
Fayette County Oelwein	18	1505CST 1511CST			0	0	55K		Thunderstorm Wind (G55)
Fayette County Oelwein Muni Arpt	18	1505CST			0	0	30K		Thunderstorm Wind (G50)
Winneshiek County 1.5 NE Calmar	18	1515CST			0	0	45K	30K	Thunderstorm Wind (G70)
Winneshiek County Decorah	18	1517CST			0	0	20K	12K	Thunderstorm Wind
Howard County 3 N Cresco	18	1525CST			0	0	10K		Thunderstorm Wind (G53)
Clayton County Elkader	18	1530CST			0	0	35K	25K	Thunderstorm Wind (G55)
Winneshiek County Hesper	18	1545CST			0	0	35K	20K	Thunderstorm Wind
Allamakee County Waukon	18	1607CST			0	0	15K		Thunderstorm Wind (G52)
A line of severe thunderstorms knocked down numerous trees and power lines across northeast Iowa. The town of Nashua was hardest hit as straight-line winds, estimated as high as 120 mph, damaged over 70 homes and blew down approximately 1000 trees. Five businesses in Nashua sustained damage and a 100 foot concrete silo was toppled. A man was also injured when his mobile home was destroyed.									
Farm outbuildings were damaged and trees blown down in other areas of Chickasaw County and around Decorah in Winneshiek County.									
Chickasaw County Alta Vista to Ionia	18	1600CST 1730CST			0	0	12K	20K	Flash Flood
Howard County Lime Spgs to Elma	18	1600CST 1730CST			0	0	15K	25K	Flash Flood
Flash flooding was observed in area streams after 2 to 3 inches of rain fell in an hour.									
Howard County 3 W Chester	20	1432CST			0	0	25K	20K	Thunderstorm Wind (G61)
Howard County 2 E Cresco	20	1455CST			0	0	85K	35K	Thunderstorm Wind (G61)
Howard County 8 SW Cresco	20	1500CST			0	0			Thunderstorm Wind (G61)
Winneshiek County 5 N Decorah	20	1503CST			0	0	25K	30K	Thunderstorm Wind (G61)
Chickasaw County 2 W Nashua	20	1510CST			0	0		15K	Thunderstorm Wind (G52)
Winneshiek County Burr Oak to Hesper	20	1540CST			0	0	15K	20K	Thunderstorm Wind (G61)
Chickasaw County New Hampton	20	1545CST			0	0	10K		Thunderstorm Wind (G61)
Clayton County Gunder	20	1600CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA, Northeast</b>									
<b>Fayette County</b>									
West Union	20	1605CST			0	0	14K	18K	Thunderstorm Wind (G61)
<b>Allamakee County</b>									
Postville	20	1615CST			0	0			Hail (0.75)
<b>Allamakee County</b>									
Waukon	20	1617CST			0	0		15K	Hail (0.75)
<b>Allamakee County</b>									
Lansing	20	1626CST			0	0	20K		Hail (1.50)
									Hail the size of dimes to as large as walnuts was reported by law enforcement and storm spotters. Winds up to 70 mph damaged barns, silos, and knocked down numerous large trees.
<b>Mitchell County</b>									
Osage	23	2319CST			0	0	7K		Thunderstorm Wind (G52)
<b>Howard County</b>									
Cresco	23	2330CST			0	0	0.20K		Thunderstorm Wind
<b>Winneshiek County</b>									
Jackson Jct	24	0009CST			0	0	12K		Thunderstorm Wind (G53)
									Winds gusted to 61 mph, blowing down large trees and branches.
<b>Chickasaw County</b>									
Fredricksburg to New Hampton	24	0000CST 0130CST			0	0	20K		Urban/Sml Stream Fld
									A city park was underwater and a few roads were flooded after 1.5 inches of rain fell in a couple hours.
<b>Clayton County</b>									
Monona	27	0211CST			0	0			Thunderstorm Wind (G52)
<b>Mitchell County</b>									
St Ansgar	27	1835CST			0	0	2K	8K	Thunderstorm Wind (G52)
<b>Howard County</b>									
Cresco	27	1905CST			0	0	3K	0.60K	Thunderstorm Wind
<b>Howard County</b>									
2 W Cresco	27	1908CST	0.3	20	0	0		1.5K	Tornado (F0)
<b>Mitchell County</b>									
Mc Intire	27	1915CST			0	0	15K	0.40K	Thunderstorm Wind
<b>Floyd County</b>									
1 W Floyd	27	1916CST			0	0	2K	2K	Thunderstorm Wind (G61)
<b>Floyd County</b>									
Powersville	27	1927CST			0	0	0.30K	0.20K	Thunderstorm Wind
<b>Winneshiek County</b>									
Burr Oak	27	1930CST			0	0	25K	2.9K	Thunderstorm Wind
<b>Allamakee County</b>									
Dorchester	27	1934CST			0	0	4K	1K	Thunderstorm Wind (G61)
<b>Howard County</b>									
6 N Riceville	27	1939CST			0	0		1K	Thunderstorm Wind
<b>Allamakee County</b>									
New Albin	27	1950CST			0	0	130K	6K	Thunderstorm Wind (G61)
<b>Winneshiek County</b>									
Decorah	27	1955CST			0	0	17K	1.6K	Thunderstorm Wind
<b>Winneshiek County</b>									
Decorah	27	2000CST 2103CST			0	0	2K	2K	Urban/Sml Stream Fld
<b>Chickasaw County</b>									
New Hampton	27	2015CST 2103CST			0	0	2K	1.3K	Urban/Sml Stream Fld
<b>Allamakee County</b>									
Harpers Ferry	27	2030CST			0	0			Thunderstorm Wind (G52)
<b>Allamakee County</b>									
Waukon	27	2133CST 2333CST			0	0	20K		Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>IOWA, Northeast</u></b>									
<b>Chickasaw County</b> New Hampton	27	2133CST 2333CST			0	0	25K		Flash Flood
<b>Floyd County</b> Charles City	27	2133CST 2333CST			0	0	2K		Flash Flood
<b>Winneshiek County</b> Decorah	27	2133CST 2333CST			0	0	5K		Flash Flood
<b>Howard County</b> Cresco	27	2146CST 2349CST			0	0	10K		Flash Flood
<b>Winneshiek County</b> Ossian	27	2200CST			0	0			Hail (0.75)
<b>Fayette County</b> 4 NE West Union	27	2217CST			0	0			Hail (0.75)
<p>A line of thunderstorms swept across northeast Iowa producing widespread wind damage and flash flooding. The strongest winds were near the Iowa-Minnesota border with hundreds of trees down from Mitchell County east into the Decorah area. Further south damage was more sporadic along with occasional power outages.</p> <p>A brief tornado touched down just west of Cresco as witnessed by trained amateur radio storm spotters. The touchdown was brief and only damaged a small area of crops.</p> <p>Combined with other storms from earlier in the month, 7 northeast Iowa counties were declared Federal Disaster areas, including Allamakee, Clayton, Chickasaw, Fayette, Floyd, Howard, and Winneshiek. Chickasaw County had the highest estimated damage amounts approaching \$500,000. Most counties had damage estimates from \$100,000 to \$200,000.</p>									
<b><u>IOWA, Northwest</u></b>									
<b>Ida County</b> 8 SE Ida Grove	20	1331CST			0	0			Hail (1.75)
<b>Woodbury County</b> 2 S Holly Spgs to 6 E Holly Spgs	23	1845CST 1900CST	6	100	0	0	50K		Tornado (F0)
A tornado blew down trees, power lines, and farm buildings.									
<b>Woodbury County</b> Sloan	23	1900CST 1906CST			0	0			Hail (1.75)
<b>Woodbury County</b> 2 W Salix	23	1914CST			0	0			Hail (1.00)
<b>Woodbury County</b> Sloan	23	1908CST	0.1	50	0	0			Tornado (F0)
A brief tornado caused no reported damage.									
<b>Buena Vista County</b> 5 W Alta	23	1915CST			0	0			Hail (1.00)
<b>Plymouth County</b> Westfield	23	1930CST	0.1	50	0	0			Tornado (F0)
A brief tornado caused no reported damage.									
<b>Woodbury County</b> 3 SE Anthon	23	2010CST			0	0	5K		Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage.									
<b>Buena Vista County</b> Storm Lake	23	2040CST			0	0			Hail (0.75)
<b>Woodbury County</b> Salix to Smithland	23 24	2100CST 0500CST			0	0			Flash Flood
Thunderstorm rainfall of 3 to 7 inches caused flash flooding in southern Woodbury County. Several streams flooded, including Wolf Creek which closed a highway near Holly Springs. Many fields and other low areas were flooded including some roads.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>IOWA, Northwest</u></b>									
<b>Clay County</b> 5 SW Spencer to Spencer	26	0851CST 0857CST			0	0			Hail (1.00)
<b>Clay County</b> 5 SW Spencer to Spencer	26	0851CST 0857CST			0	0			Hail (1.00)
<b>Clay County</b> Dickens to 2 N Dickens	26	0915CST 0922CST			0	0			Hail (1.75)
			Large hail covered the ground and caused an unknown amount of crop damage.						
<b>Dickinson County</b> West Okoboji	26	0932CST			0	0			Hail (1.75)
<b>Lyon County</b> Lester	27	1515CST			0	0			Hail (2.75)
<b>Lyon County</b> Little Rock	27	1550CST			0	0			Hail (2.00)
			Large hail caused property and crop damage but the amount of damage was not determined.						
<b>Lyon County</b> 1 NW George	27	1530CST 1531CST	0.1	50	0	0			Tornado (F0)
			A brief tornado caused no reported damage.						
<b>Osceola County</b> 4 SE Sibley to 5 SW Ocheyedana	27	1545CST 1600CST	4	100	0	0	500K		Tornado (F1)
			A tornado hit 8 farms, completely destroying one, and damaging others. The damage included farm buildings destroyed and damaged, sheep killed, a grain bin blown over, and tree damage.						
<b>Osceola County</b> 5 NE Sibley	27	1554CST			0	0			Hail (0.88)
<b>Osceola County</b> Sibley	27	1608CST			0	0			Hail (1.75)
<b>Dickinson County</b> Orleans	27	1620CST			0	0			Hail (0.75)
<b>Dickinson County</b> 1 W Lake Park	27	1628CST			0	0			Hail (0.88)
<b>Dickinson County</b> 6 NW Spirit Lake	27	1645CST			0	0			Hail (1.00)
<b>Ida County</b> 3 NE Holstein	29	1050CST			0	0			Hail (0.88)
<b>Woodbury County</b> Lawton	29	1050CST			0	0			Hail (0.75)
<b>Cherokee County</b> 11 S Cherokee	29	1105CST			0	0			Hail (0.75)
<b><u>IOWA, Southwest</u></b>									
<b>IAZ069-079&gt;080- 090&gt;091</b>			<b>Pottawattamie - Mills - Montgomery - Fremont - Page</b>						
	09 30	0746CST 1700CST			0	0	35M		Flood
			Significant flooding occurred along the Nishnabotna river in southwest Iowa with major flooding of the town of Hamburg. Hundreds of thousands of acres of crops were under water. Crop losses were around 31 million dollars. Both the Nishnabotna at Hamburg and the and the East Nishnabotna at Red Oak crested at all time record levels. The Nishnabotna river at Hamburg crested at 33.18 feet and the East Nishnabotna at Red Oak crested at 29.36 feet.						
<b>Page County</b> 8 SW Clarinda	11	2227CST			0	0			Funnel Cloud
<b>Page County</b> 8 SSE Clarinda	11	2235CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>IOWA, Southwest</u></b>									
<b>Page County</b> 8 SSW Clarinda	11	2330CST			0	0			Hail (1.75)
<b>Montgomery County</b> Red Oak Muni Arpt	14	0012CST			0	0			Thunderstorm Wind (G50)
<b>Page County</b> Clarinda	14	0034CST			0	0			Thunderstorm Wind (G57)
<b>Harrison County</b> Woodbine	18	0123CST			0	0			Hail (0.75)
<b>Monona County</b> 7 NW Whiting	23	1830CST	2	50	0	0			Tornado (F2) House destroyed.
<b>Monona County</b> 5 NNW Whiting	23	1920CST	2	50	0	0			Tornado (F0)
<b>Monona County</b> 7 NW Whiting	23	1925CST			0	0			Thunderstorm Wind (G61) Power lines downed.
<b>Harrison County</b> 2.5 SE Little Sioux	23	2140CST			0	0			Thunderstorm Wind (G60) Roof blown off a grain bin near Smith Lake.
<b>Harrison County</b> Missouri Vly	26	0705CST			0	0			Hail (0.75)
<b>Harrison County</b> Logan	26	0740CST			0	0			Hail (0.75)
<b>Mills County</b> Glenwood	27	2125CST 2126CST			0	0			Thunderstorm Wind (G56) Numerous power lines downed. Two inch diameter tree branches downed.
<b>Fremont County</b> 8 N Shenandoah	27	2140CST			0	0			Thunderstorm Wind (G70) Tree limbs downed. Roof damaged.
<b>Page County</b> 8 N Shenandoah	27	2140CST			0	0			Thunderstorm Wind (G70)
<b>Monona County</b> Whiting	29	1115CST			0	0			Thunderstorm Wind (G65) Trees and power lines downed.
<b>Monona County</b> Onawa	29	1115CST 1130CST			0	0			Thunderstorm Wind (G65) Widespread trees damage. Power lines downed.
<b>Monona County</b> Turin	29	1120CST			0	0			Thunderstorm Wind (G61) Metal/wood cafe destroyed. Metal grain bin destroyed. Trees downed.
<b>Monona County</b> Soldier	29	1130CST			0	0			Hail (0.75)
<b>Monona County</b> Soldier	29	1130CST			0	0			Thunderstorm Wind (G52)
<b><u>KANSAS, East</u></b>									
<b>Riley County</b> Manhattan	08	0200CST			0	0	70K		Lightning Lightning ignited a fire which destroyed a building in the south part of Manhattan.
<b>Ottawa County</b> 3 N Tescott	08	1533CST			0	0			Hail (1.00)
<b>Ottawa County</b> 2 NE Culver	08	1547CST	2	20	0	0			Tornado (F0) Weather spotters and a sheriff reported a tornado in open country.
<b>Ottawa County</b> 1 E Niles	08	1623CST	0.5	20	0	0			Tornado (F0)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
A trained weather spotter reported that a tornado touched down in open county.									
<b>Republic County</b> 6 E Belleville	10	0708CST			0	0			Funnel Cloud
<b>Marshall County</b> 5 E Marysville	10	0825CST			0	0			Hail (0.75)
<b>Nemaha County</b> 3 S Baileyville	10	0850CST			0	0			Hail (2.00)
<b>Nemaha County</b> 1 E Baileyville	10	0854CST			0	0			Hail (1.00)
<b>Nemaha County</b> Seneca	10	0900CST			0	0			Hail (1.00)
<b>Nemaha County</b> 8 SE Seneca	10	0917CST			0	0			Hail (1.00)
<b>Brown County</b> Willis	10	0940CST			0	0	3K		Hail (1.75)
<b>Brown County</b> Willis	10	0940CST			0	0	2K		Thunderstorm Wind (G57)
Strong winds combined with hail to crack or shatter windows on several buildings. The strong winds also broke several large tree limbs.									
<b>Brown County</b> 8 W Horton	10	0945CST			0	0			Hail (0.75)
<b>Riley County</b> Manhattan Arpt	10	1645CST			0	0			Hail (0.75)
<b>Riley County</b> 5 SE Manhattan	10	1658CST			0	0			Hail (1.25)
<b>Riley County</b> Manhattan	10	1705CST			0	0	400K		Hail (2.00)
Two inch hail dented numerous vehicles, including 191 cars at a single dealership. The hail also shattered several windows on a greenhouse at Kansas State University.									
<b>Pottawatomie County</b> 2 N St George	10	1722CST			0	0			Hail (1.50)
<b>Pottawatomie County</b> Wamego	10	1730CST			0	0	15K		Hail (1.75)
Hail dented several vehicles, smashed the wind shield on one car, and shattered windows on a house and a barn.									
<b>Pottawatomie County</b> Belvue	10	1737CST			0	0			Hail (1.75)
<b>Pottawatomie County</b> Belvue	10	1737CST			0	0			Hail (1.75)
<b>Shawnee County</b> Willard	10	1805CST			0	0			Funnel Cloud
<b>Shawnee County</b> Rossville	10	1811CST			0	0			Thunderstorm Wind (G61)
Strong winds downed several large trees and blew out a window on a bank.									
<b>Shawnee County</b> 6 N Topeka	10	1835CST			0	0			Thunderstorm Wind (G61)
<b>Shawnee County</b> 10 N Topeka	10	1843CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Rock Creek	10	1904CST			0	0			Thunderstorm Wind (G61)
<b>Lyon County</b> 1 SW Emporia	10	1905CST	0.1	20	0	0			Tornado (F0)
A tornado touched down briefly in open country.									
<b>Morris County</b> Dunlap	10	1909CST			0	0			Funnel Cloud
<b>Pottawatomie County</b> 5 N St Marys	10	1915CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Lyon County</b> Emporia	10	1915CST			0	0	1K		Thunderstorm Wind
									Strong winds broke a few large tree limbs and downed power lines.
<b>Jefferson County</b> Ozawkie	10	1920CST			0	0			Thunderstorm Wind (G65)
<b>Lyon County</b> 3 N Admire	10	1925CST			0	0			Thunderstorm Wind (G52)
<b>Coffey County</b> Burlington	10	1938CST			0	0			Thunderstorm Wind (G59)
<b>Jefferson County</b> Ozawkie	10	1940CST			0	0			Hail (0.75)
<b>Jefferson County</b> 2 S Oskaloosa	10	1955CST			0	0			Thunderstorm Wind (G61)
									Strong winds downed 6 to 8 inch tree limbs.
<b>Jefferson County</b> Mc Louth	10	2000CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Meriden	10	2009CST			0	0			Thunderstorm Wind (G55)
									Strong winds broke a few large tree limbs.
<b>Douglas County</b> Lawrence Arpt	10	2019CST			0	0			Thunderstorm Wind (G55)
<b>Jefferson County</b> 7 SE Oskaloosa	10	2022CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Mc Louth	10	2040CST			0	0			Flash Flood
<b>Jefferson County</b> 1 E Williamstown	10	2040CST			0	0			Flash Flood
									Two to Three inches of rain caused flash flooding along US Highway 24 one mile east of Williamstown and on several county roads on the west side of Mc Louth.
<b>Morris County</b> Diamond Spgs	13	1640CST			0	0	7K		Hail (2.50)
									Hail broke windows on a car and small truck and dented several pieces of farm equipment.
<b>Morris County</b> Wilsey	13	1645CST			0	0			Hail (2.50)
<b>Morris County</b> 4 N Wilsey	13	1645CST			0	0	2K		Hail (3.00)
									Two and one half to 3 inch diameter hail broke windows and dented roofs on two metal sheds.
<b>Morris County</b> Council Grove	13	1657CST			0	0			Hail (1.75)
<b>Morris County</b> 5 W Council Grove	13	1705CST			0	0			Hail (2.50)
<b>Wabaunsee County</b> Alta Vista	13	1704CST			0	0			Hail (1.75)
<b>Wabaunsee County</b> 2 W Alma	13	1713CST			0	0			Hail (1.00)
<b>Wabaunsee County</b> Alma	13	1735CST			0	0			Hail (2.50)
<b>Republic County</b> 9 N Belleville	13	1738CST	0.2	200	0	0			Tornado (F0)
									A tornado touched down briefly in open country and produced no damage.
<b>Pottawatomie County</b> Belvue	13	1740CST			0	0			Hail (1.00)
<b>Republic County</b> 10 N Belleville	13	1800CST			0	0	775K		Thunderstorm Wind
									Strong winds knocked down numerous utility poles and power lines, damaged or destroyed a variety of farm structures and equipment and tore the roof off one house. The damage occurred in an area extending from 6 to 10 miles north of Belleville. A



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
survey from the Kansas State Farm Service Agency Office indicated \$125,000 of damage to farm structures and \$650,000 of damage to farm machinery.									
<b>Nemaha County</b> 7 N St Benedict	13	1900CST	0.1	25	0	0			<b>Tornado (F0)</b>
A trained weather spotter reported that a tornado touched down briefly in open country.									
<b>Nemaha County</b> 8 W Bern to 3.7 W Bern	13	1919CST 1925CST	4	450	0	0			<b>Tornado (F1)</b>
A storm chaser reported that a tornado remained on the ground for 4 miles but remained in open country, causing no structural damage. Due to the lack of damage to structures or trees a confident estimate of the tornado's strength was difficult.									
<b>Nemaha County</b> 3 W Bern	13	1930CST	0.1	25	0	0			<b>Tornado (F0)</b>
A storm chaser reported a brief tornado touch down in open country. The supercell thunderstorm that produced this tornado was the same one that spawned a 4 mile track tornado that ended 4 miles west of burn.									
<b>Nemaha County</b> 4 NW Berwick	13	1935CST	1.5	50	0	0			<b>Tornado (F0)</b>
<b>Nemaha County</b> 3 NW Berwick	13	1940CST	2	50	0	0			<b>Tornado (F0)</b>
A storm chaser and reports from Law Enforcement indicated two small tornadoes touched down in the vicinity of Berwick but caused no damage. The tornado reported 4 miles northwest of Berwick was just a brief touch down but the tornado 3 miles northwest of Berwick touched down 4 times along and 2 mile path.									
<b>Nemaha County</b> 2 N Sabetha	13	1943CST	1	100	0	0			<b>Tornado (F0)</b>
<b>Nemaha County</b> 3 N Sabetha	13	1944CST	0.1	20	0	0			<b>Tornado (F0)</b>
Reports from a storm chaser and other eyewitness reports received by the sheriff's office indicated that two more in a series of tornadoes touched down north of Sabetha but also remained in open country.									
<b>Brown County</b> 2 W Morrill	13	1955CST	0.2	50	0	0			<b>Tornado (F1)</b>
Emergency management reported that a tornado touched down briefly in open country and downed several large trees.									
<b>Brown County</b> 3 SW Reserve	13	2000CST	0.1	25	0	0			<b>Tornado (F0)</b>
Sheriff reported a tornado briefly on the ground in open country.									
<b>Brown County</b> 5 E Reserve	13	2006CST			0	0	1K		<b>Thunderstorm Wind</b>
Strong winds damaged a barn.									
<b>Brown County</b> 7 NE Hiawatha	13	2015CST			0	0	5K		<b>Thunderstorm Wind</b>
Strong winds bent in half a 45 foot television antenna and tore shingles off the roof of a house.									
<b>Nemaha County</b> 6 S Bern	13	2100CST	0.1	25	0	0			<b>Tornado (F0)</b>
County sheriff reported a brief tornado touchdown without damage.									
<b>Nemaha County</b> Sabetha	13	2122CST	1	100	0	0	3.5M		<b>Tornado (F2)</b>
A tornado ripped through downtown Sabetha causing extensive structural damage to buildings in a two block area, as well as downing power lines and several large trees. The tornado's path extended from one-half mile west to one-half mile east of the City Hall building. Eighteen buildings in downtown sustained damage with five buildings including City Hall damaged close to the point of loss. The tornado caused 2 million in damage to City Hall alone as it destroyed half the roof and walls of the building. Away from downtown several homes and vehicles were damaged from fallen trees and limbs on the fringes of the tornado or from strong straight line winds.									
<b>Brown County</b> 1 W Reserve	13	2130CST			0	0	1K		<b>Thunderstorm Wind</b>
Strong winds destroyed a small shed.									
<b>Anderson County</b> Colony	13	2141CST			0	0			<b>Hail (0.75)</b>
<b>Brown County</b> 4 N Hiawatha	13	2155CST	0.1	25	0	0			<b>Tornado (F0)</b>
Sheriff reported brief tornado touchdown in open country.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
Douglas County 3 W Lawrence	18	1210CST			0	0			Hail (0.75)
Jefferson County 5 SE Oskaloosa	18	1215CST			0	0			Hail (0.75)
Douglas County Vinland	18	1241CST			0	0			Hail (0.75)
Coffey County 5 SW Burlington	19	2010CST			0	0			Hail (1.00)
Coffey County Gridley	19	2010CST			0	0			Hail (0.75)
Morris County 5 N Council Grove	19	2052CST			0	0			Hail (1.75)
Morris County 4 NE Council Grove	19	2100CST			0	0			Hail (1.00)
Wabaunsee County Eskridge	19	2119CST			0	0			Hail (1.75)
Nemaha County 12 NW Seneca	20	1624CST	0.5	25	0	0			Tornado (F0)
A weather spotter reported a tornado just south of the Kansas and Nebraska border.									
Nemaha County 9 SW Seneca	20	1630CST			0	0	3K		Thunderstorm Wind
Strong winds damaged a barn and hog shed.									
Nemaha County 8 N Seneca	20	1633CST			0	0	2K		Thunderstorm Wind
Strong winds broke windows on a house and destroyed three small sheds.									
Marshall County Frankfort	20	1640CST			0	0			Hail (1.25)
Marshall County 4 NW Axtell	20	1640CST			0	0			Hail (1.75)
Nemaha County 8 NW Seneca	20	1647CST	0.2	25	0	0			Tornado (F0)
A county sheriff reported a tornado on the ground in open country.									
Marshall County Frankfort	20	1659CST			0	0			Hail (1.75)
Marshall County Beattie	20	1710CST			0	0			Hail (1.75)
Brown County Hiawatha	20	1715CST			0	0	3K		Thunderstorm Wind
Strong winds shattered windows on two businesses, produced minor roof damaged to the Brown County Historical Society building and broke several large limbs.									
Pottawatomie County Havensville	20	1738CST			0	0			Hail (0.75)
Jackson County Netawaka	20	1800CST			0	0			Hail (1.75)
Jackson County Holton	20	1815CST			0	0			Hail (0.75)
Jackson County Holton	20	1832CST			0	0			Hail (0.75)
Jackson County 7 S Holton	20	1840CST	0.1	20	0	0			Tornado (F0)
A storm Chaser reported the brief touchdown of a weak tornado 1 1/2 miles northwest of the Prairie Band Casino.									
Jefferson County Nortonville	20	1850CST			0	0			Thunderstorm Wind (G61)
Strong winds downed several large trees.									
Jackson County Denison	20	1854CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Jefferson County</b> 2 E Oskaloosa	20	1908CST			0	0			Hail (0.75)
<b>Jefferson County</b> Nortonville	20	1932CST			0	0			Hail (0.75)
<b>Douglas County</b> Lecompton	20	1935CST			0	0			Thunderstorm Wind (G50)
<b>Jefferson County</b> Nortonville	20	1940CST			0	0			Hail (0.75)
<b>Coffey County</b> 6 W Burlington	20	2020CST			0	0			Hail (0.75)
<b>Jefferson County</b> 4 SE Winchester	20	2035CST			0	0			Hail (1.75)
<b>Jefferson County</b> 4 SE Oskaloosa	20	2050CST			0	0			Hail (0.75)
<b>Ottawa County</b> 8 SW Minneapolis	21	2229CST			0	0			Hail (2.00)
<b>Dickinson County</b> Elmo	21	2229CST			0	0			Hail (2.00)
<b>Anderson County</b> Garnett	21	2231CST			0	0			Hail (1.00)
<b>Anderson County</b> Welda	21	2245CST			0	0			Hail (0.75)
<b>Franklin County</b> 1 S Williamsburg	21	2308CST 2320CST			0	0			Hail (1.00)
		Large hail fell intermittently for an extended period of time.							
<b>Geary County</b> Junction City	21	2310CST			0	0			Thunderstorm Wind (G57)
		Strong winds downed one large tree and several large tree limbs.							
<b>Anderson County</b> 12 SE Garnett	21	2315CST			0	0			Hail (1.00)
<b>Franklin County</b> 2 W Princeton	21	2320CST			0	0			Hail (1.00)
<b>Franklin County</b> Pomona	21	2335CST			0	0			Hail (1.00)
<b>Riley County</b> Manhattan	21	2335CST 2355CST			0	0			Hail (1.00)
		The Manhattan police department reported that hail 3/4 to 1 inch hail fell for ten minutes.							
<b>Douglas County</b> Globe	21	2354CST			0	0			Hail (0.75)
<b>Franklin County</b> Wellsville	21	2354CST			0	0			Hail (0.75)
<b>Riley County</b> Manhattan	21	2355CST			0	0			Thunderstorm Wind (G50)
		Strong winds knocked down several large tree limbs.							
<b>Riley County</b> Ogden	22	0005CST			0	0			Hail (0.75)
<b>Ottawa County</b> 3 SE Bennington	22	0010CST			0	0			Hail (0.75)
<b>Ottawa County</b> Verdi	22	0015CST			0	0			Hail (0.75)
<b>Clay County</b> 7 W Clay Center	22	0035CST			0	0			Hail (1.00)
<b>Morris County</b> Wilsey	22	0257CST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Morris County</b> Council Grove	22	0304CST			0	0			Thunderstorm Wind (G52)
<b>Lyon County</b> Emporia	22	0325CST			0	0	2K		Thunderstorm Wind Strong winds downed several trees and large tree limbs. Some fell on a car and the roof of a house.
<b>Osage County</b> Lyndon	22	0404CST			0	0			Thunderstorm Wind (G52)
<b>Franklin County</b> Ottawa	22	0415CST			0	0			Thunderstorm Wind (G52) Strong winds downed several power lines and large limbs.
<b>Republic County</b> Munden	22	0430CST			0	0			Lightning Lightning hit a house with little damage other than a few burned or partially melted ceiling tiles.
<b>Pottawatomie County</b> St Marys	22	2311CST			0	0			Hail (0.75)
<b>Clay County</b> Clay Center	22	2325CST			0	0			Hail (1.75)
<b>Jackson County</b> Holton	23	0008CST			0	0			Hail (1.75)
<b>Douglas County</b> Lawrence	23	0030CST			0	0	2K		Thunderstorm Wind Strong winds broke off several large tree limbs. One large tree fell and smashed the windshield and severely dented the front hood of a car.
<b>Geary County</b> Ft Riley	23	0036CST			0	0			Hail (0.75)
<b>Coffey County</b> Sharpe	23	0130CST			0	0			Hail (0.75)
<b>Franklin County</b> Ottawa	23	0225CST			0	0	3K		Thunderstorm Wind (G52) Strong winds downed several large trees one of which crushed the passenger compartment of a car.
<b>Cloud County</b> 10 SW Concordia	23	1927CST			0	0			Hail (2.00)
<b>Cloud County</b> 6 SE Glasco	23	2051CST			0	0			Hail (1.00)
<b>Ottawa County</b> Delphos	23	2055CST			0	0			Hail (0.75)
<b>Ottawa County</b> 5 E Delphos	23	2105CST			0	0			Funnel Cloud
<b>Clay County</b> Oak Hill	23	2140CST			0	0			Hail (1.75)
<b>Republic County</b> Agenda	23	2208CST			0	0			Hail (1.00)
<b>Washington County</b> 5 S Morrowville	23	2234CST			0	0			Hail (0.75)
<b>Washington County</b> Morrowville	23	2234CST			0	0			Hail (0.75)
<b>Washington County</b> 6 E Washington	23	2258CST			0	0			Hail (1.00)
<b>Marshall County</b> 3 NW Marysville	23	2310CST			0	0			Hail (1.00)
<b>Marshall County</b> 1 N Summit	23	2335CST			0	0			Hail (0.75)
<b>Nemaha County</b> 4 W Bern	23	2358CST			0	0			Hail (0.75)
<b>Ottawa County</b> 5 S Minneapolis	24	1950CST			0	0			Thunderstorm Wind (G56)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Ottawa County Minneapolis</b>	24	1956CST			0	0	1K		<b>Thunderstorm Wind</b>
									Strong winds knocked down several trees and power poles in Minneapolis.
<b>Ottawa County Culver</b>	24	2028CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Strong winds downed power lines.
<b>Clay County Clay Center</b>	24	2035CST			0	0			<b>Thunderstorm Wind (G56)</b>
									County sheriff reported that strong winds downed numerous tree limbs of all sizes that blocked several roads.
<b>Marshall County Waterville</b>	24	2112CST			0	0			<b>Thunderstorm Wind (G57)</b>
									Strong winds downed large trees and a few power lines.
<b>Ottawa County 1 E Culver</b>	24	2130CST			0	0			<b>Thunderstorm Wind (G59)</b>
									Strong wind broke off 6 to 8 inch tree limbs.
<b>Clay County Oak Hill</b>	24	2210CST			0	0			<b>Thunderstorm Wind (G56)</b>
<b>Clay County Clay Center</b>	24	2210CST			0	0			<b>Thunderstorm Wind (G56)</b>
									Strong winds downed several trees and blew out a store window.
<b>Clay County Broughton</b>	24	2223CST			0	0			<b>Thunderstorm Wind (G56)</b>
<b>Brown County Horton</b>	24	2350CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Strong winds downed a few large tree limbs.
<b>Brown County Hiawatha</b>	24	2355CST			0	0	4K		<b>Thunderstorm Wind</b>
									Strong winds knocked down a 50 foot television antenna and destroyed a small tin shed.
<b>Washington County 2 NW Hollenburg to 2.5 SE Hollenburg</b>	27	2053CST 2105CST	4.5	100	0	0	55K		<b>Tornado (F1)</b>
									A tornado moved through the town of Hollenberg, touching down at several locations. The tornado in combination with strong straight line winds destroyed a small car garage, damaged the shingles, siding, or windows on at least 6 houses, damaged a grain bin, and damaged a shed. The storm also downed power lines and telephones lines as well as numerous large tree limbs.
<b>Washington County 5 NW Hanover to 3 N Hanover</b>	27	2110CST 2120CST	3	50	0	0	12K		<b>Tornado (F0)</b>
									A tornado destroyed two hog sheds and a small barn and downed large tree limbs as it touched down several times along its path.
<b>Washington County Hanover</b>	27	2120CST			0	0	2K		<b>Thunderstorm Wind</b>
									Strong winds damaged a barn.
<b>Marshall County Bremen</b>	27	2125CST			0	0			<b>Thunderstorm Wind (G54)</b>
									Strong winds downed several large tree limbs.
<b>Washington County 9 SW Hollenburg</b>	27	2145CST	0.2	25	0	0			<b>Tornado (F0)</b>
									Several weather spotters reported a tornado touched down in open country, causing no damage.
<b>Washington County 5 S Washington</b>	27	2155CST			0	0			<b>Hail (1.75)</b>
<b>Washington County 5 S Washington</b>	27	2155CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Marshall County Home to Beattie</b>	27	2210CST	6	75	0	0	810K		<b>Tornado (F1)</b>
									A tornado travelled from the northeast edge of Home, KS to Beattie, KS damaging or destroying a variety of farm machinery and buildings, including 4 brick silos. A mobile home was pushed off it's foundation along with most of its roof being peeled off. Airborne debris shattered windows and stripped off shingles on several houses. Two vehicles were pushed into each other and severely damaged. Strong winds associated with the tornado also downed numerous power poles, large trees and large limbs.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Washington County</b>									
Washington	27	2215CST			0	0			Hail (0.75)
<b>Nemaha County</b>									
Seneca	27	2304CST			0	0			Thunderstorm Wind (G50)
									Strong winds downed tree limbs which broke a primary power line supplying electricity to the town of Seneca.
<b>Nemaha County</b>									
Seneca	27	2305CST			0	0			Lightning
									Lightning hit an electrical transformer adding to the power outages already caused by a primary power line which was broken by fallen limbs.
<b>Marshall County</b>									
Blue Rapids	27	2345CST			0	0			Thunderstorm Wind (G52)
									Strong winds downed a few large limbs.
<b>Washington County</b>									
Greenleaf	28	0000CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b>									
Grantville	28	1805CST			0	0			Hail (1.75)
<b>Shawnee County</b>									
Topeka	28	1805CST 1815CST			0	0	100K		Hail (3.00)
									Large hail fell across the eastern two thirds of Topeka. Hail from three-fourths to an inch in diameter was common but a few areas received two to three inch diameter hail. The largest hail of three inches in diameter fell at the intersection of Huntoon Street and Medford Street. Two inch diameter hail fell at the National Weather Service office at Phillip Billard Airport. Two and one-fourth inch diameter hail fell at Lake Shawnee. Cars were dented at locations which received the largest hail.
<b>Geary County</b>									
4.5 W Junction City	28	1816CST			0	0			Hail (1.75)
<b>Geary County</b>									
Junction City	28	1830CST			0	0			Hail (1.00)
<b>Douglas County</b>									
Big Spgs	28	1845CST			0	0			Hail (0.75)
<b>Douglas County</b>									
1 SW Lecompton	28	1900CST			0	0			Hail (2.00)
<b>Pottawatomie County</b>									
5 N St George	28	1920CST			0	0			Hail (1.00)
<b>Geary County</b>									
Junction City	28	1937CST			0	0			Hail (1.75)
<b>Pottawatomie County</b>									
Flush	28	1937CST			0	0			Hail (1.75)
<b>Nemaha County</b>									
7 SE Seneca	28	1940CST			0	0			Hail (1.00)
<b>Brown County</b>									
Reserve	28	1946CST			0	0			Hail (0.75)
<b>Clay County</b>									
Morganville	28	2010CST			0	0			Hail (1.75)
<b>Clay County</b>									
5 N Clay Center	28	2018CST			0	0			Hail (0.75)
<b>Ottawa County</b>									
2 NE Bennington	28	2055CST			0	0			Hail (0.75)
<b>Dickinson County</b>									
1 N Manchester	28	2055CST			0	0			Hail (0.75)
<b>Riley County</b>									
Leonardville	28	2105CST			0	0			Hail (1.75)
<b>Washington County</b>									
.5 W Barnes	28	2347CST			0	0			Flash Flood
									County Sheriff reported flooding on Highway 148 three-fourths miles west of Highway 15 or about one-half mile west of the town of Barnes.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Brown County</b> 1 E Hiawatha	28	2347CST			0	0			Flash Flood
<b>Brown County</b> 2.5 N Hiawatha	28	2347CST			0	0			Flash Flood
									County law enforcement reported flooding of several roads to the east and north of Hiawatha.
<b>Jefferson County</b> Mc Louth	29	0110CST			0	0			Thunderstorm Wind (G52)
<b>Dickinson County</b> 5.5 NW Woodbine	29	0130CST			0	0	1K		Lightning
									Lightning started a fire which damaged a barn.
<b>Jefferson County</b> 4 N Oskaloosa	29	0204CST			0	0			Hail (1.00)
<b>Jefferson County</b> Mc Louth	29	0210CST			0	0			Thunderstorm Wind (G52)
<b>Nemaha County</b> Wetmore	29	1712CST			0	0			Hail (1.75)
<b>Riley County</b> Leonardville	29	1724CST			0	0			Hail (1.00)
<b>Jackson County</b> 2 SW Mayetta	29	1734CST	1	25	0	0	70K		Tornado (F1)
									A mobile weather spotter reported that a tornado touched down in several locations from 2 miles southwest of Mayetta to 1.8 miles south of Mayetta. The tornado tore a portion of the roof off a mobile home, shattered windows or peeled off shingles on several houses, and damaged or destroyed at least 13 farm structures including a large barn and grain bin. Most damage was concentrated near the beginning and the end of the tornado's path. Between the two points of greatest damage several power lines, utility poles and large trees were also knocked down.
<b>Riley County</b> 1.5 NE Randolph	29	1735CST			0	0			Thunderstorm Wind (G50)
									Strong winds downed several large limbs.
<b>Brown County</b> 4 ESE Sabetha	29	1738CST			0	0			Hail (1.75)
<b>Jackson County</b> 4 W Mayetta	29	1740CST			0	0	20K		Thunderstorm Wind
									Strong winds tore off shingles from many houses and knocked down several large trees and power lines.
<b>Jackson County</b> 2 E Hoyt	29	1740CST			0	0	5K		Thunderstorm Wind
									Strong winds damaged the roofs of several farm buildings and downed power lines and trees.
<b>Brown County</b> Fairview	29	1743CST			0	0			Hail (0.75)
<b>Shawnee County</b> Silver Lake	29	1755CST			0	0			Thunderstorm Wind (G50)
									Strong winds downed several large limbs.
<b>Jefferson County</b> Meriden	29	1755CST			0	0			Hail (0.75)
<b>Pottawatomie County</b> 3 SW Olsburg	29	1756CST			0	0			Hail (4.00)
<b>Pottawatomie County</b> Wamego	29	1800CST			0	0			Thunderstorm Wind (G52)
									Strong winds downed several large trees and numerous large limbs.
<b>Jackson County</b> 5 ESE Hoyt	29	1805CST			0	0			Hail (1.75)
<b>Riley County</b> Manhattan	29	1805CST			0	0	85K		Thunderstorm Wind (G52)
									Strong winds tore a large section of the roof off three industrial buildings and destroyed part of a wall on one of the buildings. The winds also knocked down 15 power line poles, blew out several transformers, and downed several large trees. Most of the damage occurred north of downtown.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>KANSAS, East</b>									
<b>Pottawatomie County</b> 3 N St Marys	29	1810CST	1	50	0	0			<b>Tornado (F0)</b>
									A storm chaser reported that a tornado stayed on the ground between one and two minutes.
<b>Jefferson County</b> 4 N Meriden	29	1825CST			0	0			<b>Thunderstorm Wind (G55)</b>
									Strong winds downed several large trees.
<b>Shawnee County</b> Rossville	29	1825CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Shawnee County</b> 3 S Valencia	29	1825CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Strong winds downed two large trees plus several large limbs off other trees.
<b>Jefferson County</b> 3 NNW Perry	29	1830CST			0	0	100K		<b>Hail (1.75)</b>
<b>Jefferson County</b> 3 NNW Perry	29	1830CST 1835CST			0	2	700K		<b>Thunderstorm Wind (G78)</b>
									Very strong winds up to 90 mph and golf ball size hail produced widespread damage at the Perry Lake Marina and surrounding camp grounds. The winds tore a large section of the roof off a restaurant and a boat storage facility, damaged 50 boats, 20 severely, damaged the roof of 5 docks and destroyed a barn. The wind also turned 6 camper trailers onto their side. Two people in one of the trailers were injured. A total of 80 camper trailers plus several smaller vehicles received dents and broken windows from debris and golf ball size hail driven by the strong winds. Numerous trees, large limbs, and several power lines were also brought to the ground. A damage survey by National Weather Service meteorologists confirmed the occurrence of a brief weak tornado but it did not appear to be the source of much damage. One mile east of the marina winds tore apart a barn and tossed part of it into a nearby house, blowing apart the house's chimney and shattering several windows.
<b>Jefferson County</b> 3 NNW Perry	29	1836CST	0.1	25	0	0			<b>Tornado (F0)</b>
									A very weak tornado occurred along with widespread damaging wind and hail that swept across the south part of Lake Perry. The extensive damage was much more a result of the wind and hail.
<b>Jefferson County</b> Williamstown	29	1845CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Strong winds downed several large trees.
<b>Douglas County</b> Lawrence	29	1853CST 1856CST			0	0	30K		<b>Thunderstorm Wind (G74)</b>
									Several wind gusts in the 65 to 85 mph range knocked down ten power line poles, numerous large trees and tree limbs and destroyed the carport of one residence. The roof of a pick-up truck was crushed when a large limb fell on it.
<b>Shawnee County</b> Topeka Forbes Fld	29	1855CST			0	0			<b>Thunderstorm Wind (G50)</b>
									Winds gusting up to 58 mph as measured at Forbes Field Airport on the south side of Topeka downed several large tree limbs.
<b>Douglas County</b> Eudora	29	1858CST			0	0			<b>Thunderstorm Wind (G61)</b>
									Strong winds downed several large trees and tree limbs.
<b>Franklin County</b> Williamsburg	29	1907CST			0	0			<b>Hail (0.75)</b>
<b>Franklin County</b> Williamsburg	29	1907CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Jackson County</b> Mayetta	29	1915CST			0	0			<b>Thunderstorm Wind (G61)</b>
									Strong winds knocked down a couple of power line poles.
<b>Jackson County</b> Hoyt	29	1920CST			0	0			<b>Thunderstorm Wind (G61)</b>
									Strong winds knocked down several power line poles.
<b>Osage County</b> 5 N Osage City	29	1924CST	0.2	25	0	0			<b>Tornado (F0)</b>
									County sheriff reported a brief tornado touchdown.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, East</u></b>									
Osage County Osage City	29	1927CST			0	0			Hail (0.75)
Franklin County 1 N Ottawa	29	1930CST			0	0			Thunderstorm Wind (G52)
Osage County .5 N Melvern	29	1946CST	0.2	25	0	0			Tornado (F0) County Sheriff reported that a tornado touched down in open country.
Osage County .5 E Scranton	29	2027CST	0.2	25	0	0			Tornado (F0) County Sheriff reported a brief tornado touchdown in open country.
Lyon County 4 W Reading	29	2030CST			0	0			Thunderstorm Wind (G61)
Osage County Lyndon	29	2045CST			0	0			Hail (0.75)
Osage County Lyndon	29	2045CST			0	0	3K		Thunderstorm Wind (G56) Strong winds knocked down a few large trees and large limbs. One limb damaged a horse trailer. Wind blown hail shattered windows on one house. Hail covered the ground on the west edge of town.
Coffey County 10 E Lebo	29	2050CST			0	0			Hail (2.75)
Coffey County Burlington	29	2050CST			0	0			Hail (1.75)
Coffey County Burlington	29	2050CST			0	0			Thunderstorm Wind (G56) Strong winds knocked down several large trees.
Osage County 6 W Melvern	29	2050CST			0	0			Hail (1.75)
Osage County 6 W Melvern	29	2050CST			0	0	200K		Thunderstorm Wind Wind and wind driven hail damaged 84 campers with 6 being damaged severely.
Osage County 3 W Melvern	29	2051CST			0	0			Funnel Cloud
Lyon County Emporia	29	2100CST			0	0	2K		Lightning Lightning struck the chimney of a house and knocked bricks from the chimney.
Coffey County Burlington	29	2110CST			0	0			Thunderstorm Wind (G61)
Anderson County Garnett	29	2135CST			0	0			Thunderstorm Wind (G50) Strong winds downed several power lines.
Anderson County Colony	29	2135CST			0	0	50K		Thunderstorm Wind (G50)
Anderson County Welda	29	2140CST			0	0	50K		Thunderstorm Wind (G52) Strong winds damaged or destroyed 50 farm dwellings and structures most of which were barns and small sheds.
<b><u>KANSAS, Extreme Southeast</u></b>									
Crawford County Pittsburg	08	2055CST			0	0	0	0	Hail (0.75)
Bourbon County Uniontown	13	1915CST			0	0			Thunderstorm Wind (G52)
Bourbon County Ft Scott	13	1925CST			0	0	3K		Thunderstorm Wind Thunderstorm winds damaged trees and power lines.
Bourbon County Bronson	18	1442CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Extreme Southeast</u></b>									
<b>Bourbon County</b> Uniontown	18	1500CST			0	0			Hail (1.00)
<b>Bourbon County</b> Ft Scott Arpt	18	1515CST			0	0			Thunderstorm Wind (G58)
<b>Crawford County</b> Farlington	18	1611CST			0	0	5K		Hail (1.75)
<b>Crawford County</b> Arcadia	18	1625CST			0	0	5K		Hail (1.75)
<b>Bourbon County</b> Uniontown	22	0605CST			0	0			Thunderstorm Wind (G52)
<b>Bourbon County</b> Countywide	28	2145CST			0	0	300K		Thunderstorm Wind Thunderstorm winds produced widespread damage across the county. Especially hard hit was the Ft. Scott area. Winds downed a number of barns, small trailers, trees and power lines.
<b>Crawford County</b> Countywide	29	2215CST			0	0	100K		Thunderstorm Wind Thunderstorm wind gusts estimated at 70 to 80 mph produced tree, power line, and widespread structural damage.
<b>Cherokee County</b> Countywide	29	2300CST			0	0	75K		Thunderstorm Wind Thunderstorm winds produced extensive tree and power line damage across the county. Hardest hit communities were Columbus, Baxter Springs, and Galena.
<b>Cherokee County</b> 1 E Galena	30	0222CST			0	0			Thunderstorm Wind (G54)
<b><u>KANSAS, North Central</u></b>									
<b>Osborne County</b> Natoma	08	1340CST			0	0	5K	50K	Hail (1.00)
<b>Osborne County</b> 18 S Osborne	08	1410CST			0	0	10K	50K	Hail (1.50)
<b>Mitchell County</b> 2 E Hunter	08	1436CST			0	0	0	0	Hail (0.75)
<b>Mitchell County</b> 2 SW Beloit	08	1507CST			0	0	0	0	Hail (0.75)
<b>Phillips County</b> 3 SW Woodruff	08	1540CST			0	0	0	0	Hail (0.75)
<b>Phillips County</b> 12 N Phillipsburg	08	1620CST			0	0	0	50K	Hail (1.00)
<b>Phillips County</b> Kirwin Res	08	1630CST 1631CST	0.5	25	0	0	0	0	Tornado (F0)
<b>Phillips County</b> 18 NE Phillipsburg	08	1635CST			0	0	5K	50K	Hail (1.50)
<b>Smith County</b> 8 NW Smith Center	08	1708CST			0	0	10K	150K	Hail (2.75) Strong and severe thunderstorms erupted during the mid afternoon dropping large hail in southern Osborne county. Hail was reported in Mitchell county as the thunderstorms moved northeast. Toward evening, thunderstorms developed in Phillips county and dropped torrential rainfall and walnut size hail. The storms moved in to Smith county and dropped hail nearly the size of baseballs. Little damage was reported.
<b>Jewell County</b> Mankato	10	0615CST			0	0	0	0	Hail (0.75)
<b>Phillips County</b> 2 E Phillipsburg	13	1505CST			0	0	5K	75K	Hail (1.75)
<b>Smith County</b> 15 N Athol	13	1539CST			0	0	0	0	Hail (0.75)
<b>Smith County</b> 2 NW Thornburg to 2.5 NW Thornburg	13	1600CST 1602CST	0.5	20	0	0	25K	100K	Tornado (F0)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## KANSAS, North Central

A severe thunderstorm developed just east of Phillipsburg in the late afternoon and quickly became severe. After dropping golf ball sized hail in Phillips county, the storm spawned a brief tornado in northern Smith county near Thornburg. The tornado did only minor damage before lifting as the parent thunderstorm moved into southern Nebraska.

<b>Osborne County</b> 13 SE Osborne	22	0100CST			0	0	0	0	Thunderstorm Wind (G52)
<b>Rooks County</b> 4 SE Plainville	23	1727CST			0	0	5K	50K	Thunderstorm Wind (G56)
<b>Rooks County</b> 7 S Woodston	23	1735CST			0	0	0	0	Hail (0.75)
<b>Smith County</b> 4 S Gaylord	23	1740CST			0	0	5K	75K	Hail (1.75)
<b>Smith County</b> Gaylord	23	1813CST			0	0	0	0	Hail (1.00)
<b>Osborne County</b> 18 S Osborne	23	1955CST			0	0	0	50K	Hail (1.50)
<b>Osborne County</b> Osborne	24	1815CST			0	0	0	0	Thunderstorm Wind (G52)

## KANSAS, Northeast

<b>Atchison County</b> 8 S Atchison	04	0523CST			0	0			Hail (0.75)
The Atchison County Sheriff's Office reported dime-size hail during a severe thunderstorm 8 miles south of Atchison.									
<b>Doniphan County</b> 1 NE Purcell	10	1010CST			0	0			Hail (0.88)
Nickel-size hail was reported during a severe thunderstorm a mile northeast of Purcell.									
<b>Leavenworth County</b> Linwood to Basehor	10	2030CST 2050CST			0	0	30K		Thunderstorm Wind (G70)
Severe thunderstorm winds gusted to 70 MPH throughout Leavenworth County. County Emergency Management reported 15 to 20 inch diameter trees down in Basehor. Also in Basehor, a 60 foot tree fell on two homes and a car. Numerous power lines were reported down as were numerous power outages.									
<b>Wyandotte County</b> Kansas City to 2 N Bonner Spgs	10	2030CST 2205CST			0	0			Thunderstorm Wind (G70)
Severe thunderstorm winds gusted to 70 MPH at Kansas City Kansas Community College and Emergency Management reported 4 inch tree limbs down at 123rd and Polfer. A local television station remote sensor recorded a 67 MPH wind gust 2 miles north of Bonner Springs.									
<b>Johnson County</b> Roeland Park to Overland Park	10	2050CST 2100CST			0	0			Thunderstorm Wind (G60)
Severe thunderstorm winds knocked down 10 to 15 inch tree limbs in Overland Park. The Johnson County Sheriff's Office reported large trees down in Roeland Park due to the strong thunderstorm winds.									
<b>Wyandotte County</b> Kansas City	10	2105CST			0	0			Hail (1.75)
The same severe thunderstorms that produced the damaging thunderstorm winds in Kansas City also dropped golfball-size hail at I-70 and 57th Street.									
<b>KSZ025-102&gt;103</b>	<b>Atchison - Doniphan - Leavenworth</b>								
	13	0000CST			0	0	1.8M		Flood
	22	2359CST							
Minor to moderate river flooding occurred along the Missouri River at Atchison and Leavenworth from June 13th through 22nd. The flooding river resulted in 1.8 million dollars in crop damage in Doniphan County.									
Missouri River Atchison, KS									
Flood Stage			22 ft						
Above Flood Stage			6/13 to 6/22						
Crest			26.15 ft on 6/16						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Northeast</b>									
Leavenworth, KS									
			Flood Stage	20 ft					
			Above Flood Stage	6/14 to 6/20					
			Crest	23.8 ft on 6/16					
<b>Linn County</b>									
Mound City to Pleasanton	13	1900CST 1905CST			0	0			Thunderstorm Wind (G60)
The Linn County Sheriff Office reported trees blown down from thunderstorm winds in Mound City and Pleasanton.									
<b>Doniphan County</b>									
Wathena	13	2235CST			0	0	35K		Thunderstorm Wind
Thunderstorm winds blew down a tree which fell on and totaled a trailer in Wathena.									
<b>KSZ103</b>									
<b>Leavenworth</b>									
	14	0000CST			0	0			Flood
	20	2359CST							
Heavy rains from thunderstorms over Eastern Kansas and upstream over Eastern Nebraska during mid-June resulted in minor river flooding along the Missouri River.									
Missouri River									
Leavenworth, KS									
			Flood Stage	20 ft					
			Above Flood Stage	6/14 to 6/20					
			Crest	23.8 ft on 6/16					
<b>Doniphan County</b>									
Wathena	18	1156CST			0	0			Hail (1.00)
The Doniphan County Sheriff's Office reported quarter-size hail during a severe thunderstorm at Wathena.									
<b>Leavenworth County</b>									
Jarbalo to 3 N Basehor	18	1220CST 1240CST			0	0			Hail (2.00)
Severe thunderstorms dropped very large hail over Leavenworth County. The sheriff's office reported quarter-size hail near Jarbalo while 2 inch diameter hail was observed a mile west of Basehor.									
<b>Leavenworth County</b>									
Leavenworth	18	1232CST			0	0			Thunderstorm Wind (G60)
A storm spotter reported a 60 MPH wind gust in Leavenworth.									
<b>Wyandotte County</b>									
Kansas City	18	1249CST			0	0			Hail (1.75)
The Kansas City, Kansas Fire Department reported golfball-size hail at 123rd and Leavenworth.									
<b>Johnson County</b>									
Mission	18	1332CST			0	0			Thunderstorm Wind (G60)
Johnson County Fire dispatch reported a powerline down in Mission as a result of damaging severe thunderstorm winds.									
<b>Miami County</b>									
Bucyrus	18	1350CST			0	0			Thunderstorm Wind (G60)
Public reported 4 inch diameter tree limbs down and power poles blown over in Bucyrus.									
<b>Linn County</b>									
La Cygne	18	1422CST 1445CST			0	0			Hail (1.00)
The Linn County Sheriff's Office reported quarter-size hail at La Cygne.									
<b>Linn County</b>									
3 W Parker	19	2051CST			0	0			Hail (0.88)
Nickel-size hail was reported by a spotter 3 miles west of Parker.									
<b>Linn County</b>									
2 W La Cygne	19	2125CST			0	0			Thunderstorm Wind (G60)
Storm spotters reported thunderstorm wind gusts to 60 MPH 2 miles west of La Cygne.									
<b>Miami County</b>									
Somerset	19	2146CST			0	0			Thunderstorm Wind (G65)
A 65 MPH thunderstorm wind gust was recorded by a spotter in Somerset.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Northeast</b>									
<b>Atchison County</b> Effingham	20	1840CST			0	0			<b>Thunderstorm Wind (G60)</b> Thunderstorm winds knocked down power lines in Effingham resulting in numerous power outages.
<b>Leavenworth County</b> 6 N Tonganoxie	20	1930CST			0	0			<b>Hail (1.00)</b> One inch diameter hail was reported by the county sheriff's office 6 miles north of Tonganoxie.
<b>Leavenworth County</b> Leavenworth to Jarbalo	20	1950CST			0	0	20K		<b>Thunderstorm Wind</b> Severe thunderstorm winds blew trees down onto a transformer causing a fire at Leavenworth. Thunderstorm winds in Jarbalo took the roof off a barn and blew down a grain bin.
<b>Wyandotte County</b> Bonner Spgs	20	1955CST			0	0			<b>Hail (0.88)</b> Wyandotte County Emergency Management reported nickel-size hail at Bonner Springs.
<b>Johnson County</b> Shawnee to Fairway	20	2001CST 2115CST			0	0			<b>Hail (1.75)</b> A severe thunderstorm produced large hail over much of Johnson County. Golfball-size hail was reported by local police along I-35 between I-435 and 95th Street. Further south dime to quarter-size hail was reported in Overland Park at 91st and Nall, in Stanley and at the Federal Aviation Administration facility in Olathe. In the northern section of Johnson County, large hail was reported at various points along Shawnee Mission Parkway from Shawnee eastward to Fairway.
<b>Wyandotte County</b> Wyandotte Co Lake	20	2030CST			0	0			<b>Thunderstorm Wind (G60)</b> Thunderstorm winds gusted to 60 MPH and knocked over several large trees at Wyandotte County Lake Park.
<b>Johnson County</b> Edgerton to Olathe	22	0006CST 0027CST			0	0			<b>Thunderstorm Wind (G65)</b> Johnson County Emergency Management reported a 60 MPH wind gust along I-35 in Platte and a 65 MPH gust at Edgerton.
<b>Miami County</b> Bucyrus	22	0030CST			0	0			<b>Thunderstorm Wind (G60)</b> Severe thunderstorm winds knocked down 8 inch diameter tree limbs in Bucyrus.
<b>Linn County</b> Blue Mound to 1 N Mound City	22	0040CST 0043CST			0	0			<b>Thunderstorm Wind (G60)</b> The Linn County Sheriff's Office reported tree limbs, 6 inches in diameter. The tree limbs fell in Blue Mound and a mile north of Mound City.
<b>Miami County</b> Paola to Osawatomie	22	0450CST 0500CST			0	0			<b>Thunderstorm Wind (G70)</b> The Miami County Sheriff's Department reported six inch tree limbs downed by severe thunderstorm winds in Paola and Osawatomie. Spotters recorded a 70 MPH wind gust 8 miles northeast of Paola which downed a large tree.
<b>Johnson County</b> Johnson Co Arpt	22	0451CST			0	0			<b>Thunderstorm Wind (G64)</b> Severe thunderstorm winds gusted to 64 MPH at Johnson County Industrial Airport.
<b>Linn County</b> 1 W Mound City	22	0739CST 0758CST			0	0			<b>Flash Flood</b> Thunderstorms produced 2 to 6 inch rains over Linn County which resulted in areas of flash flooding. A half a foot of water covered Highway 31 a mile west of Mound City. Linn County Emergency Management officials reported 1 to 2 feet of water on several gravel roads in the Mound City area.
<b>Miami County</b> 6 W Hillsdale	23	0244CST			0	0			<b>Thunderstorm Wind (G60)</b> The Miami County Sheriff's Office reported 60 MPH winds during a severe thunderstorm 6 miles west of Hillsdale. The thunderstorm winds knocked down several large trees.
<b>Johnson County</b> Merriam to Mission	23	0315CST 0320CST			0	0			<b>Thunderstorm Wind (G60)</b> Johnson County Emergency Management reported large trees and power lines down from severe thunderstorm winds in Merriam, Overland Park, Shawnee and Mission.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Northeast</b>									
<b>Wyandotte County</b> Kansas City	23	0400CST 0430CST			0	0			<b>Flash Flood</b>
Several inches of rain fell during thunderstorms which resulted in flash flooding in Kansas City, KS. Wyandotte County Emergency Management reported that several people were trapped in buildings and cars due to the high water. Many residents reported water in their basements as a result of the storm.									
<b>Doniphan County</b> 1 E Troy	25	0010CST			0	0			<b>Thunderstorm Wind (G60)</b>
The Doniphan County Sheriff Office reported a 60 MPH wind gust a mile east of Troy.									
<b>Miami County</b> Somerset	28	2146CST			0	0			<b>Thunderstorm Wind (G65)</b>
The Miami County Sheriff's Office reported a 65 MPH wind gust during a severe thunderstorm at Somerset.									
<b>Wyandotte County</b> Kansas City to Lake Quivira	29	0235CST			0	0			<b>Thunderstorm Wind (G60)</b>
Wyandotte County Emergency Management reported 60 MPH wind gusts at Kansas City and Lake Quivira.									
<b>Johnson County</b> Overland Park	29	0350CST			0	0	100K		<b>Thunderstorm Wind (G75)</b>
Severe thunderstorm winds gusted to 75 MPH in Overland Park. Structural damage was reported at several homes and business along 119th street between Antioch Rd and Metcalf Rd. Large trees were blown onto the roofs of several houses and fallen trees temporarily blocked traffic along 119th St. The damaging winds also blew roof top air conditioners from their moorings at several businesses and threw them approximately 20 feet. A construction trailer was damaged by the winds and several street lights were and power lines were blown down in the 119th Street and Metcalf area.									
<b>Johnson County</b> Leawood to Overland Park	29	0400CST 0600CST			0	0			<b>Flash Flood</b>
A National Weather Service employee reported flash flooding in Leawood just west of the Kansas-Missouri state line. Up to 4 feet of water on the roadway closed the intersection of 135th Street and Kenneth Road.									
<b>KSZ105</b>									
	29	0000CST 2359CST			0	0			<b>Flood</b>
Heavy rain from thunderstorms at the end of June resulted in minor river flooding along the Indian Creek in Overland Park.									
Indian Creek Overland Park, KS									
			Flood Stage	13 ft					
			Above Flood Stage	6/29					
			Crest	13.91 ft					
<b>Atchison County</b> Atchison	29	1815CST			0	0			<b>Thunderstorm Wind (G55)</b>
Tree limbs, 4 inches in diameter, were reported blown down along River road in Atchison by the sheriff's office.									
<b>Leavenworth County</b> Tonganoxie	29	1835CST			0	0			<b>Thunderstorm Wind (G70)</b>
A spotter reported 70 MPH winds in Tonganoxie during a severe thunderstorm.									
<b>Wyandotte County</b> Kansas City	29	1843CST			0	0			<b>Thunderstorm Wind (G65)</b>
The Wyandotte County Sheriff's Office reported wind gusts to 65 MPH during a severe thunderstorm in Kansas City, KS. The strong winds were reported at I-435 and Kansas Avenue.									
<b>Johnson County</b> Johnson Co Arpt	29	1907CST			0	0			<b>Thunderstorm Wind (G65)</b>
Wind gusts to 65 MPH were recorded at Johnson County Executive Airport during a severe thunderstorm.									
<b>Miami County</b> 2 W Bucyrus to 1 N Paola	29	1940CST 2000CST			0	0			<b>Thunderstorm Wind (G70)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Northeast</u></b>									
The Miami County Sheriff's Office reported a wind gust to 60 MPH during a severe thunderstorm 2 miles west of Bucyrus. The winds were observed at the intersection of Highway 169 and 223rd Street. A wind gust to 70 MPH was observed a mile north of Paola near Hillsdale Lake.									
<b>Miami County</b> Paola	29	2000CST			0	0			<b>Hail (1.00)</b>
									The same severe thunderstorm responsible for the damaging winds throughout Miami County also produced quarter-size hail in Paola.
<b>Linn County</b> La Cygne	29	2046CST			0	0			<b>Thunderstorm Wind (G60)</b>
									The Linn County Sheriff's Office reported a wind gust to 60 MPH during a severe thunderstorm at La Cygne. Several large trees and powers lines were blown down in the city.
<b>Linn County</b> 8 N Mound City to 4 E Centerville	29	2123CST 2128CST			0	0			<b>Hail (1.75)</b>
									Golfball-size hail was reported during a severe thunderstorm 8 miles north of Mound City and 4 miles east of Centerville.
<b><u>KANSAS, Northwest</u></b>									
<b>Sherman County</b> Goodland Arprt	03	0125MST			0	0			<b>Thunderstorm Wind (G50)</b>
									Also, wind to 63 mph at Goodland CATV (2 south of Goodland)
<b>Sherman County</b> 3 W Ruleton	03	0125MST			0	0	100K		<b>Thunderstorm Wind (G60)</b>
									Thunderstorm winds estimated at least 70 mph flipped over a full irrigation rig, knocked over 16 power poles, broke branches, and damaged outdoor play equipment, sheds, a roof, and grain bins.
<b>Sherman County</b> 1 NE Goodland Arprt	03	0145MST			0	0			<b>Lightning</b>
									A lightning strike hit a gas pipeline and started a fire.
<b>KSZ001&gt;004-013&gt;016-027&gt;029-041&gt;042</b>			<b>Cheyenne - Rawlins - Decatur - Norton - Sherman - Thomas - Sheridan - Graham - Wallace - Logan - Gove - Greeley - Wichita</b>						
	06	0300MST 0800MST			0	0			<b>Extreme Cold</b>
									Record cold early morning temperatures with lows near or slightly below freezing in most locations. Tender crops and garden suffered unknown damage. It was the coldest for so late in the season at a few locations.
<b>Thomas County</b> Colby	07	1630CST			0	0			<b>Hail (1.75)</b>
									Also, nickel size hail reported 2E of Colby at 1630 CST.
<b>Decatur County</b> Lyle	10	1900CST			0	0			<b>Funnel Cloud</b>
									Brief funnel cloud reported by spotter.
<b>Decatur County</b> 1 NW Lyle	10	1905CST			0	0			<b>Hail (1.75)</b>
									Also, nickel to quarter size hail reported 3 NE of Lyle at 1909 CST.
<b>Decatur County</b> 14 NE Oberlin	10	1930CST			0	0			<b>Hail (1.25)</b>
<b>Sherman County</b> 2 S Goodland	21	1908MST			0	0			<b>Thunderstorm Wind (G51)</b>
									Also, 62 mph wind at Goodland Airport at 1912 MST and 66 mph at Goodland CATV (2S of Goodland at 1918 MST).
<b>Logan County</b> Winona	21	2120CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Tree limbs in excess of 1 inch in diameter broken.
<b>Gove County</b> 6 SW Gove	21	2220CST			0	0			<b>Hail (0.75)</b>
<b>Gove County</b> 12 SE Gove	21	2245CST			0	0	10K		<b>Thunderstorm Wind (G61)</b>
									Windows blown out of tractor. Large grain bin blown over.
<b>Gove County</b> 19 SE Gove	21	2245CST			0	0	5K		<b>Thunderstorm Wind (G61)</b>
									Power pole and power lines downed.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Northwest</u></b>									
<b>Cheyenne County</b> 12 NW St Francis	23	0011CST	0.1	20	0	0			Tornado (F0)
		Brief tornado observed.							
<b>Sherman County</b> 8.5 SE Goodland	29	1500MST			0	0			Hail (0.88)
<b>Wallace County</b> 10 NNE Wallace	29	1520MST			0	0			Hail (0.88)
<b>Logan County</b> 4 NW Mc Allaster	29	1620CST			0	0			Hail (1.25)
<b>Logan County</b> 1 SW Mc Allaster	29	1630CST			0	0			Hail (1.75)
<b>Logan County</b> 4 W Russell Spgs	29	1646CST			0	0			Hail (0.88)
		Also, dime size hail reported 4W McAllaster at 1650 CST.							
<b>Logan County</b> 14 S Monument	29	1715CST			0	0			Hail (1.00)
		Also, tree limbs down.							
<b>Logan County</b> 14 S Russell Spgs	29	1720CST			0	0			Hail (1.75)
<b>Thomas County</b> 16 E Colby	29	1732CST			0	0			Funnel Cloud
<b>Thomas County</b> 4 W Colby	29	1802CST			0	0			Hail (1.75)
<b>Thomas County</b> 1 E Colby	29	1807CST			0	0			Hail (1.75)
<b>Thomas County</b> 2 NE Colby	29	1828CST			0	0			Funnel Cloud
<b>Thomas County</b> 12 S Levant	29	1845CST			0	0			Hail (1.00)
<b><u>KANSAS, Southeast</u></b>									
<b>Barton County</b> 4 N Great Bend	08	1353CST			0	0			Hail (0.75)
<b>Harper County</b> 5 N Attica	08	1415CST			0	0			Hail (1.00)
<b>Russell County</b> Waldo	08	1415CST			0	0	1K	5K	Hail (1.00)
		Two cars side-swiped on Highway 18. One patrol car sustained broken windshield. Part of the wheat crop also sustained damage.							
<b>Harper County</b> Harper	08	1430CST			0	0			Hail (1.75)
<b>Harper County</b> Danville	08	1433CST			0	0			Hail (1.75)
<b>Harper County</b> Runnymede	08	1441CST			0	0			Hail (1.75)
<b>Harper County</b> 2 S Danville	08	1443CST			0	0			Hail (2.75)
<b>Lincoln County</b> 10 N Sylvan Grove	08	1449CST			0	0			Hail (1.00)
<b>Ellsworth County</b> 10 E Lorraine	08	1451CST			0	0			Thunderstorm Wind (G52)
<b>Reno County</b> Nickerson	08	1456CST			0	0			Thunderstorm Wind (G52)
<b>Sumner County</b> 2 S Milton	08	1456CST			0	0			Hail (0.75)
<b>Lincoln County</b> Ash Grove	08	1500CST			0	0		25M	Hail (1.00)
		About 50% of wheat crop damaged.							



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Lincoln County</b> Barnard	08	1510CST			0	0			Hail (1.75)
<b>Rice County</b> 5 SE Geneseo	08	1510CST			0	0			Hail (1.00)
<b>Rice County</b> 1 N Little River	08	1515CST			0	0			Hail (1.50)
<b>Reno County</b> Nickerson	08	1520CST			0	0			Thunderstorm Wind (G52)
<b>Reno County</b> 4 N Hutchinson	08	1521CST			0	0			Hail (1.75)
<b>Sumner County</b> 2 N Wellington	08	1525CST			0	0			Thunderstorm Wind (G78)
<b>Mcperson County</b> Moundridge	08	1530CST			0	0			Hail (1.75)
<b>Reno County</b> 2 SE Buhler	08	1537CST	0.2	55	0	0			Tornado (F0)
<b>Sumner County</b> 5 S Belle Plaine	08	1542CST	1	110	0	0			Tornado (F0)
<b>Harvey County</b> 7 N Burrton	08	1544CST	2	110	0	0	150K		Tornado (F0)
									One farm sustained damage to three outbuildings while the residence sustained roof damage and had several windows blown out. A second farmstead sustained damage to it's roof, two barns and a metal shed.
<b>Cowley County</b> Udall	08	1549CST			0	0			Thunderstorm Wind (G52)
<b>Reno County</b> 1 W Buhler	08	1600CST			0	0			Hail (1.75)
<b>Reno County</b> 5 E Hutchinson	08	1600CST			0	0			Hail (0.88)
<b>Reno County</b> 5 E Hutchinson	08	1600CST			0	0			Thunderstorm Wind (G52)
<b>Cowley County</b> 1 N Rock	08	1608CST			0	0			Thunderstorm Wind (G52)
<b>Harvey County</b> 2 SW Hesston to 2 S Hesston	08	1617CST	0.2	55	0	0			Tornado (F0)
<b>Cowley County</b> 6 S Udall	08	1626CST	0.2	55	0	0	500K		Tornado (F0)
									One barn and a few houses damaged.
<b>Sumner County</b> 4 E Belle Plaine	08	1630CST			0	0			Hail (1.75)
<b>Sumner County</b> 4 E Belle Plaine	08	1630CST			0	0			Thunderstorm Wind (G56)
<b>Marion County</b> Peabody	08	1657CST			0	0			Hail (0.75)
<b>Marion County</b> 4 SE Peabody	08	1700CST			0	0			Thunderstorm Wind (G56)
									Mobile home moved from foundation. Trees damaged and blown down.
<b>Chase County</b> 1 SW Wonsevu	08	1735CST	0.2	55	0	0	10K		Tornado (F0)
									Outbuildings damaged.
<b>Labette County</b> Dennis	08	1935CST			0	0	10K		Thunderstorm Wind (G52)
									Back porch lost half of it's roof.
<b>Labette County</b> 2 E Parsons	08	1935CST			0	0			Thunderstorm Wind (G65)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Neosho County</b> 8 SE Thayer	08	1935CST			0	0			Thunderstorm Wind (G52)
<b>Wilson County</b> 10 E Neodesha	08	1935CST			0	0			Thunderstorm Wind (G52)
<b>Elk County</b> Moline	08	2106CST			0	0			Hail (0.75)
<b>Montgomery County</b> Sycamore	08	2203CST			0	0			Hail (0.75)
<b>Montgomery County</b> Cherryvale	08	2220CST			0	0			Hail (0.75)
<b>Montgomery County</b> Independence	08	2220CST			0	0	1M		Hail (1.50)
									Wind-driven hail smashed windows and inflicted considerable damage to roofs and vehicles.
<b>Montgomery County</b> Independence	08	2220CST			0	0	1M		Thunderstorm Wind (G52)
									Numerous trees blown over, inflicting damage to at least 3 houses. Nine utility poles blown over, severing power to numerous residences.
<b>Labette County</b> Altamont	08	2252CST			0	0			Hail (0.75)
<b>Labette County</b> Altamont	08	2252CST			0	0			Thunderstorm Wind (G52)
<b>Butler County</b> Augusta	10	1741CST			0	0			Thunderstorm Wind (G52)
<b>Butler County</b> Haverhill	10	1742CST			0	0			Thunderstorm Wind (G52)
<b>Butler County</b> 1 E Haverhill	10	1743CST			0	0			Hail (0.75)
<b>Butler County</b> 1 W Augusta	10	1751CST			0	0			Hail (0.75)
<b>Butler County</b> Haverhill	10	1752CST			0	0			Hail (0.75)
<b>Cowley County</b> Rock	10	1800CST			0	0			Hail (0.75)
<b>Butler County</b> El Dorado	10	1805CST			0	0	150K		Thunderstorm Wind (G61)
									In South El Dorado, 4 aircraft and 1 older hangar damaged.
<b>Butler County</b> 5 S El Dorado	10	1807CST			0	0			Hail (1.00)
<b>Cowley County</b> Rock	10	1815CST			0	0			Hail (1.00)
<b>Chase County</b> 5 SW Cottonwood Falls	10	1830CST			0	0			Thunderstorm Wind (G52)
<b>Chase County</b> 3 W Cottonwood Falls	10	1830CST			0	0			Thunderstorm Wind (G50)
<b>Cowley County</b> Rock	10	1940CST			0	0			Hail (1.00)
<b>Sedgwick County</b> 5 W Viola	10	2125CST			0	0			Thunderstorm Wind (G52)
<b>Sedgwick County</b> Cheney	13	1535CST			0	0			Hail (0.75)
<b>Sedgwick County</b> Mt Hope	13	1548CST			0	0			Hail (1.75)
<b>Sedgwick County</b> Wichita	13	1554CST			0	0			Hail (1.75)
									Reported in East Wichita.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Cowley County Arkansas City</b>	13	1559CST			0	0			Hail (0.75)
<b>Sedgwick County Park City</b>	13	1600CST			0	0			Thunderstorm Wind (G52)
<b>Sedgwick County Wichita</b>	13	1600CST			0	0			Hail (1.00)
		Reported in East Wichita.							
<b>Butler County Andover</b>	13	1603CST			0	0			Hail (1.00)
<b>Marion County Peabody</b>	13	1605CST			0	0	5K		Hail (0.75)
		Hail combined with high winds to inflict tree damage in Marion and Peabody.							
<b>Cowley County Arkansas City</b>	13	1607CST			0	0			Hail (1.25)
<b>Cowley County Winfield</b>	13	1621CST			0	0			Hail (1.25)
<b>Butler County 5 E Whitewater</b>	13	1625CST			0	0			Thunderstorm Wind (G61)
<b>Chase County 7 NW Elmdale</b>	13	1630CST			0	0			Hail (0.88)
<b>Sumner County 5 S Belle Plaine</b>	13	1635CST	0.5	55	0	0	50K		Tornado (F0)
		A few outbuildings damaged.							
<b>Cowley County 9 W Arkansas City</b>	13	1644CST			0	0			Thunderstorm Wind (G61)
<b>Chase County Elmdale</b>	13	1650CST	0.5	55	0	0			Tornado (F0)
<b>Sumner County Corbin</b>	13	1650CST			0	0			Hail (2.75)
<b>Sumner County Corbin</b>	13	1650CST			0	0			Thunderstorm Wind (G70)
<b>Sumner County Wellington</b>	13	1708CST			0	0	2M		Hail (1.75)
		Wind-driven golfball-sized hail smashed windows, dented siding and caused widespread roof damage.							
<b>Sumner County Wellington</b>	13	1708CST			0	0			Thunderstorm Wind (G61)
<b>Sumner County Caldwell</b>	13	1709CST			0	0			Hail (0.75)
<b>Sumner County Caldwell</b>	13	1709CST			0	0	1M		Thunderstorm Wind (G61)
		Winds of 70 mph combined with 0.75 inch hail to inflict widespread damage to trees, power lines, homes, and blew roofs off barns, sheds and outbuildings.							
<b>Chase County 10 NW Elmdale</b>	13	1710CST			0	0			Hail (2.50)
<b>Sumner County Wellington</b>	13	1720CST			0	0	1M		Hail (1.75)
		Hail smashed windows to numerous cars and buildings.							
<b>Cowley County Udall</b>	13	1722CST			0	0	200K		Hail (4.50)
		Softball to grapefruit-sized hail smashed windows and inflicted roof and siding damage to at least 20 homes. Also, at least 20 cars sustained broken windows.							
<b>Sedgwick County 5 S Wichita</b>	13	1725CST			0	0			Thunderstorm Wind (G61)
<b>Cowley County 4 W Udall</b>	13	1728CST			0	0			Hail (2.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Cowley County</b> 1 W Burden to Burden	13	1729CST 1733CST	1	110	0	0	500K		Tornado (F0)
									Minor damage inflicted to a few homes on south side of Burden.
<b>Butler County</b> Douglass	13	1733CST			0	0			Hail (1.75)
<b>Butler County</b> Smileyburg	13	1738CST			0	0			Hail (1.00)
<b>Greenwood County</b> 3 W Eureka	13	1803CST			0	0			Hail (1.75)
<b>Woodson County</b> 1 W Yates Center	13	1832CST			0	0			Hail (0.75)
<b>Greenwood County</b> Madison	13	1846CST			0	0			Hail (1.75)
<b>Allen County</b> Moran	13	1900CST			0	0	10K		Lightning
									Lightning struck one home, setting it on fire and causing moderate damage.
<b>Wilson County</b> Fredonia	13	1908CST			0	0			Thunderstorm Wind (G52)
<b>Woodson County</b> 2 S Yates Center	13	2135CST			0	0			Hail (0.88)
<b>Allen County</b> 7 S La Harpe	18	1433CST			0	0			Hail (0.75)
<b>Labette County</b> 3 S Bartlett	18	1643CST			0	0			Hail (0.75)
<b>Labette County</b> Chetopa	18	1645CST			0	0			Hail (0.75)
<b>Cowley County</b> 8 E Hackney	19	1749CST			0	0			Hail (0.75)
<b>Cowley County</b> 3 SW Udall	19	1811CST			0	0			Hail (0.75)
<b>Sumner County</b> 4 S Belle Plaine	19	1815CST			0	0			Hail (0.75)
<b>Sumner County</b> 5 S Oxford	19	1830CST			0	0			Hail (1.75)
<b>Butler County</b> 3 SE Douglass	19	1832CST			0	0			Hail (0.88)
<b>Cowley County</b> 1 NW Udall	19	1845CST			0	0			Hail (0.75)
<b>Cowley County</b> 1 NW Udall	19	1845CST			0	0			Thunderstorm Wind (G52)
<b>Butler County</b> Leon	19	1847CST			0	0			Hail (0.75)
<b>Cowley County</b> 2 S Udall	19	1850CST			0	0			Hail (1.75)
<b>Sedgwick County</b> Wichita	19	1921CST			0	0			Hail (1.75)
									Reported in East Wichita.
<b>Butler County</b> Andover	19	1923CST			0	0			Hail (0.75)
<b>Greenwood County</b> Eureka	19	1923CST			0	0			Hail (1.00)
<b>Greenwood County</b> Eureka	19	1925CST			0	0			Hail (1.75)
<b>Cowley County</b> Arkansas City	19	1930CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Greenwood County</b> Eureka	19	1930CST			0	0			Hail (1.75)
<b>Sedgwick County</b> 3 E Wichita	19	1930CST			0	0			Hail (1.00)
<b>Marion County</b> 5 NE Marion	19	2005CST			0	0			Hail (0.75)
<b>Cowley County</b> Hackney	20	1852CST			0	0			Hail (0.75)
<b>Sumner County</b> 2 SE Adamsville	20	1854CST			0	0			Hail (1.75)
<b>Sumner County</b> 1 SE Adamsville	20	1910CST			0	0			Hail (1.75)
<b>Cowley County</b> Arkansas City	20	1923CST			0	0			Hail (1.00)
<b>KSZ098</b> Chautauqua	20	1940CST			0	0	2K		High Wind (G61)
			Non-thunderstorm winds tore shingles off a roof.						
<b>Cowley County</b> 8 N Winfield	20	1950CST			0	0			Hail (0.88)
<b>Greenwood County</b> 4 W Hamilton	20	2017CST			0	0			Hail (0.88)
<b>Greenwood County</b> Eureka	20	2036CST			0	0			Hail (1.00)
<b>Greenwood County</b> 12 E Eureka	20	2057CST			0	0			Hail (0.75)
<b>Woodson County</b> Toronto	20	2100CST			0	0			Thunderstorm Wind (G52)
<b>Woodson County</b> Toronto	20	2107CST			0	0			Hail (0.75)
<b>Barton County</b> Great Bend	21	0400CST			0	0	10K		Thunderstorm Wind (G57)
			A 115,000-volt main transmission line was blown down in Great Bend, leaving all of Great Bend without power for approximately 45 minutes.						
<b>Butler County</b> 1 E De Graff	21	0424CST			0	0			Hail (1.75)
<b>Rice County</b> Lyons	21	0508CST			0	0	25K	25K	Thunderstorm Wind (G53)
			Damage to wheat crop east of Sterling and just north of Lyons. Corn crop damaged west of Lyons near Chase.						
<b>Mcperson County</b> Marquette	21	0524CST			0	0			Hail (1.00)
<b>Mcperson County</b> 5 SW Mc Pherson	21	0525CST			0	0	85K		Thunderstorm Wind (G61)
			Awning of service station blown down, a restaurant sign was blown down, a barn just southwest Mcpherson severely damaged, and numerous tree limbs blew onto power lines severing power to numerous residences.						
<b>Mcperson County</b> Windom	21	0525CST			0	0			Thunderstorm Wind (G52)
<b>Mcperson County</b> Mc Pherson	21	0540CST			0	0			Thunderstorm Wind (G52)
<b>Mcperson County</b> Moundridge	21	0551CST			0	0			Thunderstorm Wind (G61)
<b>Harvey County</b> 5 NE Newton	21	0603CST			0	0			Thunderstorm Wind (G52)
<b>Marion County</b> Peabody	21	0609CST			0	0			Thunderstorm Wind (G52)
<b>Marion County</b> Marion	21	0612CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
Reno County 8 S Hutchinson	21	2114CST			0	0			Hail (1.75)
Reno County Nickerson	21	2122CST			0	0			Hail (1.75)
Reno County Castleton	21	2146CST			0	0			Hail (1.00)
Chase County Matfield Green	21	2200CST			0	0			Hail (1.75)
Chase County Matfield Green	21	2230CST			0	0			Hail (0.75)
Sedgwick County 2 N Mt Hope	21	2241CST			0	0			Thunderstorm Wind (G52)
Russell County Milberger	22	0015CST			0	0	5K		Hail (1.75)
		Damage sustained to windows, screens, siding and outbuildings.							
Russell County Luray	22	0040CST			0	0			Thunderstorm Wind (G52)
Barton County Galatia	22	0045CST			0	0			Thunderstorm Wind (G52)
Russell County Luray	22	0047CST			0	0			Thunderstorm Wind (G61)
Russell County Wilson Lake	22	0055CST			0	0			Thunderstorm Wind (G52)
Barton County Ellinwood	22	0130CST			0	0			Thunderstorm Wind (G52)
Rice County Lyons	22	0132CST			0	0			Thunderstorm Wind (G62)
Mcpheerson County Windom	22	0200CST			0	0			Thunderstorm Wind (G52)
Marion County Lehigh	22	0230CST			0	0			Thunderstorm Wind (G65)
Marion County 4 E Durham	22	0340CST			0	0			Thunderstorm Wind (G52)
Reno County 7 SE Castleton	22	2020CST			0	0			Hail (0.75)
Sedgwick County Andale	22	2024CST			0	0			Hail (0.75)
Sedgwick County 2 S Mt Hope	22	2042CST			0	0			Hail (0.75)
Sedgwick County Andale	22	2043CST			0	0			Hail (1.00)
Sedgwick County 2 E Andale	22	2045CST			0	0			Hail (1.00)
Reno County 2 W Pretty Prairie	22	2103CST			0	0			Hail (1.00)
Saline County 1 SE Salina	22	2115CST			0	0			Hail (0.75)
Reno County 1 SW Haven	22	2116CST			0	0			Hail (0.88)
Reno County Plevna	22	2140CST			0	0			Hail (1.00)
Reno County Plevna	22	2146CST			0	0			Hail (1.25)
Barton County Heizer	22	2153CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
Sedgwick County Andale	22	2155CST			0	0			Hail (0.88)
Reno County 7 SE Castleton	22	2159CST			0	0			Hail (0.88)
Reno County Hutchinson	22 23	2225CST 0118CST			0	0			Flash Flood
			Urban flooding occurred across Hutchinson.						
Sedgwick County 2 N Andale	22 23	2248CST 0018CST			0	0			Flash Flood
			The Cowskin Creek flooded 1 mile stretch of 247th Street N, 2 miles N of Andale.						
Sedgwick County Andale	22	2249CST			0	0			Hail (0.88)
Reno County Partridge	22	2301CST			0	0			Hail (0.75)
Sedgwick County Bentley	22	2305CST			0	0			Hail (0.75)
Reno County Elmer	22	2328CST			0	0			Hail (1.75)
Butler County 5 N De Graff	22	2340CST			0	0			Hail (0.75)
Butler County 5 N De Graff	22	2340CST			0	0			Thunderstorm Wind (G52)
Harvey County Halstead	22	2350CST			0	0			Thunderstorm Wind (G50)
Harvey County Sedgwick	23	0001CST			0	0	1K		Thunderstorm Wind (G56)
			Tree damage and construction signs blown down on U.S. Highway 50.						
Sedgwick County 5 NW Valley Center	23	0001CST			0	0			Thunderstorm Wind (G56)
Reno County Hutchinson	23	0012CST			0	0			Hail (0.75)
Butler County 10 N El Dorado	23	0015CST			0	0			Thunderstorm Wind (G52)
Sedgwick County Andale	23	0015CST			0	0			Thunderstorm Wind (G56)
Russell County 2 SW Paradise	23	1935CST			0	0			Hail (2.50)
Russell County Waldo	23	1945CST			0	0			Hail (0.88)
Russell County 2 NE Waldo	23	1949CST			0	0			Hail (2.00)
Russell County Waldo	23	1950CST			0	0			Hail (2.00)
Lincoln County Denmark	24	1805CST			0	0			Thunderstorm Wind (G52)
Russell County 5 S Lucas	24	1805CST			0	0			Hail (0.75)
Lincoln County 5 NW Sylvan Grove	24	1818CST			0	0			Hail (0.75)
Russell County Russell	24	1837CST			0	0	12.5K		Thunderstorm Wind (G62)
			Empty semi tractor-trailer rig over turned on I-70.						
Russell County Russell	24	1840CST			0	0			Thunderstorm Wind (G55)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southeast</b>									
<b>Barton County</b> 3 N Albert	24	1919CST			0	0			Thunderstorm Wind (G61)
<b>Russell County</b> Russell	24	1919CST			0	0			Thunderstorm Wind (G52)
<b>Ellsworth County</b> Wilson	24	1920CST			0	0			Thunderstorm Wind (G52)
<b>Lincoln County</b> 8 S Sylvan Grove	24	1930CST			0	0			Thunderstorm Wind (G52)
<b>Barton County</b> 1 S Susank	24	2015CST			0	0			Hail (0.75)
<b>Barton County</b> 1 S Susank	24	2015CST			0	0			Thunderstorm Wind (G65)
<b>Russell County</b> 2 S Dorrance	24	2020CST			0	0	1K		Thunderstorm Wind (G55)
		Tree limb blown through a window.							
<b>Barton County</b> 3 W Olmitz	24	2024CST			0	0			Hail (0.75)
<b>Barton County</b> 3 W Olmitz	24	2024CST			0	0			Thunderstorm Wind (G52)
<b>Barton County</b> Albert	24	2025CST			0	0			Thunderstorm Wind (G52)
<b>Barton County</b> Hoisington	24	2030CST			0	0			Thunderstorm Wind (G70)
<b>Russell County</b> 2 S Dorrance	24	2030CST			0	0			Thunderstorm Wind (G52)
<b>Ellsworth County</b> 2 NW Holyrood	24	2045CST			0	0			Thunderstorm Wind (G61)
<b>Barton County</b> Beaver	24	2046CST			0	0			Thunderstorm Wind (G52)
<b>Ellsworth County</b> 2 W Ellsworth	24	2101CST			0	0			Thunderstorm Wind (G52)
<b>Lincoln County</b> 8 S Lincoln	24	2115CST			0	0			Thunderstorm Wind (G52)
<b>Lincoln County</b> 2 SW Lincoln	24	2115CST			0	0			Thunderstorm Wind (G52)
<b>Ellsworth County</b> 6 SE Lorraine	24	2120CST			0	0			Thunderstorm Wind (G61)
<b>Rice County</b> 4 W Geneseo	24	2120CST			0	0			Thunderstorm Wind (G61)
<b>Saline County</b> 1 E Brookville	24	2125CST			0	0			Thunderstorm Wind (G56)
<b>Saline County</b> Brookville	24	2139CST			0	0			Thunderstorm Wind (G53)
<b>Saline County</b> 1 E Brookville	24	2140CST			0	0			Thunderstorm Wind (G61)
<b>Saline County</b> Salina	24	2150CST			0	0			Thunderstorm Wind (G52)
<b>Marion County</b> Goessel	24	2354CST			0	0			Thunderstorm Wind (G55)
<b>Reno County</b> Nickerson	28	1915CST			0	1	1K		Lightning
		One wall of a storage shed set ablaze. One person sustained minor injuries.							



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Southeast</u></b>									
<b>Saline County</b> 5 N Salina	28	1925CST			0	0			Hail (0.75)
<b>Saline County</b> 2 S Salina	28	2010CST			0	0			Hail (1.00)
<b>Saline County</b> 5 W Salina	28	2017CST			0	0			Hail (1.00)
<b>Saline County</b> Assaria	28	2055CST			0	0			Thunderstorm Wind (G56)
<b>Saline County</b> Assaria	28	2105CST			0	0	300K		Hail (2.75) Extensive damage to 15 vehicles and houses sustained major roof damage and broken windows in a 3-mile wide area from near Smolan southeast to Assaria.
<b>Saline County</b> Assaria	28	2105CST			0	0	200K		Thunderstorm Wind (G61) Numerous power lines and power poles blown down, a shed blown over, and widespread roof damage.
<b>Woodson County</b> 12 E Yates Center	29	2100CST			0	0	25K		Thunderstorm Wind (G52) Widespread tree damage.
<b>Allen County</b> Iola	29	2148CST			0	0	50K		Thunderstorm Wind (G58) Tree damage, most noteworthy being a 50-foot tree falling onto a car.
<b>Allen County</b> Moran	29	2150CST			0	0	200K		Thunderstorm Wind (G58) Windows blown out and roofs damaged. Numerous trees uprooted inflicting further roof damage and knocking down power lines that left much of Allen County without power for 8 hours.
<b>Greenwood County</b> Virgil	29	2159CST			0	0			Hail (1.00)
<b>Neosho County</b> Chanute	29	2159CST			0	0	90K		Thunderstorm Wind (G61) Trees and power lines downed.
<b>Neosho County</b> Erie	29	2203CST			0	0	1M		Thunderstorm Wind (G61) Two stores unroofed and two mobile homes heavily damaged. Numerous trees and power lines downed.
<b>Greenwood County</b> Virgil	29	2215CST			0	0			Hail (0.75)
<b>Allen County</b> Iola	30	0051CST			0	0			Hail (1.75)
<b><u>KANSAS, Southwest</u></b>									
<b>KSZ046</b> Rush	06	0700CST			0	0			Freeze Late season freeze damaged 115,200 acres of corn, milo and wheat. Extent of the damage was unknown.
<b>Morton County</b> 5 NNE Elkhart	07	2131CST			0	0			Hail (0.88)
<b>Morton County</b> 5 NNE Elkhart	07	2135CST			0	0			Hail (1.00)
<b>Gray County</b> Ingalls	07	2319CST			0	0			Thunderstorm Wind (G56)
<b>Scott County</b> 8 E Scott City	08	0100CST			0	0			Hail (0.75)
<b>Lane County</b> 1 E Shields	08	0130CST			0	0			Hail (0.75)
<b>Pawnee County</b> 6 NE Larned	08	1334CST			0	0			Hail (0.75)
<b>Barber County</b> 9 SW Medicine Lodge	08	1342CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southwest</b>									
<b>Barber County</b> Medicine Lodge	08	1345CST			0	0			Hail (0.75)
<b>Barber County</b> Medicine Lodge	08	1353CST			0	0			Hail (1.00)
<b>Barber County</b> Sharon	08	1400CST			0	0			Hail (0.88)
<b>Barber County</b> 4 SSW Sharon	08	1426CST			0	0			Hail (1.00)
			Hail completely covered the ground.						
<b>Barber County</b> 2 SE Sharon	08	1433CST			0	0			Hail (1.00)
<b>Barber County</b> 4 ESE Sharon	08	1439CST			0	0			Hail (1.00)
<b>Rush County</b> La Crosse	13	2000CST			0	0			Thunderstorm Wind (G65)
			Power lines and large tree branches down.						
<b>Stevens County</b> 8 SE Moscow	14	1915CST			0	0	50K		Thunderstorm Wind
			Irrigation sprinkler blown over and damaged.						
<b>Ellis County</b> Victoria	17	2202CST			0	0			Hail (1.00)
<b>Ness County</b> 2 NE Utica	21	0230CST			0	0			Hail (0.88)
<b>Pawnee County</b> 11 NNW Burdett	21	0245CST			0	0			Hail (1.00)
<b>Trego County</b> 11 SW Trego Center	21	0258CST			0	0			Hail (0.75)
<b>Lane County</b> 3 W Healy	21	0300CST			0	0			Hail (0.88)
<b>Ness County</b> 1 E Bazine	21	0304CST			0	0			Hail (1.75)
<b>Rush County</b> La Crosse	21	0317CST			0	0			Hail (1.00)
<b>Ness County</b> 3 NW Brownell	21	0320CST			0	0			Hail (0.75)
<b>Scott County</b> 15 SE Scott City	21	2305CST			0	0			Hail (0.75)
<b>Scott County</b> 15 SE Scott City	21	2305CST			0	0			Thunderstorm Wind (G52)
<b>Trego County</b> 17 SSW Wakeeney to 1 SSW Wakeeney	21	2310CST			0	0			Thunderstorm Wind (G52)
<b>Finney County</b> 3 E Friend	21	2318CST			0	0			Hail (0.75)
			Corn was completely stripped from the hail and wind.						
<b>Finney County</b> 3 E Friend	21	2318CST			0	0			Thunderstorm Wind (G52)
<b>Ness County</b> 17 NE Ness City	21	2345CST			0	0			Thunderstorm Wind (G61)
<b>Trego County</b> 19 SE Trego Center	21	2345CST			0	0			Thunderstorm Wind (G57)
<b>Trego County</b> 19 SE Wakeeney	21	2345CST			0	0			Hail (0.75)
<b>Ellis County</b> Hays	22	0001CST			0	0			Thunderstorm Wind (G65)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southwest</b>									
<b>Scott County</b> Shallow Water	22	0002CST			0	0			Thunderstorm Wind (G52)
<b>Rush County</b> Liebenthal	22	0030CST			0	0			Hail (0.75)
<b>Gray County</b> 5 NNW Montezuma	22	0039CST			0	0			Hail (0.75)
<b>Meade County</b> 16 NW Meade	22	0045CST			0	0			Hail (0.88)
<b>Meade County</b> 16 NW Meade	22	0045CST			0	0			Thunderstorm Wind (G57)
<b>Edwards County</b> Offerle	22	0050CST			0	0			Thunderstorm Wind (G51)
<b>Ford County</b> 11 SSE Dodge City to 11 SE Dodge City	22	0115CST			0	0			Hail (0.75)
<b>Pawnee County</b> 2 SW Garfield	22	0120CST			0	0			Thunderstorm Wind (G57)
<b>Meade County</b> 10 SW Meade	22	1839CST			0	0			Hail (0.88)
<b>Clark County</b> 18 WSW Ashland	22	1840CST			0	0			Hail (0.75)
<b>Meade County</b> 2 S Plains	22	1847CST			0	0			Hail (1.00)
<b>Meade County</b> Plains	22	1850CST			0	0			Hail (1.75)
<b>Seward County</b> Kismet	22	1854CST			0	0			Hail (0.88)
<b>Seward County</b> 3 E Kismet	22	1910CST			0	0			Hail (0.75)
<b>Meade County</b> Plains	22	1925CST			0	0			Hail (1.75)
<b>Clark County</b> 8 E Minneola	22	1940CST			0	0			Hail (0.75)
<b>Ford County</b> Kingsdown	22	1940CST			0	0			Hail (1.00)
<b>Ford County</b> Kingsdown	22	1940CST			0	0			Thunderstorm Wind (G52)
<b>Gray County</b> 13 ESE Montezuma	22	1940CST			0	0			Hail (1.00)
<b>Ford County</b> 3 S Dodge City	22	1941CST			0	0			Hail (1.00)
<b>Ford County</b> 5 SE Dodge City	22	1945CST			0	0			Hail (1.00)
<b>Ford County</b> 5 SE Dodge City	22	1948CST			0	0			Hail (1.75)
<b>Ford County</b> Dodge City	22	1948CST			0	0			Hail (1.75)
<b>Ford County</b> Dodge City	22	1952CST			0	0			Hail (0.88)
<b>Ford County</b> Dodge City Arpt	22	1953CST			0	0			Hail (1.75)
<b>Ford County</b> Wright	22	1955CST			0	0			Hail (1.75)
<b>Kiowa County</b> 6 NW Mullinville	22	1955CST			0	0			Thunderstorm Wind (G61)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Southwest</u></b>									
									Damage was done to a hay shed.
<b>Ford County</b>									
Dodge City	22	1956CST			0	0			Hail (0.88)
<b>Ford County</b>									
Dodge City	22	1957CST			0	0			Hail (1.75)
<b>Ford County</b>									
5 SE Dodge City	22	1957CST			0	0			Hail (0.75)
<b>Gray County</b>									
15 SW Ingalls	22	2015CST			0	0			Hail (0.75)
<b>Kiowa County</b>									
5 ENE Mullinville	22	2035CST			0	0			Thunderstorm Wind (G61)
<b>Edwards County</b>									
Centerview	22	2038CST			0	0			Hail (0.75)
<b>Edwards County</b>									
Centerview	22	2038CST			0	0	5K		Thunderstorm Wind
									Six inch diameter tree limbs blown down.
<b>Edwards County</b>									
13 SSE Kinsley	22	2045CST			0	0			Hail (0.75)
									Some crops stripped.
<b>Edwards County</b>									
10 NW Kinsley	22	2045CST			0	0			Thunderstorm Wind (G52)
<b>Finney County</b>									
12 N Kalvesta	22	2055CST			0	0			Thunderstorm Wind (G61)
<b>Hodgeman County</b>									
5 S Hanston	22	2055CST			0	0	1.8K		Hail (1.75)
									Windshield broken.
<b>Pawnee County</b>									
7 S Rozel	22	2100CST			0	0			Hail (1.00)
									Twenty-five percent of the crops damaged or destroyed.
<b>Pawnee County</b>									
1 N Larned	22	2130CST			0	0			Hail (0.75)
<b>Stafford County</b>									
2 S Macksville	22	2145CST			0	0			Hail (0.75)
<b>Rush County</b>									
18 SE La Crosse	22	2150CST			0	0			Hail (0.88)
<b>Ellis County</b>									
1 SE Catharine	23	1650CST			0	0			Hail (0.75)
<b>Ellis County</b>									
12 NE Ellis	23	1655CST			0	0			Hail (0.75)
<b>Lane County</b>									
Dighton	24	1629CST			0	0			Thunderstorm Wind (G52)
<b>Grant County</b>									
Ulysses	24	1817CST			0	0	15K		Thunderstorm Wind
									Dry microburst produced high wind that took the roof off of one house and damaged numerous trees and power lines. Wind was probably over 100 knots.
<b>Rush County</b>									
7 W La Crosse	24	1825CST			0	0			Tstm Wind/Hail
									An awning was damaged by wind or hail...report was not clear.
<b>Ellis County</b>									
16 SE Hays	24	1845CST			0	0			Thunderstorm Wind (G52)
									A fence was blown down.
<b>Ness County</b>									
18 ENE Ness City	24	1850CST			0	0			Thunderstorm Wind (G55)
<b>Gray County</b>									
Cimarron	24	1855CST			0	0			Thunderstorm Wind (G57)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS, Southwest</b>									
<b>Rush County</b> 1 E Rush Center	24	1915CST			0	0			Hail (0.88)
<b>Rush County</b> Otis	24	1930CST Power pole snapped			0	0	0.50K		Thunderstorm Wind
<b>Hodgeman County</b> 8 N Jetmore	24	1933CST			0	0			Hail (0.75)
<b>Ford County</b> 9 N Dodge City	24	1952CST			0	0			Thunderstorm Wind (G52)
<b>Hodgeman County</b> 10 S Jetmore	24	1954CST			0	0			Hail (0.75)
<b>Gray County</b> Cimarron	24	2006CST Three inch tree limbs down.			0	0	0.10K		Thunderstorm Wind
<b>Ness County</b> 13 S Ness City	24	2020CST Four inch tree limbs down.			0	0			Thunderstorm Wind (G70)
<b>Ford County</b> 1 E Spearville	24	2030CST			0	0			Hail (0.88)
<b>Ford County</b> 1 E Spearville	24	2030CST Three inch tree limbs blown down.			0	0			Thunderstorm Wind (G57)
<b>Ness County</b> 17 SE Ness City	24	2030CST A roof on a shed was partially lifted off.			0	0			Thunderstorm Wind (G57)
<b>Edwards County</b> 6 NW Kinsley	24	2035CST			0	0			Thunderstorm Wind (G52)
<b>Pawnee County</b> 9 N Burdett	24	2045CST Three inch tree limbs blown down.			0	0			Thunderstorm Wind (G68)
<b>Pawnee County</b> Rozel	24	2100CST			0	0			Thunderstorm Wind (G65)
<b>Pawnee County</b> Garfield	28	1802CST			0	0			Hail (1.75)
<b>Pawnee County</b> 9 NE Garfield	28	1830CST			0	0			Hail (0.75)
<b>Pawnee County</b> 6 W Larned	28	1830CST			0	0			Hail (1.75)
<b>Pawnee County</b> 2 E Larned	28	1831CST			0	0			Hail (1.00)
<b>Pawnee County</b> Larned	28	1837CST			0	0			Hail (1.75)
<b>Pawnee County</b> 7 NE Garfield	28	1852CST			0	0			Hail (0.75)
<b>Pawnee County</b> 3 NE Garfield	28	1855CST Two inch tree limbs down.			0	0			Thunderstorm Wind (G52)
<b>Pawnee County</b> 5 W Larned	28	1905CST A 40 by 80 foot shed was destroyed.			0	0	20K		Thunderstorm Wind
<b>Pawnee County</b> 4 W Larned	28	1905CST Thirteen power poles blown down.			0	0	6.5K	125K	Thunderstorm Wind
<b>Pawnee County</b> 2 W Larned	28	1908CST A sod house was destroyed at the Sante Fe Museum.			0	0			Thunderstorm Wind (G70)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KANSAS, Southwest</u></b>									
<b>Pawnee County</b> 11 SW Larned	28	1930CST			0	0			Hail (0.75)
<b>Stafford County</b> 1 NW St John	28	1955CST			0	0			Thunderstorm Wind (G57)
<b>KSZ078</b> <b>Ford</b>	29	1500CST			0	0			Excessive Heat
The high temperature at the Dodge City airport reached 110 degrees which was the all-time high temperature, ever. The previous hottest temperature was 109. This heat lasted for about a week.									
<b>Scott County</b> 13 NW Scott City	29	1723CST			0	0			Hail (1.75)
Reported by NWS Goodland.									
<b>Scott County</b> 11 N Modoc	29	1730CST			0	0			Hail (0.88)
<b>Scott County</b> 10 N Modoc	29	1740CST			0	0			Hail (1.00)
<b>Scott County</b> 5 N Scott City	29	1745CST			0	0			Hail (1.75)
<b>Stevens County</b> 13 NW Hugoton	29	1915CST			0	0			Thunderstorm Wind (G52)
<b>Scott County</b> 10 E Scott City	30	0330CST			0	0			Thunderstorm Wind (G68)
Four inch tree limbs down.									
<b>Lane County</b> 2 NW Amy	30	0400CST			0	0	3K		Thunderstorm Wind (G68)
Five to 10 inch tree limbs down. Several power poles destroyed.									
<b>Finney County</b> 4 S Kalvesta	30	0430CST			0	0			Thunderstorm Wind (G64)
<b>Hodgeman County</b> 22 WSW Jetmore	30	0515CST			0	0			Thunderstorm Wind (G55)
Two inch tree limbs blown down.									
<b>Meade County</b> 15 S Meade	30	2150CST			0	0			Hail (1.00)
<b>Clark County</b> 14 SW Ashland	30	2233CST			0	0			Thunderstorm Wind (G52)
<b><u>KENTUCKY, Central</u></b>									
<b>Meade County</b> Flaherty	10	1250EST			0	0	50K		Thunderstorm Wind (G60)
<b>Nelson County</b> Coxs Creek	10	1315EST			0	0			Thunderstorm Wind (G50)
Straight line wind damage was reported by spotters and DES. 3 trailers were destroyed and 19 damaged in Flaherty, otherwise, trees and power lines were down.									
<b>KYZ061</b> <b>Butler</b>	10	1400EST			0	0			Flood
	13	2200EST							
Minor flooding occurred along the Green River. Woodbury crested at 35.0 feet (flood stage is 33 feet) at 5 pm est June 12, while Rochester Ferry crested at 18.8 feet (flood stage is 17 feet) at 5 am est on June 13.									
<b>Jefferson County</b> Louisville	10	1730EST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Louisville	10	1745EST 1830EST			0	0			Flash Flood
Louisville International Airport had a gust of 60 mph, while numerous trees and power lines were down across the county. Following the severe damage, heavy rain caused numerous streets to flood. Report was from DES, public and news media. Doppler radar estimated 2.5 inches of rain in 1 hour in the downtown area.									
<b>Logan County</b> Countywide	10	1830EST 2100EST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Simpson County</b> Countywide	10	1830EST 2100EST			0	0			Flash Flood
<b>Warren County</b> Countywide	10	1830EST 2100EST			0	0			Flash Flood
Newspaper reported several streets water covered across these counties.									
<b>Jefferson County</b> Louisville	12	2145EST 2200EST			0	0	10K		Thunderstorm Wind (G52)
<b>Meade County</b> Wolf Creek to Flaherty	12	2145EST 2200EST			0	0			Thunderstorm Wind (G50)
<b>Oldham County</b> Goshen to Pewee Vly	12	2145EST 2200EST			0	0			Thunderstorm Wind (G50)
<b>Bullitt County</b> Mt Washington to Lebanon Jct	12	2200EST 2220EST			0	0			Thunderstorm Wind (G50)
<b>Breckinridge County</b> Ammons to Madrid	12 13	2205EST 2220EST			0	0			Thunderstorm Wind (G50)
<b>Shelby County</b> Toddspoint to Hemp Ridge	12	2205EST 2220EST			0	0			Thunderstorm Wind (G50)
<b>Spencer County</b> Elk Creek to Van Buren	12	2215EST 2220EST			0	0			Thunderstorm Wind (G50)
<b>Franklin County</b> Frankfort	12	2230EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b> Alton	12	2235EST			0	0			Thunderstorm Wind (G50)
<b>Woodford County</b> Millville to Nonesuch	12	2235EST 2250EST			0	0			Thunderstorm Wind (G50)
<b>Scott County</b> Stonewall to Davis	12	2240EST 2250EST			0	0			Thunderstorm Wind (G50)
<b>Fayette County</b> Lexington	12	2250EST 2300EST			0	0			Thunderstorm Wind (G50)
<b>Hart County</b> Bonnieville	13	0030EST			0	0			Thunderstorm Wind (G50)
<b>Marion County</b> Lebanon	13	0050EST			0	0			Thunderstorm Wind (G50)
<b>Green County</b> Greensburg	13	0055EST			0	0			Thunderstorm Wind (G50)
A strong squall line moved southeast across south central Indiana and then into central Kentucky. Widespread damage reports were received from DES, spotters, state police, media and the public. Most of the damage was fallen trees and power lines. A couple of trees fell on cars in Louisville. 70,000 people lost their power in Louisville as the line moved through.									
<b>Warren County</b> 1 W Bowling Green to Bowling Green	14	0915EST 0940EST			0	0			Hail (1.75)
<b>Allen County</b> Meador	14	0951EST 0955EST			0	0			Hail (1.00)
<b>Logan County</b> Jerico	14	1000EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Monroe County</b> 1 W Gamaliel	14	1025EST			0	0			<b>Thunderstorm Wind (G50)</b> DES and spotters reported large hail and damaging winds as a cluster of storms moved across south central Kentucky. Only tree and power line damage was observed.
<b>Logan County</b> Countywide	14	1030EST 1300EST			0	0			<b>Flash Flood</b>
<b>Simpson County</b> Countywide	14	1030EST 1300EST			0	0			<b>Flash Flood</b>
<b>Warren County</b> Countywide	14	1030EST 1300EST			0	0			<b>Flash Flood</b>
<b>Barren County</b> South Portion	14	1100EST 1230EST			0	0			<b>Flash Flood</b>
<b>Monroe County</b> Countywide	14	1100EST 1230EST			0	0			<b>Flash Flood</b>  2 to 4 inches of rain fell over a large area of south central Kentucky in a 1 to 3 hour period. Grounds were already saturated from heavy rainfall during the previous week. This caused widespread flash flooding. State police reported numerous roads closed across these counties in addition to one man rescued in his car.
<b>Clark County</b> Ruckerville	14	1815EST			0	0			<b>Hail (0.75)</b> Dime size hail reported by spotter.
<b>Oldham County</b> Ballardsville	14	1850EST			0	0			<b>Hail (0.75)</b>
<b>Henry County</b> Pendleton	14	1855EST			0	0			<b>Hail (0.75)</b>
<b>Henry County</b> 2 N New Castle	14	1905EST			0	0			<b>Hail (1.25)</b> Dime to half dollar size hail reported by DES, spotters and state police.
<b>Ohio County</b> Centertown	14	2010EST			0	0			<b>Thunderstorm Wind (G60)</b>
<b>Butler County</b> Rochester	14	2030EST			0	0			<b>Hail (0.88)</b>
<b>Breckinridge County</b> Hardinsburg	14	2035EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Grayson County</b> Caneyville	14	2037EST			0	0			<b>Thunderstorm Wind (G62)</b>
<b>Hancock County</b> 5 S Hawesville	14	2040EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Edmonson County</b> Brownsville	14	2045EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Hardin County</b> 1 N Radcliff	14	2050EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Bullitt County</b> Shepherdsville	14	2100EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Hardin County</b> Howe Vly	14	2110EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Hart County</b> Bonnieville	14	2110EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Bullitt County</b> Brooks	14	2115EST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Boyle County</b> Danville	14	2117EST			0	0			<b>Thunderstorm Wind (G52)</b>



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Nelson County</b> Bardstown	14	2120EST			0	0			Thunderstorm Wind (G50)
<b>Larue County</b> Buffalo	14	2125EST			0	0	20K		Thunderstorm Wind (G60)
<b>Marion County</b> Lebanon	14	2140EST			0	0			Thunderstorm Wind (G50)
<b>Washington County</b> Springfield	14	2140EST			0	0			Thunderstorm Wind (G50)
<b>Edmonson County</b> Chalybeate	14	2145EST			0	0			Thunderstorm Wind (G50)
<b>Metcalfe County</b> Edmonton to Beechville	14	2145EST			0	0			Hail (0.75)
<b>Taylor County</b> Campbellsville to 2 N Campbellsville	14	2145EST			0	0	20K		Thunderstorm Wind (G60)
<b>Warren County</b> Bowling Green	14	2145EST			0	0			Thunderstorm Wind (G50)
<b>Green County</b> Allendale	14	2150EST			0	0			Thunderstorm Wind (G50)
<b>Mercer County</b> 3 N Harrodsburg to 2 N Harrodsburg	14	2215EST			0	0	20K		Thunderstorm Wind (G50)
<b>Woodford County</b> Versailles	14	2215EST			0	0			Thunderstorm Wind (G50)
<b>Fayette County</b> Lexington to Coletown	14	2220EST			0	0			Thunderstorm Wind (G50)
<b>Franklin County</b> Frankfort	14	2220EST			0	0			Thunderstorm Wind (G50)
<b>Garrard County</b> 3 N Lancaster	14	2225EST			0	0			Thunderstorm Wind (G50)
<b>Jessamine County</b> 1 N Nicholasville	14	2225EST			0	0			Thunderstorm Wind (G50)
<b>Clark County</b> Becknerville	14	2240EST			0	0			Thunderstorm Wind (G50)
<b>Madison County</b> Richmond	14	2245EST			0	0			Thunderstorm Wind (G52)
A bow echo moved across central Kentucky producing widespread reports of trees and power lines down. DES, state police, spotters and the public all made reports. One barn near Campbellsville was thrown several yards and heavily damaged. A few houses there also received minor damage as trees fell on them. Also, two barns were destroyed and one mobile home damaged in Buffalo as the line moved through. Finally, a barn was completely destroyed and a mobile home damaged in Mercer county.									
<b>Mercer County</b> Salvisa	14	2248EST 2300EST			0	0	50K		Lightning
Lightning struck an auto body shop causing major damage.									
<b>KYZ061</b> <b>Butler</b>	15	0600EST			0	0			Flood
	17	0500EST							
Minor flooding occurred once again along the Green River as Rochester Ferry reached 17.9 feet at 4 am est June 16.									
<b>Adair County</b> Columbia	19	0445EST			0	0	50K		Thunderstorm Wind (G60)
<b>Metcalfe County</b> Edmonton	19	0445EST			0	0	50K		Thunderstorm Wind (G60)
Dispatch reported numerous trees down with some roof damage to a few homes.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Oldham County</b> Westport	21	0010EST 0400EST			0	0			Flash Flood
			2 inches rain fell over a 1-2 hour time frame resulting in widespread flash flooding. Also, a rock slide occurred on highway 524 in Westport which blocked traffic. 10 homes had to be evacuated due to the high waters. Report was from state police.						
<b>Trimble County</b> 1 SW Abbott	21	0050EST 0300EST			0	0			Urban/Sml Stream Fld
			Police reported Pattons and Organ Creeks out of their banks.						
<b>Allen County</b> Scottsville	21	0200EST 0400EST			0	0			Urban/Sml Stream Fld
			DES reported several roads water covered and small creeks out of their banks.						
<b>Allen County</b> Scottsville	21	0220EST			0	0			Thunderstorm Wind (G50)
			Dispatch reported trees and power lines down.						
<b>Barren County</b> Temple Hill	21	0315EST			0	0			Thunderstorm Wind (G50)
			DES reported trees and power lines down.						
<b>Meade County</b> Countywide	21	0600EST 0800EST			0	0			Flash Flood
			State police reported water covering highway 448.						
<b>Adair County</b> Knifley	21	0600EST 1000EST			0	0			Flash Flood
			State police reported numerous roads closed and some homes surrounded by water.						
<b>Taylor County</b> Yuma	21	0600EST 1000EST			0	0			Flash Flood
			State police reported several roads water covered and homes evacuated.						
<b>Simpson County</b> Countywide	21	0730EST 1000EST			0	0			Flash Flood
			State police reported several roads water covered.						
<b>Allen County</b> Countywide	21	0730EST 1000EST			0	0			Flash Flood
			State police reported several roads water covered.						
<b>Warren County</b> Countywide	21	0730EST 1000EST			0	0			Flash Flood
			State police reported several roads water covered.						
<b>Jefferson County</b> Countywide	21	0730EST 0930EST			0	0			Flash Flood
			DES reported several roads water covered.						
<b>Hardin County</b> Countywide	21	0800EST 0930EST			0	0			Flash Flood
			DES reported several roads water covered.						
<b>Henry County</b> New Castle	22	1425EST			0	0			Thunderstorm Wind (G50)
<b>Oldham County</b> La Grange	22	1425EST 1440EST			0	2	20K		Thunderstorm Wind (G50)
<b>Trimble County</b> Bedford	22	1425EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Trimble County</b> Countywide	22	1430EST 1600EST			0	0			Flash Flood
<b>Oldham County</b> Westport	22	1445EST 1545EST			0	0			Flash Flood
<b>Trimble County</b> Bedford	22	1445EST			0	0			Thunderstorm Wind (G50)
<b>Jefferson County</b> Louisville	22	1500EST 1515EST			0	0			Thunderstorm Wind (G50)
<b>Oldham County</b> Westport	22	1500EST			0	0	200K		Lightning
<b>Bullitt County</b> Mt Washington	22	1530EST			0	0			Thunderstorm Wind (G52)
<b>Shelby County</b> Countywide	22	1530EST 1700EST			0	0			Flash Flood
<b>Shelby County</b> Shelbyville	22	1530EST			0	0			Thunderstorm Wind (G50)
<b>Nelson County</b> 1 N Bardstown	22	1545EST			0	0			Thunderstorm Wind (G50)
<b>Spencer County</b> Taylorsville	22	1545EST			0	0			Thunderstorm Wind (G50)
<b>Spencer County</b> Taylorsville	22	1545EST			0	0			Thunderstorm Wind (G75)
<b>Anderson County</b> Lawrenceburg	22	1555EST			0	0			Thunderstorm Wind (G50)
<b>Franklin County</b> Frankfort	22	1555EST			0	0			Thunderstorm Wind (G50)
<b>Washington County</b> Willisburg	22	1555EST			0	0			Thunderstorm Wind (G50)
<b>Bourbon County</b> Paris	22	1600EST			0	0			Thunderstorm Wind (G50)
<b>Fayette County</b> Lexington	22	1615EST			0	0			Thunderstorm Wind (G50)
<b>Woodford County</b> Versailles	22	1615EST			0	0			Thunderstorm Wind (G50)
<b>Jessamine County</b> Nicholasville	22	1620EST			0	0			Thunderstorm Wind (G50)
<b>Scott County</b> Georgetown	22	1620EST			0	0			Thunderstorm Wind (G50)
<b>Harrison County</b> Cynthiana	22	1625EST			0	0			Thunderstorm Wind (G50)
<b>Bourbon County</b> Paris	22	1630EST			0	0			Thunderstorm Wind (G50)
<b>Clark County</b> Countywide	22	1630EST 1800EST			0	0			Flash Flood
<b>Clark County</b> Winchester	22	1630EST			0	0			Thunderstorm Wind (G50)
<b>Nicholas County</b> Carlisle	22	1630EST			0	0			Thunderstorm Wind (G50)
<b>Boyle County</b> Danville	22	1635EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Central</b>									
<b>Lincoln County</b>									
Mc Kinney	22	1645EST			0	0			Thunderstorm Wind (G50)
<b>Madison County</b>									
Berea	22	1650EST 1705EST			0	0			Thunderstorm Wind (G50)
<b>Garrard County</b>									
Lancaster	22	1700EST			0	0			Thunderstorm Wind (G50)
<b>Madison County</b>									
Richmond	22	1705EST 1830EST			0	0			Flash Flood
<b>Lincoln County</b>									
Stanford	22	1710EST			0	0	10K		Thunderstorm Wind (G52)
<b>Adair County</b>									
Columbia	22	1728EST			0	0			Hail (1.00)
<b>Adair County</b>									
Columbia	22	1730EST			0	0	20K		Thunderstorm Wind (G52)
<b>Russell County</b>									
Russell Spgs	22	1743EST			0	0	10K		Thunderstorm Wind (G52)
An area of thunderstorms moved southeast across central Kentucky producing widespread wind damage and spotty large hail. Barns were blown down in Stanford and Russell Springs, while trees fell on houses in LaGrange and Columbia injuring 2 in LaGrange and trapping a family in Columbia. Lightning caused a fire in Westport that completely destroyed a house. Also, bridges were washed out in Westport and several locations in Trimble county, while several roads were under water across these and a few other counties .									
<b>Harrison County</b>									
Cynthiana	22	1625EST 1825EST			0	0			Flash Flood
Several roads were closed due to high water.									
<b>Hancock County</b>									
Hawesville	23	0030EST			0	0			Thunderstorm Wind (G50)
Dispatch reported lines down on River Road.									
<b>Breckinridge County</b>									
Cloverport	23	0045EST			0	0			Thunderstorm Wind (G50)
Dispatch reported trees down.									
<b>KYZ042</b>									
<b>Bourbon</b>									
	23	0600EST 2200EST			0	0			Flood
Minor flood occurred at Stoner Creek in Paris as the river crested at 12 pm est at 19.2 feet (flood stage is 18 feet).									
<b>Hancock County</b>									
Lewisport	23	1715EST			0	0			Hail (0.75)
Co-op observer reported dime size hail.									
<b>KYZ042</b>									
<b>Bourbon</b>									
	29	0700EST			0	0			Flood
	30	1900EST							
Minor flooding occurred along Stoner Creek in Paris. The creek crested at 19.8 feet (flood stage is 18 feet) on June 30 at 7 am edt.									
<b>Fayette County</b>									
Lexington	29	1348EST			0	0			Thunderstorm Wind (G50)
<b>Fayette County</b>									
Lexington	29	1400EST 1600EST			0	0			Flash Flood
Bluegrass Airport and several other locations across Lexington reported trees down. Numerous streets were water covered as well. Several major roads including Richmond Road and New Circle Road were inundated with up to 2 feet of water.									
<b>Hancock County</b>									
Lewisport	29	2130EST			0	0			Hail (0.75)
<b>Trimble County</b>									
Milton	29	2130EST			0	0			Thunderstorm Wind (G52)
<b>Oldham County</b>									
Goshen	29	2140EST			0	0			Thunderstorm Wind (G52)
<b>Breckinridge County</b>									
Hardinsburg	29	2145EST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KENTUCKY, Central</u></b>									
<b>Jefferson County</b>									
Louisville	29	2145EST			0	0			Thunderstorm Wind (G52)
<b>Bullitt County</b>									
Shepherdsville to Barrallton	29	2200EST			0	0			Thunderstorm Wind (G52)
<b>Shelby County</b>									
Shelbyville	29	2200EST			0	0			Thunderstorm Wind (G52)
<b>Ohio County</b>									
Hartford	29	2210EST			0	0			Hail (0.75)
<b>Ohio County</b>									
Hartford	29	2210EST			0	0	20K		Thunderstorm Wind (G60)
<b>Spencer County</b>									
Taylorsville	29	2213EST			0	0			Thunderstorm Wind (G52)
<b>Anderson County</b>									
Alton	29	2220EST			0	0			Thunderstorm Wind (G52)
<b>Scott County</b>									
Georgetown to Cranetown	29	2240EST			0	0			Thunderstorm Wind (G52)
<b>Woodford County</b>									
Versailles	29	2245EST			0	0			Thunderstorm Wind (G52)
<b>Fayette County</b>									
Lexington	29	2255EST			0	0			Thunderstorm Wind (G52)
<b>Clark County</b>									
Winchester	29	2305EST			0	0			Thunderstorm Wind (G52)
<b>Warren County</b>									
Bowling Green	29	2330EST			0	0			Thunderstorm Wind (G52)
DES, spotters and state police reported trees and power lines down and isolated large hail with the passage of a squall line that moved southeast across central Kentucky. A roof was torn from a house in Hartford and fell on a barn destroying it.									
<b><u>KENTUCKY, Eastern</u></b>									
<b>Wayne County</b>									
Countywide	01	0000EST 0200EST			0	0	0	0	Flash Flood
Numerous roads were flooded.									
<b>Pike County</b>									
1 SE Fedscreek	02	1547EST			0	0	0	0	Hail (0.75)
<b>Mccreary County</b>									
Stearns	03	0330EST			0	0	0	0	Hail (0.75)
<b>Breathitt County</b>									
Canoe	03	1655EST			0	0	0	0	Hail (1.00)
<b>Breathitt County</b>									
Canoe	03	1655EST			0	0	0	0	Thunderstorm Wind
Trees were downed.									
<b>Perry County</b>									
Dwarf	03	1722EST			0	0	0	0	Hail (1.75)
<b>Perry County</b>									
6 SE Hazard	03	1730EST			0	0	0	0	Thunderstorm Wind
Numerous trees were downed.									
<b>Letcher County</b>									
Jeremiah	03	1746EST			0	0	0	0	Hail (1.75)
<b>Letcher County</b>									
Whitesburg	03	1752EST			0	0	0	0	Hail (0.75)
<b>Pike County</b>									
10 S Pikeville	05	1652EST			0	0	0	0	Hail (0.75)
<b>Whitley County</b>									
Goldbug	05	1839EST			0	0	0	0	Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Eastern</b>									
<b>Knox County</b> Barbourville	05	1857EST			0	0	0	0	Hail (0.75)
<b>Knox County</b> Hinkle	05	1905EST			0	0	0	0	Hail (0.75)
<b>Rowan County</b> Morehead	10	0044EST			0	0	0	0	Hail (1.00)
<b>Floyd County</b> Martin	10	0134EST			0	0	0	0	Hail (1.00)
<b>Pike County</b> Coal Run	10	0203EST			0	0	0	0	Hail (0.88)
<b>Pike County</b> Meta	10	0310EST			0	0	0	0	Hail (0.75)
<b>Johnson County</b> Countywide	10	0300EST 0800EST			0	0	500K	0	Flash Flood
Roads flooded in northern part of county. Less than a dozen evacuations. Parked car floated away and mobile home floated off its foundation in Van Lear.									
<b>Martin County</b> Countywide	10	0300EST 0800EST			0	0	50K	0	Flash Flood
A trailer court was flooded just south of Inez near Davis Branch. Numerous roads flooded.									
<b>Pike County</b> North Portion	10	0300EST 0800EST			0	0	5K	0	Flash Flood
Water surged downhill and into air condition units at a nursing home at Phelps. Flooded roads across northern part of county.									
<b>Breathitt County</b> Jackson	10	1354EST			0	0	0	0	Thunderstorm Wind
Trees downed on Highway 30									
<b>Jackson County</b> 1 S Mc Kee	10	1400EST			0	0	0	0	Thunderstorm Wind
Small trees downed on Highway 421.									
<b>Breathitt County</b> 1 W Jackson	10	1430EST			0	0	0	0	Thunderstorm Wind
Trees downed on Highway 30.									
<b>Floyd County</b> Harold	10	1445EST			0	0	0	0	Hail (0.75)
<b>Magoffin County</b> Salyersville	10	1445EST			0	0	0	0	Hail (0.75)
<b>Breathitt County</b> 3 W Jackson	10	1500EST 1700EST			0	0	100K	0	Flash Flood
Highway 30 near Cane Creek 3 miles west of Jackson was water covered. Water covered a nearby trailer park which residents had to evacuate due to the high water. More than forty homes and trailers sustained water damage.									
<b>Martin County</b> Moree	10	1530EST 1630EST			0	0	5K	0	Flash Flood
Wolf Creek overflowed its banks. Houses and roads flooded.									
<b>Bath County</b> Sharpsburg	10	1547EST			0	0	0	0	Hail (0.75)
<b>Rockcastle County</b> Brodhead	10	2025EST			0	0	3K	0	Thunderstorm Wind
Trees and power lines downed.									
<b>Rockcastle County</b> Level Green	10	2034EST	0.1	20	0	0	0	0	Tornado (F0)
A small tornado touched down briefly.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Eastern</b>									
<b>Rowan County</b> 4 W Morehead	12	2342EST			0	0	3K	0	Thunderstorm Wind
									Power lines downed.
<b>Martin County</b> 7 N Inez	13	0027EST			0	0	0	0	Hail (1.75)
<b>Johnson County</b> Swamp Branch	13	0045EST			0	0	0	0	Thunderstorm Wind
									Trees downed.
<b>Johnson County</b> Nippa	13	0045EST			0	0	0	0	Thunderstorm Wind
									Trees downed.
<b>Johnson County</b> Paintsville	13	0045EST			0	0	3K	0	Thunderstorm Wind
									Power lines downed.
<b>Johnson County</b> West Van Lear	13	0045EST			0	0	3K	0	Thunderstorm Wind
									Power lines downed.
<b>Elliott County</b> Isonville	14	2122EST			0	0	0	0	Hail (0.75)
<b>Pike County</b> 5 NE Pikeville	15	1255EST			0	0	0	0	Hail (1.00)
<b>Pike County</b> Pikeville	16	1300EST			0	0	0	0	Hail (1.00)
<b>Pike County</b> Pikeville	16	1300EST			0	0	1K	0	Thunderstorm Wind
									Large sign blown off a store onto Highway 23.
<b>Harlan County</b> Pine Mtn	16	1305EST			0	0	0	0	Hail (1.00)
<b>Pulaski County</b> Shopville	19	0530EST			0	0	0	0	Thunderstorm Wind
									Trees downed.
<b>Pulaski County</b> Science Hill	19	0535EST			0	0	10K	0	Thunderstorm Wind
									Numerous small trees downed. Debris on Highway 635. Trailer damaged by high winds.
<b>Laurel County</b> Keavy	19	0610EST			0	0	0	0	Thunderstorm Wind
									Trees downed on Flatwood Rd.
<b>Pike County</b> Belcher	19	0728EST			0	0	0	0	Thunderstorm Wind
									Many large trees downed across roads around town.
<b>Menifee County</b> Sudith	22	1100EST 1800EST			0	0	5K	0	Flash Flood
									Evacuations from homes in Sudith. Numerous roads countywide underwater.
<b>Bath County</b> Owingsville	22	1645EST			0	0	0	0	Thunderstorm Wind
									Trees downed.
<b>Estill County</b> Irvine	22	1700EST 1900EST			0	0	2K	0	Flash Flood
									Cow Creek flooded portions of Highway 52 just east of Irvine, and another road near the town was flooded by 5 feet of water.
<b>Powell County</b> 5 W Clay City	22	1705EST			0	0	5K	0	Thunderstorm Wind
									Trees downed. One tree fell onto house.
<b>Powell County</b> 5 S Clay City	22	1705EST			0	0	0	0	Thunderstorm Wind
									Trees downed.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Eastern</b>									
<b>Estill County</b>									
Irvine	22	1708EST			0	0	5K	0	Thunderstorm Wind
			Trees and power lines were downed across the county.						
<b>Whitley County</b>									
Corbin	22	1710EST			0	0	0	0	Thunderstorm Wind (G70)
<b>Pulaski County</b>									
Science Hill	22	1713EST			0	0	0	0	Thunderstorm Wind (G52)
			Winds moved heavy lawn furniture and a wood doghouse.						
<b>Rowan County</b>									
Clearfield	22	1720EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Rowan County</b>									
Cranston	22	1720EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Lee County</b>									
Beattyville	22	1722EST			0	0	0	0	Thunderstorm Wind
			Large trees downed all over county.						
<b>Bath County</b>									
Owingsville	22	1724EST			0	0	5K	0	Thunderstorm Wind
			Trees and power lines downed throughout county.						
<b>Breathitt County</b>									
Lost Creek	22	1740EST			0	0	0	0	Hail (0.75)
<b>Pulaski County</b>									
9 NE Somerset	22	1741EST			0	0	10K	0	Thunderstorm Wind
			High winds damaged house and downed trees.						
<b>Wolfe County</b>									
Campton	22	1745EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Breathitt County</b>									
2.5 E Turkey	22	1750EST 1930EST			0	0	10K	0	Flash Flood
			East of Turkey, bridges at Old Buck Road were closed due to flooding. Portions of Highway 30 west of Jackson were also closed due to flooding.						
<b>Magoffin County</b>									
Salyersville	22	1807EST			0	0	0	0	Hail (0.88)
<b>Knox County</b>									
Barbourville	22	1807EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Knox County</b>									
Bimble	22	1820EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Harlan County</b>									
Big Laurel	22	1820EST			0	0	1K	0	Thunderstorm Wind
			Tree fell on house.						
<b>Harlan County</b>									
Baxter	22	1825EST			0	0	0	0	Thunderstorm Wind
			Large trees downed.						
<b>Leslie County</b>									
Wooton	22	1825EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Johnson County</b>									
Paintsville	22	1828EST			0	0	0	0	Thunderstorm Wind
			Trees downed countywide.						
<b>Knott County</b>									
Cordia	22	1829EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Floyd County</b>									
Wayland	22	1836EST			0	0	0	0	Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Eastern</b>									
			Trees downed.						
<b>Bell County</b> Middlesboro	22	1840EST			0	0	3K	0	Thunderstorm Wind
			Trees and power lines downed.						
<b>Bell County</b> Middlesboro	22	1840EST			0	0	50K	0	Lightning
			Lightning struck and burned up a transformer.						
<b>Harlan County</b> Wallins Creek	22	1840EST			0	0	0	0	Thunderstorm Wind (G52)
			Trees downed.						
<b>Letcher County</b> Whitesburg	22	1850EST			0	0	0	0	Thunderstorm Wind
			Trees were downed countywide.						
<b>Martin County</b> 1 S Calf Creek	22	1901EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Martin County</b> 3 SE Moree	22	1901EST			0	0	0	0	Thunderstorm Wind
			Trees downed.						
<b>Pike County</b> 5 SE Pikeville	22	1908EST			0	0	0	0	Thunderstorm Wind (G55)
			Trees downed.						
<b>Elliott County</b> Bruin	24	1340EST			0	0	0	0	Hail (0.75)
<b>Elliott County</b> Newfoundland	24	1340EST			0	0	0	0	Thunderstorm Wind
			Trees downed on Route 7.						
<b>Elliott County</b> Stephens	24	1340EST			0	0	0	0	Thunderstorm Wind
			Trees downed on Route 409.						
<b>Magoffin County</b> 1.5 N Hendricks	24	1429EST			0	0	0	0	Hail (0.75)
<b>Magoffin County</b> Salyersville	24	1430EST			0	0	0	0	Hail (0.75)
<b>Knott County</b> 1 N Raven	24	1505EST			0	0	0	0	Thunderstorm Wind
			Trees downed on Routes 899 and 7.						
<b>Floyd County</b> Hi Hat	24	1530EST			0	0	0	0	Thunderstorm Wind
			Trees downed across HWY 1428.						
<b>Pike County</b> Ransom	24	1535EST			0	0	0	0	Thunderstorm Wind
			Trees downed throughout county.						
<b>Letcher County</b> Mayking	24	1545EST			0	0	0	0	Thunderstorm Wind
			Trees were downed in Mayking, Fleming-Neon and Jenkins.						
<b>Montgomery County</b> Mt Sterling	28	1120EST			0	0	1K	0	Thunderstorm Wind
			Two light posts and a tree downed.						
<b>Morgan County</b> West Liberty	29	0900EST 1500EST			0	0	5K	0	Flash Flood
			Numerous roads covered with water in town and surrounding areas. Some homes with water damage.						
<b>Elliott County</b> Sandy Hook	29	0900EST 1800EST			0	0	50K	0	Flash Flood
			The nursing home had to be evacuated. Water came within 2 to 3 feet of the building. Two houses were also affected by flood waters.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KENTUCKY, Eastern</u></b>									
<b>Menifee County</b> Countywide	29	1100EST 1800EST			0	0	20K	5K	Flash Flood
			Numerous roads were flooded across the county. Several businesses and home were flooded. Many homes evacuated.						
<b>Bath County</b> Owingsville	29	1200EST 1800EST			0	0	40K	0	Flash Flood
			State Route 36 covered with water.						
<b>Breathitt County</b> 5 NW Jackson	29	1200EST 1800EST			0	0	3K	0	Flash Flood
			State Route 541 covered with water.						
<b><u>KENTUCKY, Northeast</u></b>									
<b>Lawrence County</b> Louisa to Clifford	11	1555EST 1600EST			0	0			Hail (0.75)
<b>Lawrence County</b> Louisa to Clifford	11	1555EST 1600EST			0	0	5K		Thunderstorm Wind
			Trees were blown down, damaging a few outbuildings.						
<b>Boyd County</b> Princess	14 15	2330EST 0300EST			0	0	10K		Flash Flood
<b>Carter County</b> Countywide	14 15	2330EST 0300EST			0	0	5K		Flash Flood
			Rains of 1.5 to 2.5 fell along the Interstate 64 corridor from Grayson on east. Williams Creek flooded in western Boyd County. Numerous roads were blocked in both counties. No dwellings were flooded.						
<b>Carter County</b> Carter	16	1220EST			0	0			Hail (0.88)
<b>Boyd County</b> Mavity	22	1730EST 1830EST			0	0	5K		Flash Flood
			Road flooding from the East Fork of the Little Sandy occurred.						
<b>Boyd County</b> Ashland	22	1843EST			0	0	2K		Thunderstorm Wind
			Large branches and a few trees were blown down.						
<b>Lawrence County</b> Webbville to Blaine	29	0945EST 1100EST			0	0	10K		Flash Flood
			Flooding along the Route 201 corridor included Lick Fork and Abbs Creek. Roads were impassable and outbuildings were washed away. No homes were damaged.						
<b><u>KENTUCKY, Northern</u></b>									
<b>Campbell County</b> Alexandria	09	2315EST 2320EST			0	0			Hail (1.00)
<b>Mason County</b> Maysville	10	0045EST 0050EST			0	0			Hail (1.75)
<b>Bracken County</b> Augusta	10	1919EST 1925EST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KENTUCKY, Northern</u></b>									
<b>Kenton County Countywide</b>	11	1030EST 1400EST			0	0	100K		Flash Flood
									Several hours of heavy rainfall caused area creeks and streams to overflow their bank. Numerous roads were closed due to the high water. Bank Lick Creek overflowed its banks flooding an area park and causing significant damage.
<b>Boone County Countywide</b>	11	1100EST 1300EST			0	0	5K		Flood
									Several roads were closed due to heavy rainfall.
<b>Campbell County Countywide</b>	11	1130EST 1330EST			0	0	10K		Flood
									Numerous roads closed due to heavy rainfall.
<b>Pendleton County Countywide</b>	11	1130EST 1230EST			0	0	5K		Flood
									Several roads closed to heavy rainfall.
<b>Lewis County Countywide</b>	11	1500EST 1530EST			0	0	5K		Flood
									Numerous roads closed.
<b>Bracken County Countywide</b>	11	1505EST 1530EST			0	0	5K		Flood
									Roads closed due to heavy rainfall.
<b>Mason County Dover</b>	11	1516EST 1530EST			0	0	5K		Flood
									Roads closed due to heavy rainfall.
<b>Boone County Countywide</b>	12	2100EST 2105EST			0	0	10K		Thunderstorm Wind (G50)
									Numerous trees downed.
<b>Campbell County Countywide</b>	12	2115EST 2125EST			0	0	10K		Thunderstorm Wind (G50)
									Several trees down.
<b>Pendleton County Countywide</b>	12	2145EST 2155EST			0	0	10K		Thunderstorm Wind (G50)
									Trees down across the county.
<b>Bracken County Augusta</b>	12	2200EST 2205EST			0	0	3K		Thunderstorm Wind (G50)
									Numerous trees downed.
<b>Lewis County Charters</b>	12	2255EST 2300EST			0	0	5K		Thunderstorm Wind (G50)
									Trees and power lines downed.
<b>Owen County New Liberty</b>	12	2255EST 2300EST			0	0	3K		Thunderstorm Wind (G50)
									Trees downed.
<b>Owen County Perry Park</b>	14	1915EST 1920EST			0	0			Hail (1.00)
<b>Grant County Crittenden</b>	14	1938EST 1940EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Northern</b>									
<b>Gallatin County</b> Sparta	14	1940EST 1945EST			0	0			Hail (1.25)
<b>Kenton County</b> Piner	14	2000EST 2005EST			0	0			Hail (0.75)
<b>Lewis County</b> Tannery	15	0000EST 0045EST			0	0			Flood
			Several hours of heavy rainfall caused county creeks and streams to rise out of their banks. Evacuations occurred in Tannery.						
<b>Kenton County</b> Covington	16	1132EST 1135EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Mason County</b> Plumville	16	1135EST 1140EST			0	0			Hail (1.00)
<b>Campbell County</b> Alexandria	16	1145EST 1150EST			0	0	3K		Thunderstorm Wind (G50)
			Trees and power lines downed.						
<b>Lewis County</b> Tollesboro	16	1200EST 1205EST			0	0			Hail (1.00)
<b>Campbell County</b> Alexandria	19	0200EST 0210EST			0	0	5K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Owen County</b> Owenton	22	1550EST 1555EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Grant County</b> Mason	22	1615EST 1620EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Pendleton County</b> Falmouth to Peach Grove	22	1615EST 1625EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Bracken County</b> Augusta	22	1635EST 1640EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Robertson County</b> Mt Olivet	22	1645EST 1650EST			0	0	3K		Thunderstorm Wind (G50)
			Many trees downed.						
<b>Mason County</b> Dover	22	1710EST 1715EST			0	0	3K		Thunderstorm Wind (G50)
			Several trees were knocked down.						
<b>Carroll County</b> Prestonville	29	2140EST 2145EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Boone County</b> Florence	29	2155EST 2200EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KENTUCKY, Northern</u></b>									
<b>Campbell County</b> Southgate	29	2200EST 2205EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Kenton County</b> Erlanger	29	2200EST 2205EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Owen County</b> Owenton	29	2200EST 2205EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b><u>KENTUCKY, Southwest</u></b>									
<b>Muhlenberg County</b> Midland	02	2056CST			0	0			Hail (1.00)
<b>Daviess County</b> Utica	02	2106CST			0	0			Hail (0.88)
<b>Muhlenberg County</b> Greenville	02	2109CST			0	0			Hail (1.75)
			Golf ball size hail was reported on the Western Kentucky Parkway near Greenville.						
<b>Livingston County</b> Joy	02	2120CST			0	0			Hail (1.00)
<b>Hopkins County</b> 4 S Nortonville	02	2120CST			0	0	30K		Hail (1.75)
			Golf ball size hail fell near the Christian County border on U.S. 41. Vehicles were dented.						
<b>Christian County</b> Crofton to Mannington	02	2120CST			0	0	30K		Hail (1.75)
			Golf ball size hail dented vehicles and tore leaves from trees.						
<b>Crittenden County</b> Mexico	02	2133CST			0	0			Hail (1.00)
<b>Todd County</b> Kirkmansville	02	2140CST			0	0			Hail (2.75)
			Baseball size hail fell near Kirkmansville.						
<b>Caldwell County</b> Fredonia to Farmersville	02	2145CST			0	0			Hail (1.75)
			Numerous occurrences of golf ball size hail were reported in northern Caldwell County.						
<b>Caldwell County</b> 4 N Cobb	02	2155CST			0	0			Hail (0.75)
<b>Trigg County</b> Cerulean	02	2215CST			0	0			Hail (1.75)
<b>Christian County</b> Hopkinsville	02	2226CST			0	0			Hail (1.75)
<b>Graves County</b> Water Vly	04	2330CST			0	0			Thunderstorm Wind (G55)
			Trees were blown down.						
<b>Caldwell County</b> Princeton	09	0630CST 1200CST			0	0			Flash Flood
<b>Calloway County</b> Murray	09	0630CST 1200CST			0	0			Flash Flood
<b>Marshall County</b> Calvert City	09	0630CST 1200CST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Southwest</b>									
<b>Christian County</b> Hopkinsville	09	0700CST 1800CST			0	0	100K		Flash Flood
<b>Crittenden County</b> Marion	09	0700CST 1200CST			0	0			Flash Flood
<b>Graves County</b> Mayfield	09	0700CST 1200CST			0	0			Flash Flood
<b>Hopkins County</b> Madisonville	09	0700CST 1000CST			0	0			Flash Flood
<b>Livingston County</b> Smithland	09	0700CST 0900CST			0	0			Flash Flood
<b>Lyon County</b> Eddyville	09	0700CST 1200CST			0	0			Flash Flood
<b>Mccracken County</b> Paducah	09	0700CST 1200CST			0	0			Flash Flood
<b>Muhlenberg County</b> Greenville	09	0700CST 1200CST			0	0			Flash Flood
<b>Todd County</b> Elkton	09	0700CST 1800CST			0	0			Flash Flood
<b>Trigg County</b> Cadiz	09	0700CST 1200CST			0	0			Flash Flood

A large thunderstorm complex persisted over much of southwest Kentucky during the early morning hours. Very heavy rainfall amounts were observed, with generally 2 to 4 inches on average across the region. Most of this rain fell within a 4-hour period. Many instances of road flooding were reported. The most severe flooding occurred in the Hopkinsville area and Todd County, where radar estimated up to 5 inches fell. Many roads were closed, and homes were evacuated in Christian and Todd Counties.

**KYZ017**

**Christian**

09	2100CST	0	0	100K	Flood
10	0600CST				

Thunderstorms that produced very heavy rain early on the 9th caused the Little River to flood during the early morning of the 10th. Floodwater entered about two dozen homes, and several others were evacuated as a precaution.

**Christian County**  
Hopkinsville

10	0815CST 1030CST	0	0		Flash Flood
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**Todd County**  
Elkton

10	0815CST 1030CST	0	0		Flash Flood
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Thunderstorms moved over the Hopkinsville area, which received copious amounts of rain and major flash flooding 24 hours earlier. Rainfall amounts of an inch or two per hour caused a renewal of flooding problems. In Todd County, Highway 104 between Highway 181 and Highway 41 was impassable and closed. Water was over several other roads in Todd County.

**Webster County**  
Tilden to  
Dixon

10	1530CST	0	0	5K	Thunderstorm Wind (G52)
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Trees were blown down.

**Muhlenberg County**  
Bremen to  
3 NW Central City

10	1605CST 1610CST	0	0	10K	Thunderstorm Wind (G52)
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About a dozen trees were blown down in the Bremen area. One of the trees fell on a house. A few trees fell on power lines.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Southwest</b>									
<b>Muhlenberg County</b> Bremen to Central City	10	1608CST 1614CST			0	0			Funnel Cloud
		A funnel cloud moved southeast from Bremen to Central City.							
<b>Muhlenberg County</b> 1 N Powderly to Beechmont	10	1612CST 1625CST	7.5	50	0	0	100K		Tornado (F1)
		A rotating thunderstorm tracked from near the Hopkins County line at Bremen southeast across most of the county. A funnel cloud associated with this storm touched down in the Central City/Powderly area and lifted near Beechmont. The main effect of this storm was downed trees and limbs. About a half dozen buildings were damaged by falling trees or limbs. A garage collapsed in Powderly. Several vehicles were damaged, including two that were blown off the road. An estimate of the number of trees down ranged between 50 and 100. No injuries were reported.							
<b>Muhlenberg County</b> Central City	10	1620CST			0	0			Hail (0.75)
<b>Muhlenberg County</b> Beechmont	10	1635CST			0	0			Hail (1.00)
<b>Webster County</b> 3 N Dixon	11	1915CST			0	0	3K		Thunderstorm Wind (G50)
		Several trees were blown down.							
<b>Graves County</b> 2 SW Mayfield	11	1919CST			0	0	3K		Thunderstorm Wind (G52)
		Several trees were blown down.							
<b>Calloway County</b> 2 N Murray	11	1948CST			0	0	4K		Thunderstorm Wind (G52)
		Several trees were down, and sheet metal was blown off a building.							
<b>Calloway County</b> 7 E Dexter	11	2005CST			0	0			Thunderstorm Wind (G50)
		Spotters estimated a wind gust between 55 and 60 MPH just inside the county line near Kenlake State Resort Park.							
<b>Calloway County</b> Murray	11	2020CST			0	0	4K		Thunderstorm Wind (G52)
		Thunderstorm winds bent a flagpole and peeled metal roofing off a building at the Calloway County fairgrounds.							
<b>Union County</b> 1 NE Uniontown	12	2106CST			0	0			Thunderstorm Wind (G52)
		A barge operator on the Ohio River reported a gust to 60 MPH.							
<b>Ballard County</b> Barlow	12	2110CST			0	0	30K		Thunderstorm Wind (G50)
		Trees were down at several locations in the county. In the city of Barlow, there were several trees down, causing minor damage to some buildings. A vehicle was damaged when a tree fell on it.							
<b>Henderson County</b> Henderson	12	2118CST			0	0			Hail (0.75)
<b>Henderson County</b> Henderson to 3 E Henderson	12	2125CST			0	0	35K		Thunderstorm Wind (G52)
		Numerous trees were blown down in and east of Henderson. Trees fell on vehicles at several locations in the city. East of the city, roads were blocked by downed limbs.							
<b>Mccracken County</b> Reidland	12	2152CST			0	0	8K		Thunderstorm Wind (G52)
		Emergency management personnel estimated wind gusts near 60 MPH. Many tree limbs up to 3 inches in diameter were blown down. A roof was damaged.							
<b>Carlisle County</b> Bardwell to Cunningham	12	2153CST 2215CST			0	0	5K		Thunderstorm Wind (G52)
		Thunderstorm winds were estimated near 60 MPH. Eight to ten large trees were down in the Bardwell and Cunningham areas.							
<b>Graves County</b> Symsonia to Mayfield	12	2210CST 2220CST			0	0	5K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KENTUCKY, Southwest</b>									
Trees were down at several locations in the county, including the Symsonia area and the city of Mayfield.									
<b>Calloway County</b> Dexter	12	2232CST			0	0			Thunderstorm Wind (G52)
Winds were estimated near 60 MPH.									
<b>Marshall County</b> 1 W Brewers to Hardin	12	2245CST			0	0	5K		Thunderstorm Wind (G52)
Numerous trees were down at the intersection of Highways 58 and 80 as well as Highway 641 near Hardin.									
<b>Trigg County</b> Golden Pond to 5 SW Cadiz	12	2255CST 2310CST			0	0	10K		Thunderstorm Wind (G55)
Numerous large trees were blown down. Some of the trees fell across power lines.									
<b>Calloway County</b> 2 N Murray	12	2305CST			0	0	5K		Thunderstorm Wind (G52)
Tree limbs were down and signs were bent over. Winds were estimated around 60 MPH.									
<b>Carlisle County</b> Bardwell	12 13	2315CST 0200CST			0	0	10K		Flash Flood
Thunderstorms caused creeks and streams to rise out of their banks, prompting the closure of at least one major road.									
<b>Crittenden County</b> Tolu	14	1739CST			0	0	4K		Hail (1.75)
Golf ball size hail occurred. Tree limbs were down.									
<b>Union County</b> Sturgis	14	1747CST			0	0	100K		Thunderstorm Wind (G60)
State police reported numerous trees and power lines were blown down. Siding was stripped from downtown businesses. Winds knocked over a wall and damaged bleachers at Sturgis Elementary School. An estimated 10 to 15 homes were damaged by felled trees, and other trees were down over roads. Roofs were ripped off storage buildings at a lumberyard, and some roofing material was blown three blocks down U.S. Highway 60. Sturgis was still cleaning up from wind damage that occurred during a thunderstorm on June 12.									
<b>Webster County</b> Clay	14	1800CST			0	0	25K		Thunderstorm Wind (G60)
Thunderstorm winds caused extensive damage to a house. Part of the house was unroofed, and a wall collapsed.									
<b>Union County</b> Morganfield to 4 E Morganfield	14	1810CST 1825CST			0	0	4K		Thunderstorm Wind (G52)
Numerous trees were downed near Morganfield and just east of there. Trees blocked U.S. Highway 60 near Union County High School, as well as a 3/4-mile stretch located about 2 miles east of Morganfield.									
<b>Henderson County</b> 1 NE Henderson	14	1815CST			0	0			Hail (0.75)
Dime size hail occurred on U.S. Route 60 on the northeast side of Henderson.									
<b>Henderson County</b> Henderson	14	1815CST			0	0	10K		Thunderstorm Wind (G50)
Trees fell on vehicles at several locations.									
<b>Muhlenberg County</b> Bremen to Beechmont	14	1830CST 1905CST			0	0	50K		Thunderstorm Wind (G52)
Numerous trees were blown down across the county. One of the hardest hit areas was Greenville, where about two dozen trees were down, including one on a house and one on a trailer. A few buildings were damaged in the Graham area. There were many downed power lines.									
<b>Fulton County</b> Hickman	14	1830CST			0	0			Hail (0.75)
<b>Hopkins County</b> Madisonville	14	1837CST			0	0			Hail (0.75)
<b>Fulton County</b> 4 E Hickman	14	1840CST			0	0	5K		Thunderstorm Wind (G55)
Dozens of trees were down between Cayce and Hickman.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>KENTUCKY, Southwest</u></b>									
<b>Daviess County</b> Moseleyville to Whitesville	14	1845CST 1910CST			0	0	20K		Thunderstorm Wind (G52)
									Around 30 trees were blown down across southern Daviess County. A few of the trees fell on homes or across roads.
<b>Daviess County</b> 2 W Owensboro	14	1900CST 2000CST			0	1	5K		Flash Flood
									Very heavy rains from a severe thunderstorm filled drainage ditches. An 8-year-old boy was swept into a drainage ditch and rescue d by firefighters. He was taken by ambulance to a local hospital.
<b>Calloway County</b> Kirksey	19	0437CST			0	0			Thunderstorm Wind (G52)
									A few trees were blown down.
<b>Marshall County</b> 4 W Calvert City	21	0300CST			0	0	10K		Thunderstorm Wind (G55)
									Numerous trees were blown down. Minor home damage occurred, such as damaged siding.
<b>Mccracken County</b> Lone Oak to Reidland	21	0330CST 0345CST			0	0	5K		Thunderstorm Wind (G52)
									Numerous large tree limbs and a few trees were blown down.
<b>Hickman County</b> Columbus	21	0350CST			0	0	20K		Thunderstorm Wind (G55)
									An outbuilding was destroyed and a roof was damaged.
<b>KYZ001&gt;022</b>									<b>Fulton - Hickman - Carlisle - Ballard - Mccracken - Graves - Livingston - Marshall - Calloway - Crittenden - Lyon - Trigg - Caldwell - Union - Webster - Hopkins - Christian - Henderson - Daviess - Mclean - Muhlenberg - Todd</b>
	22	0100CST			1	0			Excessive Heat
	29	2200CST							Temperatures exceeded 90 degrees for at least 7 consecutive days. High humidity resulted in excessive heat indicies approaching 110 degrees. Heat was blamed for the death of a 47-year-old Daviess County man who was mowing the lawn during the late afternoon. Demand for electricity approached or equalled record demands at most utility companies.
									M470U
<b>Daviess County</b> Maceo	23	1555CST 1605CST			0	0			Hail (1.75)
									Hail up to the size of golf balls fell in the Maceo area.
<b>Union County</b> Morganfield	29	2037CST			0	0	5K		Thunderstorm Wind (G52)
									Trees and power lines were down.
<b>Daviess County</b> Utica	29	2041CST			0	0			Hail (0.75)
<b>Webster County</b> Dixon	29	2055CST			0	0	10K		Thunderstorm Wind (G55)
									Thunderstorm winds caused major damage at Webster County High School. A section of roof about 30 by 100 feet was ripped off the center of the school. Some roofing was blown several hundred feet away.
<b><u>LOUISIANA, Northeast</u></b>									
<b>Morehouse Parish</b> Countywide	05	0125CST			0	0	5K		Thunderstorm Wind
									Trees were blown down throughout the county.
<b>West Carroll Parish</b> Forest	05	0145CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>East Carroll Parish</b> Transylvania	05	0230CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Morehouse Parish</b> Countywide	05	0955CST			0	0	10K		Thunderstorm Wind
									Numerous trees were blown down throughout the parrish.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>LOUISIANA, Northeast</b>									
<b>Richland Parish</b>									
Countywide	05	1000CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down throughout the parish.						
<b>West Carroll Parish</b>									
Countywide	05	1030CST			0	0	10K		Thunderstorm Wind
			Numerous trees and power line were blown down throughout the parish.						
<b>East Carroll Parish</b>									
Countywide	05	1045CST			0	0	10K		Thunderstorm Wind
			Numerous trees and power lines were blown down throughout the parish.						
<b>Franklin Parish</b>									
Wisner	05	1045CST			0	0	3K		Thunderstorm Wind
			Several trees and power lines were blown down.						
<b>Concordia Parish</b>									
1 W Ferriday	05	1100CST			0	0	4K		Thunderstorm Wind
			Several trees and power lines were blown down.						
<b>Franklin Parish</b>									
Baskin	05	1840CST			0	0	1K		Thunderstorm Wind
			Several trees were blown down.						
<b>Catahoula Parish</b>									
Countywide	05	1900CST			0	0	20K		Thunderstorm Wind
			Numerous trees and power lines were blown down throughout the parish. At one time the entire parish was without power.						
<b>Tensas Parish</b>									
Countywide	05	1915CST			0	0	5K		Thunderstorm Wind
			Several trees were blown down throughout the parish.						
<b>Concordia Parish</b>									
Countywide	05	1920CST 1945CST			0	0	30K		Thunderstorm Wind
			Two mobile homes were totally destroyed. Numerous trees and power lines were blown down throughout the parish. Power was knocked over the entire parish.						
<b>East Carroll Parish</b>									
Countywide	15	1420CST			0	0	10K		Thunderstorm Wind
			Trees and power lines were blown down throughout the parish.						
<b>Morehouse Parish</b>									
Bonita	15	1710CST			0	0			Hail (0.75)
<b>West Carroll Parish</b>									
Oak Grove	15	1740CST			0	0	50K		Hail (1.75)
			Roofs and automobile were damaged by golfball size hail.						
<b>East Carroll Parish</b>									
Lake Providence	15	1900CST			0	0			Hail (0.75)
<b>Richland Parish</b>									
Rayville	15	1900CST			0	0			Thunderstorm Wind (G52)
<b>Richland Parish</b>									
6 NE Rayville	15	1900CST			0	0	5K		Thunderstorm Wind
			Numerous trees and power lines were blown down.						
<b>Franklin Parish</b>									
2 E Gilbert	15	1920CST			0	0	50K		Hail (1.75)
			Several automobile and roofs of houses were damaged.						
<b>Franklin Parish</b>									
Wisner	15	1921CST			0	0	2K		Thunderstorm Wind
			The windows were blown out of a building.						
<b>West Carroll Parish</b>									
Countywide	15	1930CST			0	0	5K		Hail (1.00)
			One inch hail along with strong wind which blew down several trees and power lines occurred across the parish.						
<b>Tensas Parish</b>									
St Joseph	15	1945CST			0	0	3K		Thunderstorm Wind
			Several trees and power lines were blown down and roofing was blown off a house.						
<b>Tensas Parish</b>									
6 NW St Joseph	26	1615CST			0	0	1K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## LOUISIANA, Northeast

A few trees and large limbs were blown down.

## LOUISIANA, Northwest

### **LAZ001>002**

#### **Caddo - Bossier**

**01 0001CST**

**9 0**

**Excessive Heat**

**30 2359CST**

June 1998 suffered prolonged and excessively high temperatures throughout the month making it the 3rd hottest on record. The average monthly temperature was 84.9 degrees Fahrenheit (F) which was 5.5 degrees above normal. This was beat only by 85.8 degrees F. in 1881 and 85.4 degrees F in 1875. The average maximum temperature was 96.0 degrees F. (normal is 89.7) and the average minimum was 73.7 degrees F. (normal is 69.0 degrees). The highest was 102 degrees F. on the 1st and 14th. Record high temperatures were set on the 1st, 13th, and 14th with record high minimum temperatures tied or broken on the 3rd, 14th, 18th, and 19th. F84PH, F89PH, F55PH, M86PH, M56OU, M84PH, M79PH, M85PH, M70PH

### **LAZ001>006-010>014-017>022**

#### **Caddo - Bossier - Webster - Claiborne - Lincoln - Union - De Soto - Red River - Bienville - Jackson - Ouachita - Sabine - Natchitoches - Winn - Grant - Caldwell - La Salle**

**01 0001CST**

**0 0**

**15M Drought**

**30 0000CST**

Only 1.35 inches of rain fell during June 1998. this brought the three month period total for April, May, and June to 2.29 inches. Of the 1.35 inches of rain, 1.25 inches occurred in a 24 hour period on the 4th and 5th. Even though June 1998 was the 30th driest on record, the total three month average precipitation for April, May and June was taking its toll. Only the fall of 1924 (1.39 inches) and the summer of 1934 (2.09 inches) was drier. Area rivers and lakes fell to well below normal levels with water users urged to conserve. Agriculture and forestry were especially hard hit. Nearly half of the 100 million pine seedlings planted in 1997 were killed. Replanting costs and reforestation will run in the millions. Row crops were the hardest hit with corn, cotton, soybean, rice, grain and sorghum totalling over half of the total dollar loss. Nearly 75 percent of other crops including pastures, hay and vegetables were also destroyed.

#### **Bossier Parish 5 N Benton**

**04 2300CST**

**0 0**

**Thunderstorm Wind (G52)**

#### **Webster Parish Springhill**

**04 2330CST**

**0 0**

**Thunderstorm Wind (G52)**

#### **Caddo Parish 1 W Greenwood**

**04 2332CST**

**0 0**

**Thunderstorm Wind (G52)**

#### **Caddo Parish Shreveport**

**05 0745CST**

**0 0**

**50K**

**Thunderstorm Wind (G52)**

Large oak tree toppled across a house.

#### **Bossier Parish Bossier City**

**05 0749CST**

**0 0**

**Thunderstorm Wind (G56)**

#### **Caddo Parish Shreveport**

**05 0800CST**

**0 0**

**Thunderstorm Wind (G58)**

Several large trees down.

#### **De Soto Parish Logansport**

**05 0805CST**

**0 0**

**Thunderstorm Wind (G62)**

#### **Webster Parish Minden**

**05 0815CST**

**0 0**

**20K**

**Thunderstorm Wind (G61)**

#### **Bienville Parish Countywide**

**05 0830CST**

**0 0**

**Thunderstorm Wind (G65)**

Numerous trees down along Hwy 154.

#### **Red River Parish Countywide**

**05 0830CST**

**0 0**

**Thunderstorm Wind (G65)**

Numerous trees down along Hwy 174 at Lake Inn, Hwy 371, and Hwy 514.

#### **Natchitoches Parish Countywide**

**05 0854CST**

**0 0**

**Thunderstorm Wind (G65)**

Numerous trees and powerlines down from Ashland to Campi and Robline.

#### **Winn Parish Countywide**

**05 0921CST**

**0 0**

**Thunderstorm Wind (G60)**

Numerous trees and powerlines down.

#### **Jackson Parish Countywide**

**05 0925CST**

**0 0**

**Thunderstorm Wind (G60)**

Numerous trees and powerlines down.

#### **Lincoln Parish Countywide**

**05 0935CST**

**0 0**

**Thunderstorm Wind (G60)**

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>LOUISIANA, Northwest</b>									
			Widespread trees and powerlines down.						
<b>Ouachita Parish Countywide</b>	<b>05</b>	<b>0950CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind (G60)</b>
			Powerlines toppled.						
<b>Union Parish Countywide</b>	<b>05</b>	<b>0950CST</b>			<b>0</b>	<b>0</b>	<b>80K</b>		<b>Thunderstorm Wind (G70)</b>
			Widespread trees and powerlines down. Numerous power poles toppled.						
<b>Caldwell Parish Countywide</b>	<b>05</b>	<b>0955CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			Numerous trees down.						
<b>La Salle Parish Countywide</b>	<b>05</b>	<b>1015CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Several large trees down.						
<b>Ouachita Parish Sterlington</b>	<b>05</b>	<b>0942CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G53)</b>
<b>Sabine Parish 15 SSW Many</b>	<b>05</b>	<b>1736CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Numerous trees down.						
<b>Sabine Parish 1 NE Many</b>	<b>05</b>	<b>1745CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Trees down across Hwy 1217.						
<b>Sabine Parish 5 NW Many</b>	<b>05</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Trees down across Hwy 171.						
<b>Grant Parish Williana</b>	<b>05</b>	<b>1817CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Grant Parish Montgomery</b>	<b>05</b>	<b>1825CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G57)</b>
			Trees down across Hwy 122.						
<b>Natchitoches Parish 20 S Natchitoches</b>	<b>05</b>	<b>1830CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Trees toppled across Hwy 118.						
<b>Grant Parish 12 NE Dry Prong to 12 N Dry Prong</b>	<b>05</b>	<b>1831CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Grant Parish Dry Prong</b>	<b>05</b>	<b>1831CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
			Numerous trees down.						
<b>Grant Parish 10 NE Williana</b>	<b>05</b>	<b>1849CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
			Trees down along Hwy 165.						
<b>La Salle Parish Nebo</b>	<b>05</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>De Soto Parish 2 E Logansport</b>	<b>15</b>	<b>1655CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.75)</b>
<b>De Soto Parish 2 W Grand Cane</b>	<b>15</b>	<b>1710CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>De Soto Parish Mansfield</b>	<b>15</b>	<b>1714CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>De Soto Parish Mansfield</b>	<b>15</b>	<b>1730CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>De Soto Parish Mansfield</b>	<b>15</b>	<b>1735CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
			Trees and powerlines down.						
<b>Grant Parish Montgomery</b>	<b>15</b>	<b>1915CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>LOUISIANA, Northwest</b>									
<b>Grant Parish</b> Fishville	15	1915CST			0	0			Hail (1.75)
<b>LOUISIANA, Southeast</b>									
<b>LAZ034&gt;040-047&gt;048-050</b>			<b>Pointe Coupee - West Feliciana - East Feliciana - St. Helena - Tangipahoa - Washington - St. Tammany - West Baton Rouge - East Baton Rouge - Livingston</b>						
	01	0000CST			0	0			Drought
	30	2355CST							
	Unusually hot and dry weather persisted across much of southeast Louisiana during June. Average temperature departures were 3 to 4 degrees above normal across the region. Two daily maximum temperature records were set at New Orleans International Airport and four were set at New Orleans Audubon Park. Precipitation was below normal across southeast Louisiana, particularly in the area from the Baton Rouge area to parishes north of Lake Pontchartrain, where average monthly rainfall for the region was 1.84 inches compared to the normal of 4.57 inches. This region of southeast Louisiana was rated by the Palmer Drought Index as being in a severe drought by the beginning of July. The region south of Lake Pontchartrain and near the coast was rated as being in a mild drought. Damage estimates for crops will be described in later issuance of Storm Data at the end of the growing season.								
<b>Washington Parish</b> Varnado	05	2154CST			0	0	0.50K		Thunderstorm Wind
	Thunderstorm wind gusts down several trees.								
<b>St. Tammany Parish</b> Folsom to Bush	05	2235CST 2250CST			0	0	1K		Thunderstorm Wind
	Sheriffs office reported scattered areas of tree damage across the north portion of the parish.								
<b>Terrebonne Parish</b> Houma	05 06	2345CST 0005CST			0	0	5K		Thunderstorm Wind
	Thunderstorm wind gusts downed several trees and large tree limbs which fell onto power lines causing power outages.								
<b>LAZ066</b>			<b>Lower Terrebonne</b>						
	19	1500CST			1	0			Excessive Heat
	A shrimper was sorting his catch on a dock when he collapsed. He was rushed to a Houma hospital where died a short time later from heat exhaustion. M69OU								
<b>Orleans Parish</b> (New)Lkfrnt Arpt New	21	1615CST			0	0			Hail (0.75)
<b>Jefferson Parish</b> Harvey	21	1640CST			0	0	5K		Hail (0.75)
<b>Jefferson Parish</b> Metairie	21	1640CST			0	0	0.50K		Thunderstorm Wind
	Hail fell in several locations across the Orleans and Jefferson Parishes. Hail caused minor damage to vehicles at a fire station in Harvey. Trees were also reported blown down in Metairie.								
<b>Orleans Parish</b> New Orleans	21	1720CST			0	0	120K		Lightning
	A lightning strike started a house fire. The resulting fire caused considerable property damage.								
<b>Tangipahoa Parish</b> Loranger	21	1725CST			0	0	1K		Thunderstorm Wind
	Several trees and power lines were downed by an apparent thunderstorm downburst								
<b>Orleans Parish</b> New Orleans	21	1730CST			0	0	1K		Thunderstorm Wind
	Thunderstorm wind gusts downed several trees just north of the central business district.								
<b>East Baton Rouge Parish</b> 8 N Baton Rouge	21	1830CST			0	0	5K		Thunderstorm Wind
	Thunderstorm wind gust blew the roof off of a barn.								
<b>East Feliciana Parish</b> Clinton	21	1830CST			0	0	0.50K		Thunderstorm Wind
	Thunderstorm wind gust blew down large tree limbs in the Clinton and Norwood areas.								
<b>Ascension Parish</b> Donaldsonville	22	1230CST			0	0			Hail (0.75)
<b>Livingston Parish</b> Watson	22	1400CST			0	0	5K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## LOUISIANA, Southeast

Trees were reported downed by thunderstorm wind gusts.

### **Pointe Coupee Parish New Roads**

22	1430CST				0	0	0.50K		<b>Thunderstorm Wind</b>
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Sheriffs Office reported trees down.

### **St. John The Baptist Parish Edgard**

23	1345CST				1	0			<b>Lightning</b>
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A man working on a barge along the Mississippi River was struck by lightning during a thunderstorm. He died on July 2, 1998 as a result of his lightning strike related injuries. M19BO

## LOUISIANA, Southwest

### **LAZ027>028-030>032-041>043**

01	0000CST				0	0			<b>Drought</b>
30	0000CST								

A mild to moderate drought continued across southwestern and central Louisiana through the month of June. This drought began in mid-May, and will extend through July 1998. There were only two opportunities for rain in June, on the 5th and the 26th. Most areas received less than two inches of rain in the entire month of June.

By mid-June, most farmers had lost the entire season's crop, which consists primarily of corn, soybean, and rice. Even the cattle were affected due to the lack of grass for grazing. Specific dollar figure damages will be listed in the July 1998 Storm Data.

### **Vernon Parish Anacoco**

05	1751CST				0	0	200K		<b>Thunderstorm Wind</b>
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Severe thunderstorm winds gusted between 70 and 80 mph across the northern half of Vernon Parish, downing numerous trees. The worst hit area was in Burr Ferry, Anacoco, Hornbeck, and Simpson. Three mobile homes had moderate damage from trees blown down on them. Several other homes and businesses had roof damage and windows blown out from the high winds.

### **Rapides Parish 15 NW Alexandria to Alexandria**

05	1830CST				0	0	500K		<b>Thunderstorm Wind</b>
	1850CST								

A severe thunderstorm moved rapidly across Rapides Parish, blowing numerous trees down across the parish. The hardest hit area was near Gardner, including Lake Kincaid and Cotile Lake. In fact, the recreation area at Cotile Lake was closed for the remainder of the summer due to the extent of the damages to it's camps. Damages at the lake alone were in excess of \$250,000. Over fifty vehicles received some form of damage, and over 100 homes had damage, varying from lost shingles to trees falling through the roof. Wind equipment at the Rapides Parish EOC recorded winds in excess of 75 mph.

### **Lafayette Parish Lafayette**

22	1140CST				0	0			<b>Hail (1.00)</b>
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### **Lafayette Parish Lafayette**

22	1200CST				0	0	25K		<b>Thunderstorm Wind</b>
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SKYWARN spotters reported trees blown down on homes in Lafayette.

### **Iberia Parish South Marsh Is**

24	1120CST				0	0			<b>Waterspout</b>
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A waterspout was spotted, which is typical along the Gulf coast in the morning hours as cumulus clouds develop. No damages or injuries occurred.

### **Beauregard Parish Singer**

24	1630CST				0	0	10K		<b>Thunderstorm Wind</b>
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A barn was damaged from thunderstorm wind gusts.

### **Cameron Parish Cameron**

26	1300CST				0	0			<b>Heavy Rain</b>
27	2300CST								

Heavy rain accompanied a tropical disturbance that moved across the northwest Gulf of Mexico on June 26th and 27th. SKYWARN spotters recorded as much as eight to ten inches of rain along the coast of Cameron Parish.

## MAINE

NOT RECEIVED.

## MARYLAND, Central

### **Howard County Ellicott City**

01	0000EST				0	0	10K		<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **MARYLAND, Central**

<b>Baltimore City (C) Druid to Mt Washington</b>	<b>01</b>	<b>0015EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
<b>Harford County Aberdeen</b>	<b>01</b>	<b>0025EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>

A derecho whipped across northern Maryland just after midnight on June 1, knocking down hundreds of trees and producing scattered property damage. Baltimore Gas and Electric (BGE) reported 61,000 customers without power during the overnight hours, mostly in Carroll, Howard, and Baltimore Cos, as well as Baltimore City. Some of the hardest hit areas did not receive power until the following evening. BGE also noted that more than double the normal number of cleanup crews were out removing trees and limbs.

Tree and property damage began in western Carroll Co and continued sporadically through northern Howard, Baltimore (Co. and City), and Harford Co. In Westminster, city crews commented that tree damage was the most they had seen "in 20 years". Many trees and large limbs fell onto roadways; one smashed a vehicle. Ten thousand customers were without power in Carroll Co alone. The line of storms scraped northern Howard Co, knocking down more trees, limbs, and power lines.

Widespread, scattered tree and power line damage was reported in Baltimore Co. A wind gust of 66 mph was recorded in Upperco, near the Carroll Co line. The same storm produced a 59 mph gust in Towson approximately 10 minutes later. Numerous trees were reported down between Cockeysville and Towson. Volunteer fire companies answered at least 40 calls for fallen trees. One tree caused damage to a house. Five other trees/large limbs covered the northern suburban light rail line, mainly north of Ruxton, causing commuter delays later that morning. A few crossing gates were blown down as well. Less than a half hour later, numerous trees and limbs were knocked down in the city of Baltimore, most likely in the northwestern section.

The storms weakened a bit as they moved into Harford Co. Still, several trees/limbs were blown down, as were power lines. Several utility poles caught fire; over 6000 customers were without power at the peak of the storm.

An isolated cell produced damage in extreme eastern Baltimore Co before the derecho arrived. On Sparrows Point, near Edgemere, several large trees were either uprooted or snapped off at their bases. Cement slabs were also moved by the high winds.

<b>Carroll County 10 S Taylorsville</b>	<b>02</b>	<b>1636EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Carroll County Winfield</b>	<b>02</b>	<b>1743EST 1750EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Carroll County Hampstead</b>	<b>02</b>	<b>1752EST</b>			<b>0</b>	<b>0</b>	<b>3K</b>		<b>Thunderstorm Wind</b>
<b>Carroll County Finksburg</b>	<b>02</b>	<b>1758EST</b>			<b>0</b>	<b>0</b>	<b>3K</b>		<b>Hail (1.75)</b>
<b>Montgomery County Clarksburg</b>	<b>02</b>	<b>1804EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Baltimore County Reisterstown to Owings Mills</b>	<b>02</b>	<b>1814EST 1824EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Hail (0.75)</b>
<b>Montgomery County Damascus</b>	<b>02</b>	<b>1820EST 1834EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Hail (1.75)</b>
<b>Baltimore City (C) Baltimore</b>	<b>02</b>	<b>1829EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Hail (1.75)</b>
<b>Montgomery County Laytonsville to Ashton</b>	<b>02</b>	<b>1835EST 1850EST</b>			<b>0</b>	<b>0</b>	<b>75K</b>	<b>15K</b>	<b>Hail (2.25)</b>
<b>Allegany County 3 NW Mt Savage Jct to 2 NW Mt Savage Jct</b>	<b>02</b>	<b>1856EST 1858EST</b>	<b>1</b>	<b>50</b>	<b>0</b>	<b>0</b>		<b>30K</b>	<b>Tornado (F1)</b>
<b>Allegany County Cumberland</b>	<b>02</b>	<b>1903EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MARYLAND, Central</b>									
<b>Prince George'S County</b>									
Laurel	02	1905EST 1920EST			0	0	5K		Hail (1.75)
<b>Allegany County</b>									
Oldtown	02	1920EST			0	0	3K	10K	Hail (1.00)
<b>Allegany County</b>									
Oldtown	02	1920EST			0	0	15K		Thunderstorm Wind
<b>Allegany County</b>									
3 SE Cumberland to 3.5 SE Cumberland	02	1921EST 1923EST	0.5	50	0	0		15K	Tornado (F0)
<b>Anne Arundel County</b>									
Crofton	02	1935EST			0	0	10K		Hail (2.00)
<b>Anne Arundel County</b>									
Annapolis	02	1945EST			0	0	3K		Thunderstorm Wind
<b>Anne Arundel County</b>									
South Portion	02	1952EST			0	0			Hail (0.75)
<b>Allegany County</b>									
1 E Flintstone	02	1953EST			0	0			Hail (0.75)
<b>Allegany County</b>									
2 NW Frostburg to 2 N Cresaptown	02	2043EST 2050EST	8	250	0	5	5M	250K	Tornado (F4)
<b>Anne Arundel County</b>									
Annapolis	02	2215EST			0	0	10K		Thunderstorm Wind

The combination of an upper-level disturbance, increasing atmospheric shear, and ample instability set the stage for a major severe weather episode across the north half of Maryland during the late afternoon and evening. The episode was highlighted by supercell thunderstorms which produced three tornadoes, numerous instances of large hail, and several downbursts.

The most substantial event was a strong-to-violent tornado which caused excessive damage in western Allegany Co. The multi-vortex twister had estimated wind speeds of 210 mph - the highest in recorded Maryland history - when it ravaged a neighborhood of well-constructed single-family homes along a local plateau just north of Frostburg. The tornado was on the ground for an amazing 33 miles, beginning in Somerset Co, Pennsylvania before crossing northeastern Garrett Co Maryland on its way to Allegany Co. The parent supercell tracked over 200 miles. After descending Big Savage Mountain, the twister produced a swath of destruction across a neighborhood just west of Frostburg. At least eight homes were destroyed and dozens others were damaged. Several cars were damaged, and some were totalled. One two-story home was obliterated. Left in the wake was the foundation and some remnant plywood. The residents of the home - a woman and two children - received ample warning and rode out the storm to safety in the basement. Advance warning likely saved several lives and reduced casualties; in all, only 5 area residents sustained minor injuries.

The tornado continued through Eckhart Mines and Clarysville, causing further damage and destruction to homes and other property. It then continued through undeveloped areas, then passed across Dans Mountain before damaging a few more residences along state route 53 just north of Cresaptown. The twister lifted at that point, but the parent thunderstorm continued producing damage into eastern West Virginia. In all, emergency management officials reported 29 homes destroyed and 125 damaged, with nearly half of the surviving homes receiving moderate to major levels of damage. Initial dollar estimates ranged from \$4.5 to \$5 million. Hundreds, perhaps thousands, of trees in forested and developed areas were snapped or uprooted. The supercell was so powerful that Frostburg area residents' papers, including personal checks and one high school diploma - were found over 50 miles downstream in the northern Shenandoah Valley region of Virginia.

The "Frostburg Tornado" was not the only twister to affect the county. The area had been on high alert since early evening - tornado warnings had been issued two other times, and funnel clouds were observed by several witnesses prior to sunset. One of the funnels touched down not too far from where the Frostburg Tornado entered the county - along the west side of Big Savage Mountain nearly 2 hours earlier. The funnel lifted while over Frostburg and nearby communities, and continued through Cumberland before touching down again on Irons Mountain 2-3 miles southeast of the city. In each instance, damage was limited to forested areas along the ridges.

Tornadoes were just a portion of the severe weather to affect northern Maryland. The other major player was hail, with dozens of occurrences associated with each mini-supercell. The strongest cells produced hailstones ranging from 1.75" to 2.50" in diameter; the strong updrafts in each storm combined with steep atmospheric lapse rates to produce not only large hail but long-duration hail as well. Some areas experienced up to 20 minutes of hail, and many residents noted hail which covered the ground. Reported



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MARYLAND, Central

damage included some stripped siding, varying sized dings and dents, as well as shattered glass, in numerous vehicles; stripped paint from homes and vehicles, small limb and leaf debris, and likely crop damage or destruction. The main hail-producing storm affected portions of northern Montgomery, Howard, southern Carroll, southern Baltimore, and northern Prince George's and Anne Arundel Cos - all between 1800 and 1945EST.

The episode concluded in Maryland with a few wind damage reports on the western shore of the Chesapeake Bay just before midnight. Winds blew out the door to the Annapolis (Anne Arundel Co) city fire department station, and knocked several large trees down in Eastport at approximately the same time.

<b>Montgomery County</b> Countywide	13	1435EST 1450EST			0	1	100K		<b>Thunderstorm Wind (G56)</b>
<b>Howard County</b> West Portion	13	1450EST 1505EST			0	0	8K		<b>Thunderstorm Wind</b>
<b>Carroll County</b> South Portion	13	1500EST 1515EST			0	0	2K		<b>Tstm Wind/Hail</b>
<b>Anne Arundel County</b> Millersville	13	1515EST			0	0			<b>Hail (0.75)</b>
<b>St. Mary'S County</b> Leonardtwn	13	1543EST			0	0			<b>Hail (0.75)</b>
<b>Harford County</b> Aberdeen to Havre De Grace	13	1700EST 1745EST			0	0	8K		<b>Flash Flood</b>
<b>Harford County</b> Countywide	13	1700EST			0	0	1K		<b>Tstm Wind/Hail</b>
<b>Harford County</b> Level	13	1715EST			0	0	5K		<b>Lightning</b>

A vigorous upper-level disturbance acted upon increasingly warm and humid air near the surface to produce a squall line of strong to severe thunderstorms which traversed central and northeastern Maryland during the afternoon. Overall, damage was dominated by numerous downed trees, large limbs, and power lines, though there were scattered occurrences of large hail.

Montgomery Co was hardest hit. Though no one area received major damage, nearly all communities in the eastern two-thirds of the county had some trees, large limbs, or wires down. A portion of Woodfield Road (state route 124) was closed north of Gaithersburg; dozens of trees and large limbs were down along the state route 28 corridor from Darnestown to Rockville. Farther south, fallen trees closed a portion of Persimmon Tree Road in Potomac. The most harrowing experience occurred in Glen Echo, where two vehicles were damaged by a large limb and falling wires. The two males were rescued; the woman was brought to a nearby hospital for observation. In all, county emergency management officials reported a dozen trees on houses and several others on vehicles across the county. The combination of wind and lightning knocked out power to over 40,000 Potomac Electric Power Co. customers in Montgomery and Prince George's Cos.

Across northeastern Maryland, tree damage was confined to smaller limbs and some wires. However, a slower moving storm dropped at least 1 1/2 inches of rain across central and eastern Harford Co, creating a period of flash flooding which required at least one rescue of a stranded vehicle. Several reports of street flooding were received from both Aberdeen and Havre de Grace.

Earlier, tree and wire damage was noted in southern Carroll and western Howard Cos, with the more substantial damage in Howard. Baltimore Gas and Electric reported at least 10,000 customers lost electricity in these areas at the peak of the storm.

<b>Prince George'S</b> County Temple Hills	15	1630EST			0	1			<b>Lightning</b>
<b>Prince George'S</b> County Oxon Hill	15	1635EST 1640EST			0	0	5K		<b>Thunderstorm Wind</b>
<b>Charles County</b> 4 W Waldorf	15	1650EST 1655EST			0	0	5K		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MARYLAND, Central</b>									
<b>Anne Arundel County</b> South Portion	15	1700EST 1715EST			0	0			Hail (0.75)
<b>Charles County</b> Doncaster to 1 S Mc Conchie	15	1730EST 1745EST			0	0	20K		Thunderstorm Wind
<b>Calvert County</b> St Leonard	15	1745EST			0	0	3K		Hail (1.75)
<b>Charles County</b> 6 W La Plata	15	1818EST 1830EST			0	0			Hail (1.00)
<b>Charles County</b> 6 W La Plata	15	1818EST 1830EST			0	0	8K		Thunderstorm Wind
<b>St. Mary'S County</b> Charlotte Hall	15	1833EST			0	0			Hail (0.75)
<b>Charles County</b> Benedict to 1 N Benedict	15	1835EST 1840EST			0	0	10K		Thunderstorm Wind
<b>St. Mary'S County</b> Clements	15	1845EST			0	0	35K		Thunderstorm Wind
<b>Calvert County</b> Lusby	15	1855EST 1905EST			0	0			Hail (0.75)
<b>Calvert County</b> Lusby	15	1855EST 1905EST			0	0	5K		Thunderstorm Wind
<p>The juxtaposition of a northward-moving warm front, strong surface low pressure over the midwest, and a fast-moving upper-level jet combined to produce an outbreak of severe weather across central and lower southern Maryland during the evening. Damage was highlighted by downed trees and some large hail. The most substantial damage occurred with three cells - one a decaying bow-echo across southern Prince George's and northern Charles Cos; the others rotating mini-supercells which tracked across portions of Charles, St Mary's, and southern Calvert Cos.</p> <p>Lightning associated with the first cell struck a police cruiser in Temple Hills, with the driver sustaining injuries that required a brief hospital stay. The same cell knocked several trees and large limbs down in Oxon Hill and near Waldorf (Charles Co). Though gradually weakening, this cell continued to produce hail - ranging from 0.75" in southern Anne Arundel Co to golf ball size near St. Leonard in central Calvert Co. A second, more potent rotating thunderstorm moved into Charles Co from the Potomac River, causing numerous trees and large limbs to fall between Doncaster and McConchie.</p> <p>Another cell tracked across central and eastern Charles Co, knocking down large limbs and wires, as well as producing 1 inch hail, west of La Plata. This cell produced substantial trees damage in the extreme eastern portion of the county between Benedict and Teagues Point. The storm continued into southern Calvert Co, knocking down more trees and dropping 0.75" diameter hail in and around Lusby. Meanwhile, the other cell continued into St Mary's Co, producing additional wind and hail. In Clements, two barns were destroyed and at least a dozen trees were snapped or uprooted.</p> <p>Though utility statistics were sketchy, one could assume that thousands of customers lost power during the peak of the episode. Potomac Electric Power Co reported 1,700 customers were without power; many more likely lost electricity across the Southern Maryland Electric Co coverage area, which includes St Mary's, Calvert, Charles, and portions of Prince George's Co.</p> <p>The entire episode ended shortly after 1900EST.</p>									
<b>Allegany County</b> Cumberland	16	1700EST			0	0	25K		Thunderstorm Wind
<b>Frederick County</b> Middletown	16	1705EST 1710EST			0	0	30K	5K	Thunderstorm Wind
<b>Washington County</b> 3 S Halfway to Halfway	16	1712EST 1718EST	3	200	0	1	200K		Tornado (F1)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MARYLAND, Central</b>									
<b>Frederick County</b> Frederick	16	1715EST			0	0	75K		Lightning
<b>Frederick County</b> Jefferson to Buckeystown	16	1715EST 1729EST			0	0	25K		Thunderstorm Wind
<b>Howard County</b> North Portion	16	1720EST 1730EST			0	0	10K		Thunderstorm Wind
<b>Washington County</b> Halfway to Hagerstown	16	1721EST 1729EST	5	100	0	0	200K		Tornado (F1)
<b>Carroll County</b> Countywide	16	1725EST 1755EST			0	0	10K		Lightning
<b>Carroll County</b> Sykesville to Eldersburg	16	1729EST 1736EST			0	0			Hail (1.00)
<b>Frederick County</b> Walkersville to Libertytown	16	1730EST 1745EST			0	0	15K		Thunderstorm Wind
<b>Washington County</b> Hagerstown Arprt to East Portion	16	1730EST 1740EST			0	0	20K	20K	Thunderstorm Wind (G60)
<b>Washington County</b> Leitersburg	16	1730EST			0	0	5K		Hail (1.75)
<b>Washington County</b> 1 NE Maugansville to 3 NE Maugansville	16	1730EST 1734EST	2	75	0	0	10K	20K	Tornado (F1)
<b>Frederick County</b> 3.5 NE Frederick to 4 NE Frederick	16	1735EST	0.5	50	0	0	10K		Tornado (F0)
<b>Carroll County</b> Finksburg	16	1736EST 1740EST			0	0	35K	15K	Hail (2.50)
<b>Carroll County</b> 3 NE Finksburg to 3.5 NE Finksburg	16	1738EST 1739EST	0.5	50	0	0	20K		Tornado (F0)
<b>Baltimore County</b> Reisterstown	16	1745EST			0	0	10K		Thunderstorm Wind
<b>Carroll County</b> Westminster	16	1750EST			0	0	50K		Thunderstorm Wind (G56)
<b>Carroll County</b> North Portion	16	1800EST 1900EST			0	0	10K		Flash Flood
<b>Charles County</b> North Portion	16	1810EST 1823EST			0	0	8K		Thunderstorm Wind
<b>St. Mary'S County</b> Milestown to South Portion	16	1820EST			0	0	50K	5K	Thunderstorm Wind
<b>Calvert County</b> Prince Frederick	16	1832EST			0	0	35K		Thunderstorm Wind

The approach of a cold front combined with impressive jet stream energy at upper-levels of the atmosphere acted on unstable air near the surface to produce a major severe weather episode across northern Maryland for the second time in three weeks. The combustible situation produced a mesoscale low pressure system which focused the most substantial severe which focused the most substantial severe weather in north-central Maryland. The episode featured five tornadoes, nearly a dozen instances of wind damage, and several large hail occurrences.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## MARYLAND, Central

The most concentrated damage was in and around Hagerstown. Three separate tornadoes dropped from the same parent thunderstorm within moments of each other. The first two caused considerable property damage between the town of Halfway and Hagerstown. The third produced a track of mainly tree and underbrush damage from just south of the Washington County Regional Airport to the Maryland/Pennsylvania state line. The first twister, which developed three miles south of Halfway, toppled and uprooted dozens of trees and blew down wires in the Tammany Manor neighborhood, as well as at the Hickory Elementary School. The tornado saved its worst for the Valley Mall, where a portion of the roof was torn off and damage was noted at an anchor store's loading dock. Another adjacent store had an electrical fire.

More commercial damage occurred a few blocks north, along Wesel Boulevard, where the roofs of several vacant buildings were torn off. Canopy tents at the Wal-Mart department store were flattened; the store's garden center had its greenhouse destroyed; many pieces of equipment, and plants and flowers, were also damaged. An awning at a local automobile dealership was ripped off. This tornado dissipated just southeast of the Washington Co. Detention Center - but not before knocking down trees along Interstate 81, temporarily closing one of the two travel lanes.

Shortly before the first tornado lifted, a second touched down in the Greenbury Hills subdivision of Halfway, uprooting trees and ripping siding from a few homes. This twister, on the ground for five miles, caused much of its damage over the western portion of Hagerstown before dissipating. At the Potomac Center, 44 trees were uprooted, and another 40 were damaged. Dozens more were snapped and uprooted at the nearby Carroll Heights/Hyde Park subdivision; trees were also uprooted and snapped at the Rest Haven Cemetery, with at least four fallen trees knocking over headstones. Hundreds more trees were damaged at both the Hagerstown Business College and the nearby Fountain Head Country Club, whose golf course was closed for two days to clean up the debris.

While eastern Washington Co was being pummelled, another cell was producing wind damage from southwestern through central Frederick Co. Several trees were snapped and uprooted, and some homes sustained damage to shingles, siding, and porch supports, in Middletown. More damage was noted between Jefferson and Buckeystown - another microburst - witnessed by residents as a rolling black cloud. Damage included numerous trees snapped and uprooted, a destroyed cinder block outbuilding, and a damaged garage door. Farther to the northeast, more trees were snapped, including one which fell onto a house near Libertytown. A small tornado touched down just northeast of Frederick city, taking down about a half-dozen trees near the intersection of Gas House and Liganore Roads. Intense lightning caused problems as well. The radio transmission tower which serves the Frederick Co emergency operations center was knocked out, with damage reported to radio and telecommunications equipment. Several homes were struck in the area, as was a fire department vehicle.

Severe weather propagated eastward into Carroll and Baltimore Cos. Damaging winds snapped and uprooted many trees in Westminster, including one which fell onto a home. Two trees crashed through residents' roofs along state route 31 near Westminster. Large hail the size of tennis balls caused scattered damage to homes and vehicles in Finksburg. The heavy rains associated with the stronger cells caused flash flooding across portions of the Big Pipe Creek watershed in northern Carroll Co; several roads were temporarily closed near Taneytown where the Bear Branch overflowed its banks. One road was washed out. Lightning struck at least one home and barn, causing small fires and minor damage.

Just west of the Baltimore/Carroll line (1 mile southwest of Fowlesburg), a small tornado knocked down several trees, some which fell onto a house, a camper, and a shed. Sheet metal was stripped from the shed; the trees were severely twisted, according to the resident. More trees or large limbs fell in Reisterstown (Baltimore Co) and in northern Howard Co.

As events were winding down across northern Maryland, another severe storm moved out of east-central Virginia and into lower southern Maryland, causing damage in counties that had been struck the previous evening. Trees and large limbs fell across portions of northern and eastern Charles Co, but the storm apparently saved its worst for St Mary's Co, where three barns were destroyed and numerous trees were snapped or uprooted along the state route(s) 239/520 corridor near Milestown. In Calvert Co, more trees/large limbs fell, and a portion of roof and some siding were stripped from one home.

Thousands of Maryland residents lost power yet again due to the storms; a total of at least 25,000 customers in the Baltimore Gas and Electric and Allegheny Power service areas had no electricity during the height of the storm.

**Washington County  
Hagerstown**

<b>17</b>	<b>1700EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>	<b>Tstm Wind/Hail</b>
Estimated wind gusts to 50 mph with a late afternoon thunderstorm knocked down small tree limbs and a few power lines in Hagerstown.							

**Washington County  
3 W Hagerstown to  
2 W Hagerstown**

<b>19</b>	<b>0630EST 0632EST</b>	<b>1</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>8K</b>	<b>Tornado (F0)</b>
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**Frederick County  
Urbana to  
New Market**

<b>19</b>	<b>0730EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MARYLAND, Central

Scattered severe thunderstorms developed along a warm front during the early morning, producing wind damage near Hagerstown and Frederick within an hour. A small tornado touched down briefly along Hopewell Road between Hagerstown and Williamsport, knocking several Bradford pear trees down and an additional 10 larger trees in nearby Doub's Woods Park. One tree fell onto a car. Several eyewitnesses noted a "swirling black mass" as the storm passed. In Frederick Co, a few trees fell between Urbana and New Market.

### **Carroll County**

<b>1 W Westminster</b>	23	1830EST 1930EST			0	0	5K	<b>Flash Flood</b>
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### **Montgomery County**

<b>Damascus</b>	23	1830EST 1930EST			0	0		<b>Flash Flood</b>
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A slow-moving line of thunderstorms, containing pockets of very heavy rain, caused local flash flooding which extended from extreme northern Montgomery Co through western Carroll Co during the evening. Measured rainfall of 2.5 inches (1.1" in a half hour), falling onto saturated soil, caused small streams and creeks to escape their banks near Damascus. In western Carroll Co, the Meadow Branch overflowed its banks just west of Westminster, causing temporary closure of state highway 140.

### **Carroll County**

<b>Millers</b>	26	1408EST			0	0		<b>Hail (0.88)</b>
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### **Baltimore County**

<b>2 N Cockeysville</b>	26	1415EST			0	0		<b>Hail (0.75)</b>
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### **Baltimore County**

<b>Reisterstown to Towson</b>	26	1600EST 1614EST			0	0	10K	<b>Thunderstorm Wind</b>
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### **Baltimore County**

<b>Towson to Essex</b>	26	1615EST 1630EST			0	0	10K	<b>Thunderstorm Wind</b>
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### **Montgomery County**

<b>2 N Gaithersburg</b>	26	1615EST			0	0	5K	<b>Thunderstorm Wind</b>
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### **Baltimore County**

<b>Reisterstown</b>	26	1630EST			0	1	25K	<b>Hail (1.00)</b>
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### **Carroll County**

<b>South Portion</b>	26	1650EST 1700EST			0	0	5K	<b>Thunderstorm Wind</b>
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### **Baltimore City (C)**

<b>West Baltimore</b>	26	1730EST			1	1		<b>Lightning</b>
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### **Anne Arundel County**

<b>Countywide</b>	26	1910EST 1925EST			0	0	10K	<b>Thunderstorm Wind</b>
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### **Anne Arundel County**

<b>Arnold</b>	26	1920EST			0	0	20K	<b>Lightning</b>
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### **Calvert County**

<b>Lusby</b>	26	1930EST			0	0	10K	<b>Thunderstorm Wind</b>
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### **St. Mary'S County**

<b>Mechanicsville</b>	26	1930EST			0	0		<b>Hail (0.75)</b>
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### **St. Mary'S County**

<b>2 W Patuxent River Nas</b>	26	1930EST			0	0	25K	<b>Lightning</b>
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### **St. Mary'S County**

<b>Charlotte Hall to Leonardtown</b>	26	1940EST 1955EST			0	0	10K	<b>Thunderstorm Wind</b>
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A weak upper-level disturbance, combined with a surface trough, triggered a hot, humid, unstable air mass lying across much of Maryland. Strong to severe thunderstorms developed rapidly in northern Maryland and tracked east-southeast into east-central and lower southern Maryland during the early evening. The main culprits for damage were gusty winds and lightning, through a few occurrences of large hail were noted.

Initial thunderstorms produced large hail in central Baltimore and northern Carroll Cos during the mid afternoon. The real action

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MARYLAND, Central

began during the early evening commuting hours, when a severe thunderstorm knocked down numerous trees and large limbs on an east-southeast trek from Reisterstown to Essex. The same cell produced wind-driven hail which broke windows of several automobiles in Reisterstown. The flying glass shards injured one occupant of a vehicle; the shards had to be removed from his scalp. Other wind damage was noted across southern Carroll Co and central Montgomery Co.

The final round of storms fired during the mid-evening, producing damaging wind gusts (mainly trees and power lines), first in northern and eastern Anne Arundel Co. Other storms developed over lower southern Maryland, producing tree and wire damage in St Mary's and Calvert Cos.

Lightning was a major factor with the storms. A lightning death occurred in southwest Baltimore City at 1730EST when two youngsters were running home to escape the storm. They made it to the shelter of a large tree, which was struck. The attendant current burned over half of the deceased's (a nine-year old girl) body. Her 8 year-old friend survived with lesser burns. Farther south, a small house fire was ignited by a lightning strike in Arnold. Power outages of at least 33,000 Southern Maryland Electric Co. customers were directly attributed to a lightning strike at a supply station in St Mary's Co. In all, at least 50,000 Maryland residents west of the Chesapeake Bay lost electricity during the outbreak of storms.

<b>Washington County</b> 5 SW Hagerstown to Hagerstown Arpt	30	1639EST			0	0	5K	<b>Thunderstorm Wind (G50)</b>
<b>Washington County</b> Leitersburg to Smithsburg	30	1700EST			0	0	10K	<b>Thunderstorm Wind</b>
<b>Frederick County</b> Middletown	30	1705EST			0	0	3K	<b>Thunderstorm Wind</b>
<b>Frederick County</b> 1 S Thurmont	30	1715EST			0	0	3K	<b>Thunderstorm Wind</b>
<b>Carroll County</b> Sykesville	30	1730EST 1736EST			0	0	8K	<b>Thunderstorm Wind</b>
<b>Howard County</b> Northwest Portion	30	1735EST 1750EST			0	0	12K	<b>Thunderstorm Wind</b>
<b>Carroll County</b> Eldersburg	30	1736EST			0	0		<b>Hail (0.75)</b>
<b>Baltimore County</b> Owings Mills	30	1755EST			0	0	5K	<b>Thunderstorm Wind</b>

A fast-moving cold front, aided by another strong upper-level disturbance, concluded June's wild weather with one more severe weather episode - once again confined mainly to the northern tier of Maryland. Downburst and gust-front wind damage were the main severe weather types this day.

Wind damage began in Washington Co, when a tractor-trailer was blown over along Interstate 81 southwest of Hagerstown. Farther up the highway, at the junction of I-81 and I-70, a large tree was down, blocking some traffic. The same line of storms produced a wind gust to 58 mph at the Washington County Regional Airport near the Mason-Dixon Line. Smithsburg and Leitersburg, in eastern Washington Co, were hardest hit. Several trees and large limbs were damaged, and a shed, tiller, and swing set sustained damage at one residence. Numerous wires were blown down as well.

Farther east, in northwest Frederick Co, large limbs were knocked down near Thurmont, including one tree which barely missed striking bears at the Catocin Mountain Zoo along federal highway 15. Damage at the zoo was estimated to be \$1,000. As the line bore down on Frederick city, several residents claim to have seen funnel clouds. However, only several large limbs were felled, and no trees were (reportedly) uprooted. Additional tree, limb, and wire damage occurred as the line headed into southern Carroll, northern Howard, and western Baltimore Cos. Heaviest damage was noted in northwestern Howard Co, where several roads were blocked by fallen trees and tree debris. A tree fell onto a house in Sykesville.

Power outages included at least 34,000 customers in the BGE service area, and perhaps hundreds of others in the Allegheny Power service area in western Maryland.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MARYLAND, Northeast</b>									
<b>Kent County Countywide</b>	<b>01</b>	<b>0005EST 0015EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
			A squall line of severe thunderstorms produced what emergency management personnel described as hurricane force wind gusts knocked down numerous trees and power lines throughout the county.						
<b>Queen Anne'S County Church Hill</b>	<b>02</b>	<b>2000EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Talbot County St Michaels</b>	<b>02</b>	<b>2005EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.50)</b>
			Quarter to walnut size hail fell in St. Michaels.						
<b>Kent County Rock Hall</b>	<b>12</b>	<b>2200EST</b>			<b>0</b>	<b>1</b>		<b>0</b>	<b>Lightning</b>
<b>Cecil County Elkton</b>	<b>12</b>	<b>2215EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Lightning</b>
			Thunderstorms with frequent lightning moved through Cecil and Kent Counties during the late evening of the 12th. In Kent County, a boat was struck by lightning and one person was injured. Heavy rain contributed to numerous accidents in the county. In Cecil County, a lightning strike to the tower temporarily knocked out the emergency manager's communication center. Delmarva Power and Light reported about 6,300 customers lost power throughout the peninsula that evening.						
<b>Kent County Worton</b>	<b>13</b>	<b>1555EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
			A severe thunderstorm knocked down several trees in and around Worton.						
<b>Cecil County Charlestown to North East</b>	<b>13</b>	<b>1650EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
			A severe thunderstorm pulled down wires and knocked down trees in both Charlestown and North East.						
<b>Queen Anne'S County Centreville</b>	<b>15</b>	<b>1815EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
			A severe thunderstorm knocked down large tree limbs in and around Centreville.						
<b>Talbot County Countywide</b>	<b>16</b>	<b>1850EST 1910EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
			Severe thunderstorms rocked Talbot County during the evening of the 16th. Large trees were knocked down in Easton, Idlewild Park, Royal Oak and Trappe. A vehicle was hit by limbs near Easton. U.S. Route 50 was blocked near Trappe by downed trees. A large tree blocked a road leading to the Easton Municipal Airport. About 1,260 homes and businesses lost power with numerous outages reported in the south side of Easton.						
<b>Caroline County Countywide</b>	<b>16</b>	<b>1910EST 1915EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G65)</b>
<b>Caroline County Denton</b>	<b>16</b>	<b>1925EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
			A pair of severe thunderstorms caused wind damage in Caroline County and hit Denton twice. Wind gusts were estimated at around 75 mph and knocked down whole trees and poles. In Denton, windows were blown out of one house and downspouts were pulled away from several homes. An irrigation rig was blown across State Route 331 in Preston. Downed trees were also reported in Federalsburg, Smithville and Tuckahoe Neck. Scattered power outages occurred throughout the county and power was not completely restored until 730 a.m. EDT the next day.						
<b>MDZ019</b>		<b>Talbot</b>							
	<b>25</b>	<b>0500EST 0800EST</b>			<b>0</b>	<b>8</b>		<b>0</b>	<b>Fog</b>
			Some patchy dense fog caused several chain reaction accidents around the intersection of U.S. Route 50 and Maryland State Route 404. Six accidents that involved eighteen vehicles occurred within a 200 yard area and caused eight injuries and five hospitalizations. The worst accident involved a tractor trailer and five cars.						
<b>MDZ008-012-015- 019&gt;020</b>		<b>Cecil - Kent - Queen Annes - Talbot - Caroline</b>							
	<b>25</b>	<b>0900EST</b>			<b>0</b>	<b>0</b>		<b>0</b>	<b>Hot Spell</b>
	<b>26</b>	<b>1800EST</b>							
			A two day hot spell brought some of the highest temperatures of the summer to the Delmarva Peninsula and ended abruptly with a few severe thunderstorms during the late afternoon and early evening of the 26th. The highest temperatures occurred on the 26th and included 96 degrees at the Baltimore-Washington International Airport, 94 degrees in Salisbury and Bridgeville (Delaware).						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MARYLAND, Northeast</b>									
<b>Kent County</b> Countywide	26	1525EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm with frequent lightning downed large limbs and caused power outages across half of the county. About 20,000 homes and businesses lost power in Delmarva Power and Light's (Connectiv) service area.								
<b>Queen Anne'S County</b> Hayden	26	1630EST			0	0			<b>Thunderstorm Wind (G57)</b>
	A severe thunderstorm uprooted numerous trees and damaged homes in and around the Claiborne Fields Development near Hayden. Most of the structural damage occurred near the intersection of White Marsh and Tanyard Roads. The wind damage ran the length of White Marsh Road to Maryland State Route 305 near Hope. About 10 homes were damaged, mainly losing siding and soffit work. A home under construction had its roof torn away. A large tree crushed one deck and another tree crushed a pickup truck. Numerous trees had their tops snapped and the corn in the fields were flattened. Power was not completely restored in the area until 11 a.m. EDT the next day.								
<b>Cecil County</b> Fair Hill	30	1825EST			0	0			<b>Thunderstorm Wind (G50)</b>
	The southern edge of a squall line of severe thunderstorms moved through northern sections of Cecil County and pulled down power lines in Fair Hill.								
<b>MARYLAND, South</b>									
<b>Dorchester County</b> East New Market	02	2105EST			0	0			<b>Hail (1.00)</b>
<b>Wicomico County</b> Delmar	02	2200EST			0	0			<b>Hail (0.75)</b>
<b>Wicomico County</b> Fruitland	02	2250EST			0	0			<b>Hail (0.75)</b>
<b>Worcester County</b> Snow Hill	02	2253EST			0	0			<b>Hail (1.75)</b>
<b>Worcester County</b> 3 W Snow Hill to Snow Hill	02	2253EST			0	0	250K		<b>Thunderstorm Wind</b>
	Microburst ripped the roof off of a maintenance building, with the roof debris scattered about 200 yards into a neighboring field. Damage also occurred at a nearby car dealership, where a tent was blown down and approximately 18 cars were damaged. The ten t poles caused most of the damage to the cars, including numerous dents and broken windows. About 3 miles west of this site, several large pine trees were snapped off approximately 15 feet above the ground.								
<b>Dorchester County</b> Hurlock	13	1620EST			0	0	2K		<b>Thunderstorm Wind</b>
	Several trees and power lines down.								
<b>Wicomico County</b> Salisbury	13	1640EST			0	0	2K		<b>Thunderstorm Wind (G66)</b>
	Wind gust of 66 knots (76 mph) was recorded at Salisbury Wicomico County Airport. Few trees and power lines down around the area.								
<b>Wicomico County</b> Salisbury	13	1645EST			0	0	5K		<b>Thunderstorm Wind</b>
	Thunderstorm winds caused construction wall to collapse at Giant food store.								
<b>Worcester County</b> West Ocean City	13	1710EST			0	0	2K		<b>Thunderstorm Wind</b>
	Several trees down near golf course along Route 50.								
<b>Wicomico County</b> Fruitland	15	2125EST			1	0	20K		<b>Lightning</b>
	Lightning strike caused a fire to a barn. Also, a 20 year old man was struck and killed by lightning. M200U								
<b>Dorchester County</b> Cambridge	16	1850EST			0	0	2K		<b>Thunderstorm Wind</b>
	Power lines down.								
<b>Somerset County</b> Princess Anne	16	1910EST			0	0			<b>Hail (1.75)</b>
<b>Somerset County</b> Princess Anne	16	1910EST			0	0	3K		<b>Thunderstorm Wind</b>
	Numerous trees down on Route 13.								



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MARYLAND, South</u></b>									
<b>Wicomico County</b> Salisbury	16	1935EST			0	0			Hail (0.75)
<b>Dorchester County</b> Cambridge	26	2005EST			0	0			Hail (0.75)
<b>Dorchester County</b> Cambridge	26	2005EST			0	0			Thunderstorm Wind (G52)
<b>Wicomico County</b> Hebron	26	2030EST 2035EST			0	0	10K		Thunderstorm Wind
									Barn was destroyed and top of trees blown off.
<b>Wicomico County</b> Salisbury	26	2040EST 2050EST			0	0	3K		Thunderstorm Wind
									Several trees down and scattered power outages.
<b>Somerset County</b> Fairmount	26	2052EST			0	0	2K		Thunderstorm Wind
									Large tree down blocking both lanes of Route 361.
<b>Worcester County</b> Pocomoke City	26	2100EST			0	0	2K		Thunderstorm Wind
									Several trees down in Pocomoke River State Forest.
<b>Worcester County</b> Snow Hill	26	2100EST			0	0	2K		Thunderstorm Wind
									Several trees down.
<b><u>MARYLAND, West</u></b>									
<b>Garrett County</b> Grantsville	02	2045EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Garrett County</b> Friendsville	02	2112EST			0	0			Hail (1.50)
<b>Garrett County</b> 4 W Friendsville to 3 SW Friendsville	02	2050EST 2100EST	3	300	0	0	1M		Tornado (F2)
									An F2 tornado passed southeast through southern Fayette County PA, the northeast tip of Preston County WV, and into northwest Garrett County MD. The total length of the tornado as it passed across these three counties was 12 miles. Damage included a completely destroyed dairy barn, two completely destroyed house trailers, and at least 21 other structures heavily damaged, many with roofs partially or completely peeled off. Several cows were killed, with one cow thrown through the air over 100 yards. A clearly visible 300-yard wide, 1-mile long swath of trees which were completely sheared/uprooted was present near the Pennsylvania/West Virginia state border. One Fayette County official estimated at least two million dollars damage in lost timber alone in that county. Despite the damage, interviews with law enforcement officials, paramedics and local residents revealed no injuries occurred.
<b>Garrett County</b> 1 NW Finzel to 1.5 SE Finzel	02	2138EST 2142EST	2.5	700	0	0	500K		Tornado (F2)
									An F2 tornado passed through the town of Finzel in extreme northeast Garrett County. Several buildings were destroyed, including a small house and cinder-block garage.
<b>Garrett County</b> Countywide	16	1615EST 1630EST			0	0	25K		Thunderstorm Wind
									Thunderstorm winds blew down numerous large trees across the county.
<b>Garrett County</b> Friendsville	26	1415EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down.
<b>Garrett County</b> Keysers Ridge	30	1615EST			0	0			Hail (0.75)
<b><u>MASSACHUSETTS, Central and East</u></b>									
<b>Norfolk County</b> Braintree	01	0015EST			0	0	60K		Lightning
									Lightning struck and started a fire in a two-story Cape-style home. Damage was estimated at \$60,000. There were no injuries.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MASSACHUSETTS, Central and East</b>									
<b>Hampden County</b>									
Granville	02	2225EST			0	0			Hail (0.75)
Dime size hail was reported in Granville during a late evening thunderstorm. Farther east, a thunderstorm wind gust to 43 mph was reported in Hardwick in Worcester County.									
<b>MAZ004&gt;007-012&gt;017-020</b>									
<b>Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Southern Bristol</b>									
	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Suffolk County</b>									
Revere	13	1323EST			0	0	20K		Lightning
A lightning strike resulted in a hotel fire in Revere. Damage estimated.									
<b>MAZ005-005-005&gt;006-006-013-013</b>									
<b>Western Middlesex - Western Essex - Western Norfolk</b>									
	13	1345EST			0	0	570K		Flood
	23	2300EST							
Maynard									
<b>Norfolk County</b>									
Walpole	13	1400EST			0	0	570K		Flood
	14	1600EST							
Spring Brook									
<b>Norfolk County</b>									
Walpole	13	1400EST			0	0	570K		Flood
	14	1600EST							
Mine Brook									
<b>Norfolk County</b>									
Walpole	13	1400EST			0	0	570K		Flood
	14	1600EST							
Diamond Brook									
<b>Suffolk County</b>									
Boston	13	1500EST			0	0	570K		Flood
	14	1100EST							
Muddy River									
<b>Essex County</b>									
Lynnfield	13	1542EST			0	0	570K		Flood
Pillings Pond									
<b>Norfolk County</b>									
East Walpole	13	1547EST			0	0	570K		Flood
	14	1500EST							
Traphole Brook									
<b>Middlesex County</b>									
Wakefield	13	1555EST			0	0	570K		Flood
Crystal Lake									
<b>Essex County</b>									
Georgetown	13	1600EST			0	0	570K		Flood
Parker River									
<b>Middlesex County</b>									
Littleton	13	1700EST			0	0	570K		Flood
Beaver Brook									
<b>Norfolk County</b>									
Walpole	13	1700EST			0	0	570K		Flood
Tributary to Traphole Brook									
<b>Norfolk County</b>									
Franklin	13	1725EST			0	0	570K		Flood
Mill Brook									
<b>Worcester County</b>									
Northborough	13	1800EST			0	0	570K		Flood
	14	1500EST							
West Branch of the Assabet River									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MASSACHUSETTS, Central and East</b>									
<b>Norfolk County</b>									
<b>Bellingham</b>	<b>13</b>	<b>1900EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>15</b>	<b>0700EST</b>							
	Peters Brook								
<b>Middlesex County</b>									
<b>Winchester</b>	<b>13</b>	<b>2100EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>16</b>	<b>1100EST</b>							
	Aberjona River								
<b>Middlesex County</b>									
<b>Arlington</b>	<b>13</b>	<b>2200EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>16</b>	<b>0900EST</b>							
	Alewife Brook								
<b>Middlesex County</b>									
<b>Medford</b>	<b>13</b>	<b>2215EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>16</b>	<b>1200EST</b>							
	Mystic River								
<b>Bristol County</b>									
<b>Somerset</b>	<b>13</b>	<b>2300EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	Buffington Brook								
<b>Bristol County</b>									
<b>Norton</b>	<b>14</b>	<b>0000EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>15</b>	<b>0700EST</b>							
	Wading River								
<b>Middlesex County</b>									
<b>Wilmington to Tewksbury</b>	<b>14</b>	<b>0500EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>18</b>	<b>1200EST</b>							
	Shawsheen River								
<b>Middlesex County</b>									
<b>Waltham</b>	<b>14</b>	<b>0700EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>15</b>	<b>0600EST</b>							
	Lower Charles River								
<b>Essex County</b>									
<b>Peabody</b>	<b>14</b>	<b>0845EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	Procter and Goldwaithe Brooks								
<b>Essex County</b>									
<b>Lawrence</b>	<b>14</b>	<b>1200EST</b>			<b>0</b>	<b>0</b>	<b>570K</b>		<b>Flood</b>
	<b>18</b>	<b>1600EST</b>							
	Shawsheen River								
<b>Bristol County</b>									
<b>Attleboro</b>	<b>14</b>	<b>1230EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>15</b>	<b>1700EST</b>							
	Three Mile River								
<b>Bristol County</b>									
<b>Taunton</b>	<b>14</b>	<b>1340EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>16</b>	<b>1700EST</b>							
	Ten Mile River								
<b>Essex County</b>									
<b>Methuen</b>	<b>14</b>	<b>1700EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	Spicket River								
<b>Bristol County</b>									
<b>Rehoboth to Swansea</b>	<b>14</b>	<b>2300EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>15</b>	<b>0100EST</b>							
	Palmer River								
<b>Middlesex County</b>									
<b>Waltham</b>	<b>15</b>	<b>0715EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>16</b>	<b>1200EST</b>							
	Lower Charles River								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **MASSACHUSETTS, Central and East**

### **Middlesex County**

<b>Waltham</b>	<b>15</b>	<b>1430EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>16</b>	<b>0400EST</b>							
		Lower Charles River							

### **Essex County**

<b>Ipswich</b>	<b>15</b>	<b>2200EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
	<b>17</b>	<b>1100EST</b>							
		Ipswich River							

### **Middlesex County**

<b>Waltham</b>	<b>16</b>	<b>0730EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		<b>1200EST</b>							
		Lower Charles River							

### **Worcester County**

<b>Gardner</b>	<b>16</b>	<b>0800EST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Lightning</b>
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On June 12th through the 14th, a very slow moving complex storm system moved through southeast New England. The combination of its slow movement and the presence of tropical moisture across the region produced rainfall of 6 to 12 inches over much of eastern Massachusetts, which led to widespread urban, small stream, and river flooding. During the period from June 15th through the 20th, the slow moving upper level system continued to set off afternoon thunderstorms which moved very slowly in the weak upper level wind flow. Several flash flood events occurred. The flooding resulted in a Presidential Disaster Declaration in the following Massachusetts counties: Essex, Middlesex, Norfolk, Suffolk, and Bristol. Dollar damage has been established at \$13,000,000.

A flash flood situation developed when torrential rain fell on June 13th producing 5 to 8 inches of rainfall in less than 12 hours. Urban and poor drainage flooding began around mid-day and small stream flooding began about mid-afternoon. Second and third waves of heavy rainfall followed by the evening of June 14th, producing an additional 2 to 4 inches. Many rivers and streams reached 50 to 75 year return period elevations. However, despite the magnitude of flooding that did occur, most streams climbed to only 1 to 2 feet above their respective flood stages. The total dollar damage figure was not nearly as great as what occurred from the October, 1996 floods, which caused more than \$64 million damage to the Boston Metropolitan rail system alone.

While significant flood damage to the Boston Metro area public transportation was averted, water did force the closing of much of the subway transit system and commuter rails in Greater Boston, forcing many commuters to use bus transportation. Dozens of roads and highways were flooded and cars stalled in waist-deep muddy water. About 12,000 electric customers lost power during the heavy rain.

The first reports of small stream flooding occurred when the Spring, Diamond, and Mine Brooks overflowed their banks in Walpole. In Boston, the Muddy River was in flood at 4 PM and it remained several feet out of its banks as late as 11:30 PM. The subway system in a part of Boston was flooded. Flooding occurred during the late afternoon in Lynnfield in Essex County when Pillings Pond overflowed its banks. Cars were reported stalled on flooded roads. In Norfolk County, in Walpole, Traphole Brook overflowed and flooded two houses. A tributary to Traphole Brook flooded Francis William Park and adjacent homes. In Middlesex County, in Wakefield, Crystal Lake rose to bankfull and required sandbagging. In Littleton, Beaver Brook overflowed its banks and flooded local property there.

During the evening hours of June 13th, small stream flooding continued along several streams in Middlesex, Norfolk, and Bristol Counties. In Norfolk County, in Franklin, the Mill Brook flooded homes while other brooks and streams were in flood. In Middlesex County, the Aberjona River was reported out of its banks in Winchester; the Alewife Brook flooded a portion of Route 16 in Arlington; and the Mystic River rose out of its banks in Medford. In Bristol County, in Somerset, the Buffington Brook flooded a portion of Route 128.

During the morning of June 14th, the small stream flooding continued. In Bristol County, in Norton, the Wading River was in flood, based on a gage report. In Middlesex County, in Wilmington, the Shawsheen River was in flood based on gage reports and in Waltham, flooding occurred along the Lower Charles River. In Essex County, in Peabody, flooding occurred along the Procter and Goldwaith Brooks, with significant street flooding reported in several areas. By 1 PM in the early afternoon of the 14th, flooding was reported in Lawrence in Essex County along the Shawsheen River and a portion of Route 114 was flooded.

The following are the reports of flooding along the larger rivers. The Neponset River at Norwood reached flood stage of 9 feet at 2:45 PM on June 13th, crested at 10.87 feet at 10:15 AM on the 14th, and fell below flood stage at 4 AM on June 17th. The Charles River at Dover reached flood stage of 5 feet at 9 AM on June 15th, crested at 6.8 feet at 8 PM on the 18th, and fell below flood stage at 9:40 PM on June 19th. The Assabet River at Maynard reached flood stage of 5 feet at 1 PM on June 14th, crested at 5.49 feet at 5 AM on the 15th, and fell below flood stage at 3 AM on June 17th. The Nashua River at East Pepperell reached flood stage of 8 feet at 2 PM on June 15th, crested at 8.23 feet at 2 AM on the 16th, and dropped below flood stage at 2:30 PM on the 16th. The Ipswich River in Ipswich in Essex County reached flood stage of 7 feet at 11 PM on June 15th, crested at 7.20 feet at noon on

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **MASSACHUSETTS, Central and East**

the 17th, then fell below flood stage at 10 PM on June 18th. On June 16th, the following reports were received for towns in Middlesex, Essex, and Worcester Counties. In Malden, the Malden River was in flood at 8:15 AM; in Winchendon at 8:30 AM, the Aberjona River was still over its banks, but receding; in Methuen at 8:40 AM, the Spicket River was still in flood and evacuations had occurred downstream to Lawrence and the river was still rising. In Lawrence, officials evacuated about 60 people from flooded multi-family homes in a four block area after power and natural gas had been turned off for safety reasons. Also, on June 16th, in Tewksbury at 8:45 AM, the Shawsheen River was in flood and numerous road closures were reported in surrounding towns. In South Tewksbury, three roads were flooded along with many homes and businesses. One bridge was knocked out by the flooding. On June 16th, in Bristol County, the following small streams were flooded: in Taunton at 9:30 AM, the Taunton River was out of its banks flooding West Water Street; in Attleboro at 9:40 AM, the Three Mile River was still out of its banks with numerous road closures; in Norton at 9:45 AM, the Wading River was still over its banks.

The Concord River at Lowell reached flood stage of 8 feet at 5 AM on June 17th, crested at 8.05 feet at 10 AM on June 18th, and fell below flood stage at midnight at the end of the day on June 20th. The Merrimack River at Lowell reached flood stage of 52 feet at 8 AM on June 17th, crested at 52.8 feet at 1 AM on the 18th, the fell below flood stage at 7 PM on the 18th. The Merrimack River at Lawrence reached flood stage of 20 feet at 6 PM on June 17th, crested at 21 feet at 1 AM on the 19th, and fell below flood stage at 6 AM on the 19th. The Merrimack River at Haverhill reached flood stage of 15 feet at 5 AM on June 18th, crested at 15.8 feet at 2 PM the same day, then fell below flood stage at 8 PM on the 18th.

On June 16th, in Worcester County in Gardner, a bolt of lightning started a fire which caused \$15,000 damage to a garage. Damage estimates for the city of Boston ranged from \$9 to \$17 million in total property damage and about 10,000 homes were reporting moderate to minor damage, according to the Massachusetts Emergency Management Agency. Another \$1 million damage was done to roads and \$150,000 damage to school buildings.

<b>Worcester County</b> Westborough	18	1440EST			0	1			<b>Lightning</b>
<b>Norfolk County</b> Milton to Braintree	18	1600EST 1640EST			0	0			<b>Heavy Rain</b>
<b>Norfolk County</b> Wellesley	18	1700EST			0	0			<b>Heavy Rain</b>
<p>One person was struck and slightly injured by lightning in Westboro, in Worcester County, during an afternoon thunderstorm. A late afternoon thunderstorm produced a torrential downpour in several towns in eastern Norfolk County. The Blue Hill Observatory in Milton recorded 3.02 inches of rain in just 36 minutes ending at 5 PM. A total of 3.36 inches of rain was recorded for the afternoon storm and this brought the total rainfall from June 12th through the 18th to 12.16 inches. Many roads were flooded in the western part of Milton. In Randolph, where Route 28 and Route 139 were flooded, an observer reported 2.25 inches in 40 minutes. In Braintree, Route 3 was flooded in both directions while in Quincy, Route 37 was also flooded in both directions. In Wellesley Hills, Route 9 was flooded and a spotter reported 2.35 inches of rain in 35 minutes. Up to 5,000 electric customers lost power in the Quincy-Milton area for up to 2 hours. Another 3,000 electric customers lost power in Randolph.</p>									
<b>Norfolk County</b> Foxborough	19	1333EST			0	0			<b>Hail (0.88)</b>
<b>Bristol County</b> Taunton	19	1340EST			0	0			<b>Hail (0.75)</b>
<b>Bristol County</b> Taunton	19	1405EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Worcester County</b> Douglas	19	1530EST			0	0			<b>Flood</b>
<p>A severe thunderstorm produced large hail in Bristol and Norfolk Counties.. In Norfolk County, nickel size hail was reported in Foxboro, and in Bristol County, dime size hail was reported in Taunton. Trees and wires were downed in Taunton. In Douglas, in Worcester County, flooding closed a road when a reservoir overflowed.</p>									
<b>Worcester County</b> Barre	20	1430EST			0	0			<b>Hail (0.75)</b>
<b>Hampshire County</b> Plainfield	20	1437EST			0	0			<b>Hail (0.75)</b>
<b>Franklin County</b> Ashfield	20	1445EST			0	0			<b>Hail (0.88)</b>
<b>Worcester County</b> Brookfield	20	1510EST			0	0			<b>Hail (0.75)</b>
<b>Franklin County</b> Wendell	20	1520EST			0	0			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **MASSACHUSETTS, Central and East**

### **Franklin County**

<b>Hawley</b>	<b>20</b>	<b>1605EST 1630EST</b>			<b>0</b>	<b>0</b>	<b>75K</b>		<b>Flash Flood</b>
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Severe thunderstorms produced large hail in several towns in western and central Massachusetts. Dime size hail fell in Barre and Brookfield in Worcester County. In Franklin County, nickel size hail fell in Ashfield and dime size hail fell in Wendell. Also, in Franklin County, in the town of Hawley, a torrential downpour resulted in a flash flood event. Radar estimated rainfall of 5 inches in 3 hours. The Chickley River washed out two bridges and a portion of Route 8A was washed out. A state of emergency was declared in town.

### **Norfolk County**

<b>Wellesley</b>	<b>26</b>	<b>0030EST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind (G50)</b>
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An early morning thunderstorm produced a downburst wind event in Wellesley, in Norfolk County. Twenty one-inch diameter trees were reported down along with 3 utility poles. Several houses were hit by falling trees and branches. The most severe damage was limited to a half-mile area in West Wellesley.

### **Barnstable County**

<b>Marstons Mills</b>	<b>26</b>	<b>1115EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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Dime size hail was reported in Marstons Mills in Barnstable County (Cape Cod).

### **Bristol County**

<b>North Dartmouth</b>	<b>26</b>	<b>1646EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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### **Bristol County**

<b>New Bedford to Fairhaven</b>	<b>26</b>	<b>1705EST 1720EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Bristol County**

<b>Acushnet</b>	<b>26</b>	<b>1730EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
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### **Barnstable County**

<b>Sandwich</b>	<b>26</b>	<b>1800EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Severe thunderstorms produced large hail and damaging winds from the New Bedford area in Bristol County to the western part of Cape Cod. Thunderstorm winds downed large limbs, branches, and power lines in North Dartmouth and Acushnet in Bristol County and in Sandwich in Barnstable County. Dime size hail fell in New Bedford and Fairhaven.

### **Plymouth County**

<b>Mattapoisett</b>	<b>26</b>	<b>1720EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Trees and power lines were reported down in Mattapoisett at 620 PM, per the local police department.

### **MAZ007-015-019-021>022**

#### **Eastern Essex - Suffolk - Eastern Plymouth - Southern Plymouth - Barnstable**

	<b>27</b>	<b>1300EST 1900EST</b>			<b>0</b>	<b>1</b>	<b>10K</b>		<b>Strong Winds</b>
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A "back door" cold front moved south along the Massachusetts east coast and then along the south coast, Cape Cod, and the Islands. North winds gusting between 35 and 47 mph occurred in the wake of the front and raised havoc with small craft up and down the coast. A peak gust to 47 mph was reported from Wareham. In Boston Harbor, a sailing vessel was dismasted and several boats were blown from their moorings. A person was injured off of Hull due to excessive rolling of the boat. In Gloucester, a sailboat was blown onto the rocks. On Cape Cod, in Woods Hole, many boats were blown from their moorings and off the coast of Falmouth, 16 people had to be rescued after their boats capsized. In Chatham a small boat capsized, resulting in a person being thrown into the water. Two small boats were blown onto a breakwater. In Provincetown, a sailboat was blown onto a breakwater.

### **Bristol County**

<b>Fairhaven</b>	<b>30</b>	<b>2100EST 2115EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Bristol County**

<b>South Dartmouth</b>	<b>30</b>	<b>2110EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Plymouth County**

<b>Mattapoisett</b>	<b>30</b>	<b>2115EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Bristol County**

<b>Fairhaven</b>	<b>30</b>	<b>2118EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
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### **Bristol County**

<b>Fairhaven</b>	<b>30</b>	<b>2120EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
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### **Plymouth County**

<b>Wareham to Onset</b>	<b>30</b>	<b>2125EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MASSACHUSETTS, Central and East

<b>Barnstable County</b> Bourne to Sandwich	30	2131EST			0	0			Hail (1.00)
<b>Barnstable County</b> Barnstable	30	2147EST			0	0			Hail (0.75)

A severe thunderstorm (supercell) which produced baseball size hail in Rhode Island moved eastward along the south coast of Massachusetts onto Cape Cod producing large hail and one report of damaging winds. There was wind damage in Bristol County, in Fairhaven, caused by straight-line downburst winds. Meteorologists from the National Weather Service surveyed the damage and estimated the wind gusts to have ranged from 75 to 85 mph. The emergency management director for the town of Fairhaven reported a wall blown down and the roof of a building blown off. Numerous trees were blown down near the site where the roof was blown off. In Bristol County, dime to one inch size hail fell in Fairhaven, and dime size hail fell in South Dartmouth. Large branches were reported down in Dartmouth. One inch size hail was reported from Mattapoisett and Onset in Plymouth County. On Cape Cod, one inch size hail was reported from Bourne and Sandwich, and dime size hail fell in the town of Barnstable.

## MASSACHUSETTS, West

<b>Berkshire County</b> Northeast Portion	20	1600EST 1700EST			0	0	25K		Flash Flood
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Thunderstorms with torrential rain produced flash flooding in northeast Berkshire County. In the Town of Savoy, Hawley Road was washed out.

## MICHIGAN, East

<b>MIZ047&gt;049-053&gt;055- 060&gt;063-068&gt;069-075</b> Midland - Bay - Huron - Saginaw - Tuscola - Sanilac - Shiawassee - Genesee - Lapeer - St. Clair - Livingston - Oakland - Washtenaw	02	1300EST 1700EST			0	0			High Wind (G35)
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A cold front moved east across southeast Michigan early in the afternoon. West to northwest winds behind the cold front gusted as high as 40 mph. These winds, following so closely on the heels of the derecho of May 31st, caused some problems. Some tree limbs and power lines, undoubtedly weakened by the severe weather two days previous, came down. Detroit Edison estimated that 40,000 customers lost power, and Consumers Energy reported that the gusty winds put the restoration of electrical service from the May 31st storms behind schedule.

<b>Monroe County</b> 2 N Ottawa Lake to Petersburg	12	1630EST			0	0			Hail (0.75)
<b>Lenawee County</b> Cambridge Jct	12	1635EST			0	0			Hail (0.75)
<b>Monroe County</b> Ida	12	1640EST			0	0	5K		Thunderstorm Wind (G52)
<b>Washtenaw County</b> 1 SE Saline to 3 NW Milan	12	1700EST 1705EST			0	0	40K		Thunderstorm Wind (G52)
<b>Washtenaw County</b> 3 N Ypsilanti to 5 S Ypsilanti	12	1719EST 1725EST			0	0	5K		Thunderstorm Wind (G52)
<b>Wayne County</b> Belleville	12	1730EST			0	0			Thunderstorm Wind (G52)

A strong area of low pressure moved slowly east across the Upper Peninsula of Michigan during the day. The associated cold front crossed the Lower Peninsula during the late afternoon and evening hours. Severe thunderstorms developed in southern Michigan ahead of the cold front.

The cluster of storms that affected southeast Michigan had produced a tornado near Battle Creek earlier in the day. No tornadoes occurred in southeast Michigan; in fact, most of damage was only marginally severe. The exception to this was in the small community of Mooreville in southern Washtenaw County. Almost every residence in town suffered at least some tree damage, several cars were damaged, and the roof of a house was smashed.

Elsewhere, a couple of trees were downed just southeast of Saline, as well as south of Ypsilanti. A spotter north of Ypsilanti estimated 60 mph winds, as did the general public in Belleville. In Ida, a tree was downed, and several telephone poles were bent by thunderstorm winds. Dime sized hail was reported near Michigan Speedway and in western Monroe County.

<b>Livingston County</b> 1.5 SSE Hartland	14	1700EST			0	0	10K		Lightning
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A lightning strike damaged electrical equipment at the Hartland Township wastewater treatment plant.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, East</b>									
<b>Wayne County</b> Livonia	16	1650EST			0	0	2K		Lightning
<b>Wayne County</b> Detroit	16	1800EST			1	0			Lightning
	M23OU								
<b>Wayne County</b> Taylor	16	1830EST			0	2			Lightning
<b>Washtenaw County</b> 3 W Hudson Mills	16	1852EST			0	0	100K		Lightning
<b>Oakland County</b> Oxford	16	2030EST			0	0	5K		Thunderstorm Wind (G52)
A broad but weak area of low pressure was located over the Great Lakes. A trough dropped slowly southeast across southeast Michigan during the late afternoon hours. Interactions between this trough and a number of lake breeze boundaries ignited thunderstorms. Only one storm became severe, as several trees were downed in Oxford. However, the storms were prodigious lightning producers.									
A man in Detroit was killed by lightning as he was walking from his home to his car. He was carrying a tire iron, which may have contributed to the strike. Two were injured when lightning struck at a Little League game in Taylor. A woman suffered convulsions and was taken to the hospital, which she was released from later that night. A boy was knocked down, but was treated at the scene, and a trip to the hospital was not required. On Peach Mountain in northern Washtenaw County, the transmitting antenna for WUOM radio was struck by lightning. Both the transmission line to the antenna, and the antenna itself, had to be replaced. A residence in Livonia suffered significant damage after a lightning strike.									
<b>Monroe County</b> Lambertville	19	0230EST			0	0	15K		Thunderstorm Wind (G52)
<b>Monroe County</b> 1 N North Shrs	19	0300EST			0	0	1K		Thunderstorm Wind (G52)
A warm front slowly moved north into southern Michigan in the early morning hours. Thunderstorms developed along this front, and two of them became marginally severe. Trees were downed in Lambertville; one did substantial damage when it fell on a home. Numerous limbs were downed on the Lake Erie shoreline in LaSalle Township; one home had a window broken by a falling limb. A plastic lawn chair was also smashed.									
<b>Tuscola County</b> Fairgrove	21	1430EST			0	0	3K		Thunderstorm Wind (G52)
<b>Shiawassee County</b> 1 S Owosso	21	1615EST			0	0	2K		Thunderstorm Wind (G52)
<b>Saginaw County</b> Bridgeport	21	1715EST			0	0	8K		Thunderstorm Wind (G52)
A trough of low pressure moved across lower Michigan during the afternoon. Scattered thunderstorms developed in the unstable air ahead of the trough. These were typical 'pulse' type storms, with a few of them becoming marginally severe. Some large tree limbs were downed onto power lines in Fairgrove, and a pair of trees were downed just south of Owosso. Several trees and many limbs were downed in Bridgeport Township.									
<b>Midland County</b> Edenville to Sanford	24	1610EST 1615EST			0	0			Hail (1.75)
<b>Bay County</b> 3 NW Pinconning	24	1630EST			0	0			Hail (1.75)
<b>Washtenaw County</b> Chelsea to 5 NW Chelsea	24	1722EST 1727EST			0	0			Hail (1.75)
<b>Washtenaw County</b> 4.5 N Chelsea	24	1725EST			0	0	20K		Lightning
<b>Washtenaw County</b> Chelsea	24	1740EST			0	0			Hail (1.00)
<b>Washtenaw County</b> Sylvan to Lima	24	1740EST 1754EST			0	0	40K		Thunderstorm Wind (G65)
<b>Midland County</b> Coleman	24	1743EST			0	0			Hail (1.00)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, East</b>									
<b>Midland County</b>									
Edenville	24	1750EST			0	0			Hail (0.75)
<b>Washtenaw County</b>									
Ann Arbor to Ypsilanti	24	1810EST 1815EST			0	0			Thunderstorm Wind (G65)
<b>Washtenaw County</b>									
Whittaker to Milan	24	1815EST 1820EST			0	0			Hail (1.75)
<b>Washtenaw County</b>									
Ypsilanti to Pittsfield	24	1815EST 1819EST			0	0			Hail (1.75)
<b>Washtenaw County</b>									
Whittaker to 1.5 W Whittaker	24	1820EST 1835EST			0	0			Thunderstorm Wind (G61)
<b>Lenawee County</b>									
Macon	24	1825EST			0	0	2K		Thunderstorm Wind (G52)
<b>Monroe County</b>									
2 N Maybee to 2 S Carleton	24	1828EST 1843EST			0	1	15K		Thunderstorm Wind (G52)
<b>Washtenaw County</b>									
Milan	24	1835EST			0	0			Hail (1.75)
<b>Monroe County</b>									
Dundee	24	1840EST			0	0	5K		Thunderstorm Wind (G52)
<b>Monroe County</b>									
Stony Pt	24	1859EST			0	0			Hail (0.75)
<b>Monroe County</b>									
1 E Temperance	24	1904EST			0	0			Thunderstorm Wind (G52)

Thunderstorms developed in a warm and humid airmass during the afternoon. The storms focused on a pair of east-west oriented boundaries: one stretched across central lower Michigan, while the second was a weak warm front moving north into the southern portion of the state. Thunderstorms near both boundaries became severe.

Storms near the northern boundary were hail producers. Golfball sized hail was reported by a spotter in Sanford, and also by the Michigan State Police northwest of Pinconning. Dime to quarter sized hail was reported at a number of other locations in Midland and Bay Counties.

Along the warm front, a large supercell developed in south-central Michigan. It moved east and then turned southeast across southeast Michigan. Hardest hit was Washtenaw County, most notably around Chelsea, and from Milan to Whittaker. These locations were affected by parts of the supercell for an extended period of time. Severe weather started in the area around and north of Chelsea, where golfball sized hail fell. A lightning strike started a house fire north of Chelsea. Quarter sized hail fell in Chelsea about 20 minutes later, but this part of the storm was more noted for the wind damage it caused. Trees were downed in Sylvan, Chelsea, and Lima. A truck was destroyed by a fallen tree in Sylvan, and a few homes in Chelsea were damaged in a similar manner. Wind gusts also destroyed in barn in Lima. The wind was estimated at 75 mph in Chelsea.

The supercell covered the Milan-Whittaker area with golfball sized hail. A spotter in Whittaker estimated 70 mph winds. Again, a second component of the large supercell caused severe weather 15 to 20 minutes later. This one also produced golfball sized hail in Milan, and emergency management officials estimated 70 mph winds just west of Whittaker.

Although not hit as hard, the Ann Arbor-Ypsilanti area also saw severe weather. A spotter in Ann Arbor estimated 60 mph winds on the fringe of the supercell, while a spotter in Ypsilanti saw golfball sized hail and 75 mph winds. Another spotter in Pittsfield saw dime sized hail.

The supercell continued southeast into Lenawee and Monroe Counties. Only the northeast corner of Lenawee County was grazed, as trees were downed near Macon. Monroe County took a more substantial hit. A golfer at Thorn Hills Golf Club, northeast of Maybee, was hurt when a large tree limb fell on him. Trees were also downed in Dundee and Raisinville Township. A spotter estimated 60 mph winds in Maybee, as did emergency management officials just south of Carleton. Dime sized hail fell at the Fermi II Nuclear Power Plant. Finally, a sheriff just east of Temperance estimated a gust of 60 mph.

This supercell would go on to cause substantial damage in northern Ohio.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, East</b>									
<b>Tuscola County Mayville</b>	25	2015EST			0	0	2K		<b>Thunderstorm Wind (G52)</b>
<b>Tuscola County Vassar</b>	25	2015EST			0	0	2K		<b>Thunderstorm Wind (G52)</b>
<b>Shiawassee County Owosso</b>	25	2115EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Genesee County Clio</b>	25	2142EST 2157EST			0	0			<b>Hail (1.75)</b>
<b>Tuscola County Millington</b>	25	2208EST 2212EST			0	0			<b>Hail (1.75)</b>
<b>Shiawassee County Byron</b>	25	2210EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Genesee County Fenton</b>	25	2233EST			0	0			<b>Hail (0.75)</b>
<b>Genesee County Grand Blanc</b>	25	2257EST			0	0			<b>Hail (0.75)</b>
<b>Lenawee County Addison</b>	26	0119EST			0	0	5K		<b>Thunderstorm Wind (G52)</b>
<b>Washtenaw County 4 N Chelsea</b>	26	0125EST			0	0	2K		<b>Thunderstorm Wind (G52)</b>
<b>Washtenaw County Dexter to 2 W Ann Arbor</b>	26	0137EST 0152EST			0	0	10K		<b>Thunderstorm Wind (G52)</b>
<b>Washtenaw County 3 N Manchester</b>	26	0139EST			0	0			<b>Thunderstorm Wind (G52)</b>
<p>A hot and humid airmass had settled over Michigan. Afternoon temperatures rose into the 90s, with dew points in the 70s. This produced an unstable air mass, and scattered thunderstorms developed in the evening hours. The approach of an upper level jet allowed some thunderstorms to persist well past midnight.</p> <p>During the evening, severe thunderstorms sporadically produced large hail and damaging winds. Power lines were downed by winds in Mayville, and a large tree was felled in Vassar. Gusts of 60 mph were estimated in both Owosso and Byron. In Clio, the problem was hail; dime sized or larger hail fell for fifteen minutes. Golfball sized hail fell on two occasions during that time period. Large hail was also reported in parts of Tuscola County, and in southern Genesee County.</p> <p>A weakening area of thunderstorms moved southeast into Washtenaw and Lenawee Counties after midnight. These storms were still potent enough to generate severe wind gusts in the western parts of these counties. Trees were downed in Dexter, Addison, north of Chelsea, and just west of Ann Arbor. Law enforcement estimated a 60 mph gust near Manchester. These storms weakened below severe limits as they continued east.</p>									
<b>Lenawee County 3 S Rome Center</b>	26	0545EST			0	0	6K		<b>Lightning</b>
<p>Lightning struck a home on Plank Road, causing significant electrical damage.</p>									
<b>Lenawee County Medina</b>	27	1455EST			0	0			<b>Hail (0.88)</b>
<p>A warm front lay across the southern border of Michigan. A number of severe thunderstorms developed south of the front in Indiana and Ohio, but only one severe cell developed in southeast Michigan. A citizen reported nickel sized hail with this thunderstorm in southwest Lenawee County.</p>									
<b>St. Clair County Port Huron</b>	30	0200EST			0	0	5K		<b>Lightning</b>
<b>Oakland County Oxford</b>	30	0230EST			0	0			<b>Hail (0.75)</b>
<b>Oakland County Oxford</b>	30	0230EST			0	0	10K		<b>Thunderstorm Wind (G52)</b>
<b>Lapeer County Lapeer</b>	30	0233EST 0235EST			0	0			<b>Hail (0.75)</b>
<p>The atmosphere over southeast Michigan was warm, humid, and unstable. Scattered thunderstorms developed in the early morning</p>									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## MICHIGAN, East

hours, just ahead of a strong upper level disturbance. A couple of these storms became marginally severe. Five trees and some power lines were downed in Oxford. Dime sized hail fell in Oxford and in Lapeer. In Port Huron, a lightning strike felled a tree onto an automobile.

<b>Huron County</b> 5 NW Sebewaing	30	0930EST			0	0			<b>Waterspout</b>
<b>Tuscola County</b> 4 SW Cass City	30	0945EST	0.1	10	0	0	5K		<b>Tornado (F0)</b>
A cold front passed through southeast Michigan around daybreak. Unseasonably cool air was ushered in aloft, maintaining some instability. A few showers developed in the Saginaw Bay area during the morning hours. Low level convergence along a lake breeze front provided additional support for precipitation. A number of funnel clouds were reported with these showers in Tuscola and Huron Counties. A brief touchdown was observed by a law enforcement official southwest of Cass City, where a residence suffered minor damage. Earlier, a waterspout had been observed from Sebewaing over Saginaw Bay.									
<b>Washtenaw County</b> 1 NE Milan to 3 N Whittaker	30	1145EST 1148EST			0	0			<b>Hail (0.75)</b>
<b>Washtenaw County</b> Pittsfield	30	1145EST			0	0	40K		<b>Lightning</b>
<b>Washtenaw County</b> 3 N Whittaker	30	1148EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Monroe County</b> 3 S Maybee	30	1225EST			0	0	5K		<b>Thunderstorm Wind (G52)</b>
A few thunderstorms developed behind a cold front and ahead of a surface trough at around midday. One thunderstorm became marginally severe in far southeast Michigan. This storm caused dime sized hail in southeast Washtenaw County, and a spotter north of Whittaker estimated 60 mph winds. Lightning started a house fire in Pittsfield Township. South of Maybee in Monroe County, this storm uprooted a tree and downed power lines.									

## MICHIGAN, Extreme Southwest

<b>Berrien County</b> Stevensville	18	2210EST			0	0	0		<b>Thunderstorm Wind</b>
TREES BLOWN DOWN ON THE EAST SIDE OF TOWN.									
<b>Cass County</b> Dowagiac to Cassopolis	18	2215EST			0	0	25K		<b>Thunderstorm Wind</b>
NUMEROUS TREES AND POWER LINES BLOWN DOWN.									
<b>St. Joseph County</b> Colon	25	1934EST			0	0			<b>Hail (1.75)</b>
<b>St. Joseph County</b> White Pigeon	25	2320EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Berrien County</b> Galien	26	0040EST			0	0	0		<b>Thunderstorm Wind</b>
6 INCH TREE LIMBS BLOWN DOWN.									
<b>Branch County</b> Coldwater	26	0100EST			0	0	0		<b>Thunderstorm Wind</b>
SEVERAL TREES BLOWN DOWN ACROSS COUNTY.									
<b>Branch County</b> Coldwater	26	0500EST			0	0			<b>Hail (1.00)</b>
QUARTER SIZE HAIL COVERED THE GROUND.									
<b>Branch County</b> Quincy	26	0500EST			0	0			<b>Hail (0.88)</b>
<b>Hillsdale County</b> Camden	26	0520EST			0	0			<b>Hail (0.88)</b>

## MICHIGAN, North

<b>Kalkaska County</b> 7 NE Darragh	21	1430EST			0	0			<b>Thunderstorm Wind (G50)</b>
Strong winds downed numerous trees along forrest road in the vicinity of Blue Lakes.									
<b>Alpena County</b> 5 W Lachine	21	1729EST			0	0			<b>Thunderstorm Wind (G50)</b>
Strong winds downed several trees up to 8" in diameter in a swampy area.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, North</b>									
<b>Otsego County</b> 6 W Gaylord	24	1410EST			0	0			Thunderstorm Wind (G50)
									Strong winds downed several trees.
<b>Gladwin County</b> 2 SW Rhodes	24	1630EST			0	0			Hail (1.75)
<b>Arenac County</b> Standish	24	1651EST			0	0			Hail (1.75)
<b>Gladwin County</b> 3 NE Gladwin	24	1743EST			0	0			Hail (2.00)
<b>Arenac County</b> Alger	24	1810EST			0	0			Hail (1.00)
<b>Leelanau County</b> Suttons Bay	24	2020EST			0	0			Hail (0.75)
<b>Charlevoix County</b> Charlevoix	24	2048EST			0	0			Hail (0.75)
<b>Charlevoix County</b> Charlevoix	24	2053EST			0	0			Hail (1.00)
<b>Emmet County</b> Bayshore	24	2055EST			0	0			Hail (1.50)
<b>Emmet County</b> Petoskey	24	2115EST			0	0			Hail (1.25)
<b>Emmet County</b> 1 W Petoskey	24	2115EST			0	0	100K		Hail (2.50)
									Large hail up to 2.50" in diameter caused \$100,000 worth of damage to cars on two lots west of Petoskey.
<b>Antrim County</b> Elk Rapids	24	2134EST			0	0			Hail (0.75)
<b>Crawford County</b> Frederic	24	2230EST			0	0			Thunderstorm Wind (G60)
									Strong winds downed trees and powerlines. One tree fell on a house damaging the roof.
<b>Oscoda County</b> 6 NE Luzerne	24	2302EST			0	0			Hail (1.00)
<b>Oscoda County</b> Mio	24	2305EST			0	0			Hail (0.88)
<b>Otsego County</b> Gaylord	25	1449EST			0	0			Hail (0.75)
<b>Kalkaska County</b> 2 NE Kalkaska	25	1910EST	0.1	30	0	0			Tornado (F0)
									Brief tornado touchdown with no reported damage.
<b>Cheboygan County</b> Indian River	25	1920EST			0	0			Thunderstorm Wind (G50)
									Strong winds downed several trees.
<b>Otsego County</b> 5 E Gaylord	25	1923EST			0	0			Thunderstorm Wind (G61)
<b>Otsego County</b> 5 E Waters	25	1930EST			0	0			Thunderstorm Wind (G61)
									Strong winds snapped off around a dozen trees of up to 18 - 24" in diameter.
<b>Crawford County</b> Camp Grayling	25	1947EST	0.1	30	0	0			Tornado (F0)
									Brief tornado touchdown with no reported damage.
<b>Oscoda County</b> Comins	25	2005EST			0	0			Thunderstorm Wind (G50)
									Strong winds downed several trees.
<b>Alpena County</b> Long Lake Lake	25	2025EST			0	0			Waterspout
<b>Alcona County</b> Glennie	25	2049EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MICHIGAN, North</u></b>									
Strong winds downed trees along routes M-65...M-72 and F-30.									
<b>Ogemaw County</b> West Branch	25	2223EST	0.1	30	0	0			<b>Tornado (F0)</b>
Brief tornado touchdown with no reported damage.									
<b>Ogemaw County</b> South Branch	25	2245EST			0	0			<b>Hail (0.75)</b>
<b>Crawford County</b> 6 S Grayling	29	2235EST			0	0			<b>Hail (0.75)</b>
<b><u>MICHIGAN, Upper</u></b>									
<b>Ontonagon County</b> Ontonagon	18	1115EST			0	0			<b>Hail (0.75)</b>
<b>Iron County</b> Amasa	25	1530EST			0	0			<b>Hail (1.00)</b>
<b>Dickinson County</b> Iron Mtn to Norway	25	1602EST 1621EST			0	0	100K		<b>Thunderstorm Wind (G70)</b>
Thunderstorm downburst winds downed trees up to 12 inches in diameter in Iron Mountain, Kingsford and Vulcan. A 60 mph wind gust downed traffic signals in Norway. Several vehicles damaged. There were a total of 16 house and tree fires started by lightning from this storm.									
<b>Iron County</b> Crystal Falls	25	1615EST			0	0			<b>Hail (0.75)</b>
<b>Menominee County</b> Daggett to Spalding	25	1621EST 1701EST			0	0			<b>Thunderstorm Wind (G64)</b>
Strong thunderstorm winds downed power lines throughout Menominee County and downed trees up to 12 inches in diameter.									
<b>Delta County</b> 15 S Escanaba	25	1640EST			0	0			<b>Funnel Cloud</b>
<b>Delta County</b> 8 NW Escanaba to Brampton	25	1645EST 1700EST	1	50	0	0	25K		<b>Tornado (F1)</b>
A tornado touched down at the intersection of County Road 414 and 533 northwest of Escanaba. The storm damaged the siding and roof of a house under construction. Fiberglass insulation was blown in a random manner and a cover to a hot tub was blown against the side of a tree. Approximately one half mile east, was a storage shed that had collapsed and a pole barn with a door blown in. The parent storm travelled northeast with evidence of another tornado touchdown near M-35 near Brampton, 12 miles north of Escanaba.									
<b>Delta County</b> 7 W Escanaba to 8 W Escanaba	25	1650EST			0	0			<b>Funnel Cloud</b>
<b>Delta County</b> 9 NW Escanaba to Escanaba	25	1655EST 1730EST			0	0	75K		<b>Thunderstorm Wind (G55)</b>
Strong winds uprooted several trees in and northwest of Escanaba, damaging roofs and windows.									
<b>Luce County</b> 3 S Mc Millan	29	1405EST 1410EST			0	0			<b>Thunderstorm Wind (G55)</b>
Trees downed by thunderstorm winds on County Road 468 south of McMillan.									
<b>Alger County</b> Shingleton	29	1500EST			1	0			<b>Lightning</b>
Lightning strike killed a fork lift operator at a lumber mill in Shingleton. M30EQ									
<b><u>MICHIGAN, West</u></b>									
<b>Ottawa County</b> Port Sheldon	12	1402EST			0	0			<b>Hail (1.75)</b>
<b>Ottawa County</b> West Olive	12	1408EST			0	0			<b>Hail (1.75)</b>
<b>Allegan County</b> 5 NE Plainwell	12	1445EST			0	0	2.5K		<b>Thunderstorm Wind</b>
Trees and power lines downed in Doster, 5 miles northeast of Plainwell, near the Allegan-Barry County border.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, West</b>									
<b>Kalamazoo County</b> 1.5 S Schoolcraft	12	1505EST			0	0	50K		<b>Thunderstorm Wind</b>
A trained weather spotter reported approximately 20 trees snapped off, 12 trees uprooted, power lines downed, and minor structural damage in an area approximately 1.5 miles south of the village of Schoolcraft. Structural damage included: windows blown out of 2 homes and 1 home with siding torn off, one barn with large doors blown off and roof damage and another barn with a roof blown off at 5348 XY Avenue; 1 home with a garage door buckled out and siding damage caused by a fallen tree at 15835 Prairie Rhonde St.; a child's outdoor play set destroyed at 5802 Woodbrook Ln.; and minor structural damage done to Carter Lumber Company (which included a large overhanging storage area blown up and off, 3 large doors blown out, many stacks of lumber toppled, and several fences destroyed). Damage was estimated at \$50,000. No injuries were reported.									
<b>Allegan County</b> Plainwell	12	1515EST			0	0	2.5K		<b>Thunderstorm Wind</b>
Trees and power lines downed in the city of Plainwell.									
<b>Barry County</b> Prairieville	12	1517EST			0	0			<b>Hail (0.75)</b>
<b>Barry County</b> Prairieville	12	1518EST			0	0	10K		<b>Thunderstorm Wind</b>
A trained weather spotter and local radio broadcaster reported trees and power lines downed across Prairieville Township.									
<b>Barry County</b> Banfield	12	1520EST			0	0			<b>Hail (1.75)</b>
A trained weather spotter reported golfball-sized hail covered the ground 2 to 3 inches deep in Banfield.									
<b>Barry County</b> Delton	12	1520EST			0	0			<b>Thunderstorm Wind (G70)</b>
Amateur radio operators estimated an 80-mph wind gust near Delton in Barry Township.									
<b>Barry County</b> Hickory Corners	12	1530EST			0	0			<b>Hail (0.75)</b>
<b>Kalamazoo County</b> Richland	12	1530EST			0	0			<b>Hail (0.75)</b>
<b>Calhoun County</b> 1 SW Bedford	12	1534EST			0	0			<b>Hail (1.25)</b>
Reported by amateur radio operators just prior to tornado touchdown.									
<b>Calhoun County</b> 2 SW Bedford to 1.2 SE Bedford	12	1534EST 1538EST	2.5	200	0	0	50K		<b>Tornado (F1)</b>
Damage surveys conducted by the National Weather Service with the assistance of the Civil Air Patrol and Calhoun County Emergency Management confirmed a brief tornado touchdown occurred in Bedford Township of northwest Calhoun County at 4:34 pm EDT on Friday, June 12th. The tornado touched down in a low wooded area near Kirby Lake, 2 miles southwest of the village of Bedford. The tornado crossed Collier Road and travelled along Halbert Road and caused extensive damage to trees from Wanbascon Creek to about 3/4 of a mile east of Michigan Highway 37. The storm path length was approximately 2.5 statute miles long and up to 600 feet (or 200 yards) wide. It appeared that most of the tornadic winds remained aloft, clipping the upper half of trees like a large weed wacker. Scattered homes in the area received minor damage consisting of broken windows, TV antennas bent over roof tops, and damage to shingles and siding. A few homes sustained roof damage as the result of trees and large limbs being blown down on the dwellings. Based on the estimates from the damage survey in Bedford Township, this particular tornado was rated F1 (73-112mph) on the Fujita Scale. The tornado lifted approximately 4 minutes after touching down as the storm continued to move east-southeast into Pennfield Township. No injuries or fatalities were reported as a direct result of this tornado touchdown. Parts of Michigan Highway 37 were closed for a time after the storm to clear away downed trees and power lines.									
<b>Eaton County</b> Bellevue	12	1534EST			0	0			<b>Hail (1.50)</b>
<b>Barry County</b> 2 N Orangeville	12	1545EST			0	0	25K		<b>Thunderstorm Wind</b>
Six large trees and several telephone poles were downed near the intersection of Patterson and Wildwood Roads, just south of Gun Lake and 2 miles north of Orangeville in Orangeville Township.									
<b>Calhoun County</b> Pennfield	12	1545EST			0	0			<b>Hail (1.00)</b>
Residents reported to NWS Grand Rapids officials that one inch diameter hail fell immediately before downburst of damaging winds hit Pennfield Township.									
<b>Calhoun County</b> Pennfield	12	1545EST			1	2	500K		<b>Thunderstorm Wind</b>



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, West</b>									
<b>Muskegon County Montague</b>	18	2220EST			0	0	5K		<b>Thunderstorm Wind</b>
	Several trees and power lines were downed in and around Montague in northwest Muskegon County. Lightning strikes also resulted in several power outages. Most of Montague was reportedly without power.								
<b>Ottawa County Gitchel</b>	18	2220EST			0	0	10K		<b>Thunderstorm Wind</b>
	Amateur radio operators reported a pole barn was blown down along 30th Street, just south of Gitchel and just north of the Ottawa/Allegan County line.								
<b>Allegan County 3 E Glenn</b>	18	2222EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Allegan County Central Dispatch reported a few trees and power lines downed near the intersection of 59th and 142nd Streets 3 miles east of Glenn.								
<b>Allegan County Holland</b>	18	2222EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Allegan County Central Dispatch reported a few trees and power lines downed near the intersection of 62nd and 113th Streets in South Holland.								
<b>Van Buren County Bangor</b>	18	2222EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Van Buren County Central Dispatch reported a few trees and power lines downed in Bangor Township.								
<b>Muskegon County Muskegon</b>	18	2225EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Falling tree limbs downed power lines in and around the city of Muskegon.								
<b>Van Buren County Lawrence</b>	18	2225EST			0	0	15K		<b>Thunderstorm Wind</b>
	Van Buren County Central Dispatch reported a tree fell through a house trailer in Lawrence Township. No injuries were reported.								
<b>Van Buren County Paw Paw</b>	18	2235EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Scattered reports of trees and power lines down in Paw Paw Township.								
<b>Kent County Grand Rapids</b>	18	2245EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Amateur radio operators reported power lines downed near the intersection of Plainfield Ave and 4 Mile Road in NE Grand Rapids. A trained spotter reported one tree was uprooted at a funeral home at the corner of Fuller St. and 3 Mile Road in NE Grand Rapids. No structural damage was reported.								
<b>Kent County Grandville</b>	18	2245EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Power lines downed in Grandville.								
<b>Kalamazoo County Kalamazoo</b>	18	2255EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Kalamazoo Central Dispatch reported downed power lines scattered across the city of Kalamazoo.								
<b>Kalamazoo County Oshtemo</b>	18	2255EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Power lines downed in Oshtemo.								
<b>Barry County 5 SW Delton</b>	18	2310EST			0	0	5K		<b>Thunderstorm Wind</b>
	Tree blown down onto car in Prairieville Township, 5 miles southwest of Delton.								
<b>Barry County 3 N Middleville</b>	18	2310EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Barry County Central Dispatch reported trees downed near the intersection of 108th and Whitneyville Road, 3 miles north of Middleville in Thornapple Township.								
<b>Barry County Delton</b>	18	2315EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Trees downed in and around Delton.								
<b>Calhoun County Bedford</b>	18	2324EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Calhoun County Central Dispatch reported power lines downed in Bedford.								
<b>Calhoun County 5 NE Athens</b>	18	2330EST			0	0	2.5K		<b>Thunderstorm Wind</b>
	Trees downed along K Drive S. just east of 5 Mile Rd. in Leroy Township, approximately 5 miles northeast of Athens.								



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, West</b>									
<b>Calhoun County</b> 5 N Marshall	18	2335EST			0	0	2.5K		<b>Thunderstorm Wind</b> Trees downed along N Drive N. just east of Old U.S. 27 in Lee Township, approximately 5 miles north of Marshall.
<p>A squall line developed across southern Minnesota, Iowa, and northern Missouri ahead of a weak cold front during the late afternoon hours of Thursday, June 18th. The squall line propagated east at over 50 mph across Lake Michigan during the late evening hours and slowed down to around 35 mph after moving inland into western Lower Michigan. Weather spotter reports and automated observing systems indicated that the peak wind gusts associated with this line of thunderstorms averaged between 35 and 55 mph. However, isolated occurrences of 60 to 80 mph wind gusts downed trees and power lines at scattered locations across mainly the western two tiers of counties across southwest Lower Michigan, between Muskegon and Benton Harbor. The peak wind gust reported was 81 mph in Saugatuck, along the lake shore of Allegan County. At the height of the storm, approximately 13,400 people were without power in areas near and around Muskegon, Montague, Holland, Kalamazoo, Grand Rapids, and Battle Creek. Many power outages were caused by lightning strikes.</p>									
<b>Kent County</b> Cutlerville	24	1403EST 1410EST			0	0			<b>Thunderstorm Wind (G52)</b> A trained weather spotter reported a 60 mph wind gust and pea-sized hail associated with a severe thunderstorm, near the intersection of 68th St. and Division in Cutlerville (southern Kent County).
<b>Kent County</b> 1 SE Cutlerville	24	1410EST			0	0			<b>Hail (0.88)</b> A trained weather spotter reported nickel-sized hail and a 45 mph wind gust at a golf course near the intersection of 76th St. and Kalamazoo Ave in Gaines Township, approximately 1 mile southeast of Cutlerville.
<b>Kent County</b> (Gr)Kent Co Arpt Gr	24	1413EST			0	0			<b>Hail (0.88)</b> Nickel-sized hail fell at the National Weather Service Office in Grand Rapids, just north of the Kent County International Airport, which is 8 miles southeast of downtown Grand Rapids.
<b>Kent County</b> Cascade	24	1416EST			0	0			<b>Hail (1.75)</b> Golf-ball sized hail reported by several trained spotters in Cascade Township.
<b>Barry County</b> Gun Lake	24	1420EST			0	0			<b>Hail (1.75)</b> Amateur radio operators reported golf-ball sized hail in the vicinity of Gun Lake.
<b>Barry County</b> Yankee Spgs	24	1425EST			0	0			<b>Hail (1.75)</b> A trained spotter reported golf-ball sized hail in Yankee Springs Township.
<b>Ionia County</b> 1 SW Belding	24	1455EST			0	0			<b>Hail (1.75)</b> A trained spotter reported golf-ball sized hail along Fish Road, west of Michigan Highway 91 in Otisco Township.
<b>Barry County</b> 2 N Nashville	24	1510EST			0	0	2.5K		<b>Thunderstorm Wind</b> Barry County Central Dispatch reported trees and power lines downed near the intersection of Michigan Highway 66 and Bayne Rd. in Castleton Township, approximately 2 miles north of Nashville.
<b>Eaton County</b> 4 W Charlotte	24	1558EST			0	0			<b>Funnel Cloud</b> Eaton County Central Dispatch relayed several reports from the public of a funnel cloud approximately 4 miles west of Charlotte.
<b>Eaton County</b> Charlotte	24	1605EST			0	0	5K		<b>Thunderstorm Wind</b> Eaton County Central Dispatch reported trees, branches, and power lines were downed in and around the city of Charlotte. A Charlotte area newspaper reported a tree was downed on Lovett St. at the Prairie St. intersection. This tree pulled down power lines and damaged a power pole at the street corner.
<b>Barry County</b> Hastings	24	1620EST			0	0	2.5K		<b>Tstm Wind/Hail</b> Several trained weather spotters in and around the city of Hastings reported 3/4 to 1 inch diameter hail and strong wind gusts. Several large trees were downed, but no structural damage was reported.
<b>Eaton County</b> 1 E Eaton Rapids	24	1625EST	0	0	0	0	5K		<b>Tornado (F0)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MICHIGAN, West

Eaton Rapids Fire Department reported a brief tornado touchdown just east of the city of Eaton Rapids, in a wooded area of northeast Hamlin Township. Eaton County Emergency Management indicated no injuries or structural damage was reported. The tornado touched down in a rural area and path length and width were not able to be determined. Damage amount was estimated and damage directly related to the tornado was limited to downed trees and power lines. The tornado was estimated to be an F0 on the Fujita scale.

### **Eaton County Eaton Rapids**

24	1625EST				0	0	10K		<b>Thunderstorm Wind</b>
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Eaton County Central Dispatch reported trees and power lines were knocked down across portions of the city of Eaton Rapids. Approximately 7,000 people in and around Eaton Rapids lost power due to the storm. No injuries or structural damage was reported. Eaton County Emergency Management had no confirmed tornado touchdowns in the city, but the Eaton Rapids Fire Department reported a tornado touchdown just east of the city over northeast Hamlin Township. Damage reported in the city was a result of strong wind gusts, according to the acting Emergency Management Coordinator.

### **Eaton County Eaton Rapids**

24	1630EST				0	0			<b>Hail (1.75)</b>
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A trained weather spotter reported golf-ball sized hail in Eaton Rapids.

### **Ingham County Aurelius**

24	1645EST				0	0	5K		<b>Thunderstorm Wind</b>
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Ingham County Central Dispatch reported trees and power lines downed in Aurelius Township.

### **Ingham County Onondaga**

24	1645EST				0	0			<b>Hail (2.75)</b>
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A trained weather spotter reported baseball-sized hail and wind gusts to 50 mph. Hail reportedly damaged some auto glass and roofs in the area, but damage estimates were not available.

### **Jackson County 6 N Jackson**

24	1704EST				0	0			<b>Funnel Cloud</b>
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Jackson County Emergency Management reported a funnel cloud near the intersection of Lansing Ave. and Maple Grove Road in southern Rives Township, approximately 6 miles north of the city of Jackson.

### **Jackson County Rives Jct**

24	1705EST				0	0	5K		<b>Thunderstorm Wind</b>
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Jackson County Central Dispatch reported trees and power lines downed in the village of Rives Junction and scattered reports across Rives Township.

### **Jackson County 3 E Rives Jct to Waterloo**

24	1706EST	11.3	50		0	0	500K		<b>Tornado (F1)</b>
	1730EST								

The Jackson County Emergency Management Coordinator confirmed a weak tornado touched down just west of Layton Corners, in rural eastern Rives Township, and travelled east-southeast to near Waterloo, along the Washtenaw County line. The tornado was not on the ground for the entire 11.3 mile path, but due to the heavily wooded rural areas it traversed, exact path lengths could not be determined. Path width was narrow, estimated to be 50 yards at maximum width. No injuries or deaths were associated with this F1 tornado. Damage consisted of downed trees and power lines, roof damage to approximately 12 homes, minor structural damage mainly caused by large hail (broken windows, damaged siding, damaged vehicles and aluminum campers) and fallen trees, and overturned boats on Pleasant Lake in Henrietta Township. Hail was estimated to have reached 2 to 3 inches in diameter in association with this tornadic storm. The most significant damage was reported around the Pleasant Lake area, where several boats were overturned and several homes reported minor to moderate structural damage. Along North Meridian Road from near Layton Corners along the west end of Pleasant Lake, 2 homes reported destroyed garages. Pleasant Lake County Park was closed due to downed trees. Waterloo State Recreation Area reported hundreds of trees uprooted, which resulted in the closing of some roads and horse trails. Power outages totaled 5,800 in the affected areas of Henrietta and Waterloo Townships. Damage was estimated at approximately \$500,000.

### **Clare County Farwell**

24	1714EST				0	0			<b>Hail (0.75)</b>
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### **Jackson County 2 N Grass Lake**

24	1725EST				0	0			<b>Hail (1.75)</b>
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Jackson County Emergency Management reported golf ball-sized hail on Morrisey Road in Grass Lake Township, 2 miles north of the city of Grass Lake.

### **Isabella County Leaton**

24	1730EST				0	0			<b>Hail (1.00)</b>
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Scattered severe thunderstorms developed along and north of a northward moving warm front across southern Lower Michigan during the afternoon of Wednesday, June 24th. This severe weather event was characterized by several large hail reports, with golf-ball sized hail reports received from Kent, Barry, Eaton, Ingham, and Jackson Counties and hail of 2 to 3 inches in diameter associated with a supercell thunderstorm as it tracked east-southeast across southern Ingham and northern Jackson County.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, West</b>									
<b>Barry County</b> Nashville	25	1955EST			0	0			Hail (0.75)
	Eaton County Central Dispatch reported 3/4 inch diameter hail in Nashville, just west of the Eaton-Barry County line in Barry County. Dispatch also relayed public reports of wind gusts estimated at 60 mph.								
<b>Barry County</b> Nashville	25	1957EST			0	0			Hail (1.00)
	Eaton County Central Dispatch reported 1 inch-diameter hail in Nashville (Barry County) at 8:57 pm EDT.								
<b>Clinton County</b> De Witt	25	2020EST			0	0			Hail (0.75)
<b>Eaton County</b> Dimondale	25	2021EST			0	0			Hail (0.75)
<b>Clinton County</b> (Lan)Capitol Cty Arp	25	2025EST			0	0			Hail (2.00)
	Pilot reported 2 inch diameter hail in the vicinity of Capital City Airport, over southern Clinton County.								
<b>Ingham County</b> Lansing	25	2025EST			0	0			Hail (1.00)
	Lansing City Police reported quarter-sized hail in downtown Lansing at 9:25 pm EDT.								
<b>Clinton County</b> (Lan)Capitol Cty Arp	25	2027EST			0	0			Hail (0.75)
	FAA Contract Observer reported 3/4 inch diameter hail at Capital City Airport, just north of downtown Lansing in southern Clinton County.								
<b>Eaton County</b> Charlotte	25	2027EST			0	0			Hail (1.25)
<b>Clinton County</b> De Witt	25	2043EST			0	0			Hail (0.75)
<b>Ingham County</b> East Lansing	25	2051EST			0	0	0.50K		Thunderstorm Wind
	An 18" diameter tree was uprooted on Jolly Road in East Lansing.								
<b>Mason County</b> Hamlin Lake	25	2059EST			0	0			Thunderstorm Wind (G63)
	Mason County law enforcement reported a 73-mph wind gust in the village of Hamlin Lake at 9:59 pm EDT. The Ludington Daily News reported large trees were uprooted and minor structural damage occurred in a narrow path between the south and middle bayous of Hamlin Lake. Lakeshore Drive between the bayous was closed by the Mason County Road Commission in order to get the debris and downed power lines cleared. A large tree uprooted at 3912 N. Lakeshore and fell onto a metal building housing a home business, putting a hole in the roof. Hamlin Township firefighters assisted at 2 locations where fallen trees ruptured gas lines. Several other residents in the area reported trees down on homes and trailers and screens blown out. Approximately 274 residents lost power during the storm. No injuries were reported and damage estimates were not available.								
<b>Mason County</b> Scottville	25	2059EST			0	0			Thunderstorm Wind (G61)
	A trained weather spotter in Scottville reported a 70 mph wind gust as measured by his local anemometer. Trees and power lines were downed by severe thunderstorm winds in and around the city.								
<b>Oceana County</b> 4 SW Mears	25	2140EST 2148EST			0	0			Thunderstorm Wind (G70)
	Amateur radio operators reported wind gusts estimated at 70 to 80 mph near Silver Lake in Golden Township in Oceana County. Several reports came in between 10:40 and 10:48 pm EDT. Trees and power lines were downed and pea-sized hail was also reported. No injuries were reported and damage estimates were not available.								
<b>Calhoun County</b> Homer	25	2145EST			0	0			Hail (0.88)
	A local television station meteorologist reported nickel-sized hail in Homer at 10:45 pm EDT.								
<b>Ingham County</b> Williamston	25	2155EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN, West</b>									
<b>Allegan County</b> 3 W Plainwell	25	2340EST			0	0			<b>Thunderstorm Wind (G52)</b> Amateur radio operators estimated wind gusts to 60 mph 3 miles west of Plainwell, in Otsego Township, at 12:40 am EDT, Friday, June 26th.
<b>Barry County</b> 10 SW Hastings	25	2345EST			0	0	2.5K		<b>Thunderstorm Wind</b> Barry County Central Dispatch reported trees and power lines downed along Pine Lake Road in Hope Township, approximately 10 miles southwest of Hastings.
<b>Kalamazoo County</b> Portage	25	2345EST			0	0	0.50K		<b>Thunderstorm Wind</b> A tree was downed in Portage at 12:45 am EDT, Friday, June 26th.
<b>Kalamazoo County</b> Climax	26	0000EST			0	0			<b>Hail (1.25)</b>
<b>Calhoun County</b> Battle Creek	26	0018EST			0	0			<b>Hail (1.00)</b> Amateur radio operators reported 1-inch diameter hail in downtown Battle Creek at 1:18 am EDT.
<b>Calhoun County</b> Battle Creek	26	0030EST 0040EST			0	0			<b>Thunderstorm Wind (G52)</b> City of Battle Creek Emergency Management reported trees and power lines were downed across Battle Creek, Pennfield, and Emmett Townships and within the city limits of Battle Creek between 1:30 and 1:40 am EDT. Wind gust estimates ranged from 60 to 100 mph, mainly over the southwest section of the City of Battle Creek in Battle Creek Township, where most of the damage was reported. Several uprooted trees and at least one damaged vehicle were reported on Hamilton Lane off Capital Avenue SW in the village of Lakeview, just southwest of downtown Battle Creek. Other scattered reports of trees and power lines having been felled came from Pennfield and Emmett Townships. Approximately 4,000 residents lost power in and around the city. No injuries were reported and damage estimates were not available.
<b>Jackson County</b> Parma	26	0058EST			0	0			<b>Thunderstorm Wind (G52)</b> Jackson County Emergency Management reported wind gusts to 60 mph in Parma Township along with scattered reports of trees and power lines having been felled.
<b>Eaton County</b> Charlotte	26	0100EST			0	0	1K		<b>Thunderstorm Wind</b> Amateur radio operators reported a 24-inch diameter tree downed near the intersections of Clark and Oakland Roads in Charlotte. Power lines were also downed in the immediate vicinity.
<b>Jackson County</b> Jackson	26	0110EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Jackson County</b> Sandstone	26	0120EST			0	0			<b>Thunderstorm Wind (G52)</b> Jackson County Emergency Management reported wind gusts to 60 mph in Sandstone Township along with scattered reports of trees and power lines having been felled.
Widespread thunderstorm activity moved across Michigan's Lower Peninsula during the late evening hours of Thursday, June 25th, and early morning hours of Friday, June 26th. Scattered reports of wind damage and hail were received across west central, southwest, and south central Lower Michigan. The most significant storm damage occurred near Hamlin Lake in Mason County and in and around the City of Battle Creek in Calhoun County. No injuries were reported in either event. An estimated 22,000 people lost power due to downed trees and power lines across the southern third of Michigan's Lower Peninsula.									
<b>Muskegon County</b> Muskegon	27	0600EST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Muskegon County</b> Muskegon	27	0610EST			0	0	2.5K		<b>Thunderstorm Wind</b> Muskegon County Central Dispatch reported power lines were downed at scattered locations across the cities of Muskegon and Norton Shores.
<b>Muskegon County</b> Muskegon	27	0610EST			0	0			<b>Thunderstorm Wind (G54)</b> A trained weather spotter reported a 60 mph wind gust at 7:00 am EDT, then a 62 mph wind gust at 7:10 am EDT, as measured by his local anemometer.
<b>Van Buren County</b> South Haven	27	0647EST			0	0			<b>Waterspout</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## MICHIGAN, West

Michigan State Police Post in South Haven reported a waterspout just offshore South Haven over Lake Michigan. The waterspout was short-lived as it moved south and dissipated before moving onshore. No injuries or damage was reported.

A line of thunderstorms moved across Lake Michigan and onshore from Oceana County south to near Benton Harbor during the early morning hours of Saturday, June 27th. Wind gusts to 62 mph were reported in Muskegon and power lines were downed in and around the city. A waterspout was reported just offshore South Haven, but dissipated before moving onshore. The majority of the reports from the area indicated wind gusts to 40 mph with brief heavy rainfall. Unconfirmed funnel cloud reports came in from Allegan and Kalamazoo Counties, however no damage was reported in either county.

## MINNESOTA, Central and South Central

<b>Douglas County</b>									
Alexandria	01	2020CST			0	0			Thunderstorm Wind (G50)
		Trees and power lines blown down. Estimated windspeed.							
<b>Todd County</b>									
Eagle Bend	11	0045CST			0	0			Hail (0.88)
<b>Swift County</b>									
1.5 E Benson to 4 E Benson	11	1530CST 1534CST	2.5	50	0	0			Tornado (F0)
		Crossed open fields.							
<b>Kandiyohi County</b>									
.2 S Raymond	11	1645CST			0	0			Funnel Cloud
<b>Lac Qui Parle County</b>									
4 N Providence	11	1805CST 1810CST			0	0			Hail (0.75)
		Hailed for 10 minutes.							
<b>Redwood County</b>									
3 NW Wabasso	11	1805CST			0	0			Hail (0.75)
<b>Lac Qui Parle County</b>									
4 E Providence	11	1810CST			0	0			Hail (1.00)
<b>Yellow Medicine County</b>									
1 NE Clarkfield	11	1810CST 1820CST			0	0			Hail (0.75)
		Hailed for 10 minutes.							
<b>Kandiyohi County</b>									
Willmar	11	1850CST			0	0			Hail (1.25)
<b>Freeborn County</b>									
4.5 W Clarks Grove to 3 WSW Clarks Grove	15	1445CST	2.5	50	0	0			Tornado (F0)
		Remained over farm fields. Crop damage.							
<b>Morrison County</b>									
1 N Freedhem to Freedhem	15	1553CST			0	0			Thunderstorm Wind (G50)
		Trees blown down. Estimated windspeed.							
<b>Washington County</b>									
Woodbury	15	1950CST			0	0			Hail (0.75)
<b>Isanti County</b>									
Isanti	15	2010CST			0	0			Hail (0.75)
<b>Freeborn County</b>									
4 W Albert Lea	16	1400CST	0.5	50	0	0			Tornado (F0)
		Remained in rural areas.							
<b>Ramsey County</b>									
St Paul	16	1532CST			0	0			Hail (1.00)
<b>Ramsey County</b>									
St Paul	16	1648CST			0	0			Hail (0.75)
<b>Anoka County</b>									
Circle Pines	16	1700CST 1705CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Carver County</b> New Germany	18	1245CST			0	0			Thunderstorm Wind (G50)
		Trees blown down. Estimated windspeed.							
<b>Chippewa County</b> 8 N Clara City	18	1448CST			0	0			Funnel Cloud
<b>Redwood County</b> 3 NW Clements to 5 N Clements	18	1455CST 1458CST	2.5	30	0	0			Tornado (F1)
		5 barns damaged. One roof ripped from a barn.							
<b>Renville County</b> 4 S Danube	18	1500CST	0.1	25	0	0			Tornado (F0)
		Brief touchdown in field.							
<b>Redwood County</b> 2 S Redwood Falls	18	1507CST	0.1	25	0	0			Tornado (F0)
<b>Renville County</b> Olivia	18	1518CST	0.2	50	0	0	1M		Tornado (F1)
		Construction company building and recycling center destroyed. Department of Transportation building damaged. Vehicles damaged at dealership.							
<b>Pope County</b> Cyrus	18	1540CST			0	0			Thunderstorm Wind (G50)
		Large tree limbs blown down. Estimated windspeed.							
<b>Kandiyohi County</b> Willmar	18	1550CST			0	0			Hail (0.75)
<b>Stevens County</b> Chokio	18	1906CST			0	0			Hail (0.75)
<b>Renville County</b> Olivia	18	1917CST			0	0			Hail (0.75)
<b>Renville County</b> 2 S Bird Island	18	1945CST			0	0			Hail (1.75)
<b>Meeker County</b> 2 SW Cosmos	18	2007CST			0	0			Funnel Cloud
<b>Meeker County</b> 2 SE Cosmos to Cosmos	18	2020CST			0	0			Hail (0.75)
		Hailed for 10 minutes.							
<b>Martin County</b> Trimont	20	0828CST			0	0			Hail (0.75)
<b>Brown County</b> Sleepy Eye	20	0840CST			0	0			Thunderstorm Wind (G56)
<b>Watonwan County</b> St James	20	0844CST 0944CST			0	0			Hail (1.75)
<b>Watonwan County</b> Ormsby	20	0910CST			0	0			Hail (0.75)
<b>Watonwan County</b> South Branch	20	0920CST			0	0			Hail (0.75)
<b>Martin County</b> Truman	20	1008CST			0	0			Hail (0.75)
<b>Faribault County</b> Blue Earth	20	1030CST 1230CST			0	0			Flash Flood
		Between 3 and 4 inches of rain resulted in street flooding.							
<b>Faribault County</b> Winnebago	20	1030CST			0	0			Hail (1.75)
<b>Faribault County</b> Wells	20	1114CST			0	0			Thunderstorm Wind (G50)
		Large tree limbs blown down. Estimated windspeed.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Blue Earth County</b> Vernon Center	20	1120CST			0	0			Hail (0.88)
<b>Freeborn County</b> Manchester	20	1135CST			0	0			Thunderstorm Wind (G52)
Marble size hail along with strong winds.									
<b>Freeborn County</b> 5 E Manchester	20	1140CST			0	0			Hail (1.00)
<b>Freeborn County</b> 5 ENE Manchester	20	1145CST			0	0			Hail (1.75)
<b>Freeborn County</b> Maple Is	20	1150CST			0	0			Thunderstorm Wind (G50)
Large trees limbs down. Estimated windspeed.									
<b>Steele County</b> Blooming Prairie	20	1225CST			0	0			Hail (0.75)
<b>McLeod County</b> 2 W Winsted	23	2115CST			0	0			Hail (1.00)
Large branches down with some crop damage.									
<b>Wright County</b> 3 SE Rice Lake	23	2115CST 2130CST			0	0			Hail (1.00)
<b>Wright County</b> 3 S Waverly	23	2210CST			0	0			Hail (1.25)
<b>Dakota County</b> South St Paul	24	0036CST 0236CST			0	0			Thunderstorm Wind (G50)
Estimated windspeed.									
<b>Le Sueur County</b> Montgomery	24	2045CST			0	0			Hail (0.75)
<b>Redwood County</b> Walnut Grove	24	2145CST			0	0			Thunderstorm Wind (G61)
<b>Redwood County</b> Vesta	24	2150CST			0	0			Thunderstorm Wind (G50)
Trees blown down. Estimated windspeed.									
<b>Yellow Medicine County</b> Wood Lake	24	2217CST			0	0			Thunderstorm Wind (G52)
<b>Redwood County</b> Redwood Falls Arpt	24	2220CST			0	0			Thunderstorm Wind (G55)
<b>Redwood County</b> Lamberton	24	2230CST			0	0			Thunderstorm Wind (G61)
Trees blown down.									
<b>Renville County</b> Sacred Heart	24	2230CST			0	0			Thunderstorm Wind (G55)
Ballpark damaged. Trees uprooted and power lines down. Estimated windspeed.									
<b>Sibley County</b> Gaylord	24	2300CST			0	0			Thunderstorm Wind (G50)
Power lines down. Estimated windspeed.									
<b>Brown County</b> New Ulm Arpt	24	2302CST			0	0			Thunderstorm Wind (G50)
Trees down in New Ulm. Trailers blown over.									
<b>Chippewa County</b> Clara City	24	2304CST			0	0	250K		Thunderstorm Wind (G61)
Chimney blown through roof of grocery store. Trees down.									
<b>Kandiyohi County</b> 6 N Raymond	24	2305CST			0	0	5K		Thunderstorm Wind (G55)
Mobile home damaged.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Renville County</b> Hector	24	2306CST			0	0			Thunderstorm Wind (G55)
			Power lines down. Estimated windspeed.						
<b>Mcleod County</b> Brownton	24	2330CST			0	0			Thunderstorm Wind (G50)
			Power pole blown down. Estimated windspeed.						
<b>Nicollet County</b> Nicollet	24	2330CST			0	0			Thunderstorm Wind (G50)
			Trees and large branches down. Estimated windspeed.						
<b>Scott County</b> Belle Plaine	24	2330CST			0	0			Thunderstorm Wind (G61)
<b>Wright County</b> Buffalo	24	2330CST			0	0			Thunderstorm Wind (G55)
			Large tree blown down. Estimated windspeed.						
<b>Nicollet County</b> St Peter	24	2332CST			0	0			Thunderstorm Wind (G55)
			Crops damaged. Estimated windspeed.						
<b>Carver County</b> 2 S Watertown	24	2334CST			0	0			Thunderstorm Wind (G55)
			Large tree blown down. Estimated windspeed.						
<b>Le Sueur County</b> New Prague	24	2334CST			0	0			Thunderstorm Wind (G61)
<b>Scott County</b> Jordan	24	2334CST			0	0			Thunderstorm Wind (G61)
<b>Blue Earth County</b> Mankato	24	2338CST			0	0			Thunderstorm Wind (G55)
			Large branches down. Estimated windspeed.						
<b>Carver County</b> Chaska	24	2345CST			0	0			Thunderstorm Wind (G50)
			Trees blown down. Estimated windspeed.						
<b>Hennepin County</b> Eden Prairie	24	2355CST			0	0			Thunderstorm Wind (G52)
<b>Hennepin County</b> Orono	24	2357CST			0	0			Thunderstorm Wind (G52)
<b>Hennepin County</b> Deephaven	25	0000CST			0	0			Thunderstorm Wind (G65)
			Several hundred trees blown down. Estimated windspeed.						
<b>Wright County</b> Monticello	25	0000CST			0	0			Thunderstorm Wind (G50)
			Trees blown down. Estimated windspeed.						
<b>Hennepin County</b> Eden Prairie	25	0002CST			0	0			Thunderstorm Wind (G70)
<b>Hennepin County</b> Golden Vly	25	0002CST			0	0			Thunderstorm Wind (G65)
			Large tree blown onto house. Estimated windspeed.						
<b>Blue Earth County</b> Madison Lake	25	0010CST			0	0			Thunderstorm Wind (G55)
			Trees and power lines down. Estimated windspeed.						
<b>Hennepin County</b> Minneapolis	25	0010CST			0	0			Thunderstorm Wind (G55)
			200 trees blown down. Apartment building under construction blown down. Roof damage to 6 houses. Estimated windspeed.						
<b>Dakota County</b> Burnsville	25	0012CST			0	0			Hail (1.00)
			Damage also reported in Apple Valley.						
<b>Anoka County</b> Andover	25	0020CST			0	0			Thunderstorm Wind (G50)
			Large branches down. Estimated windspeed.						



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Ramsey County</b> St Paul	25	0022CST			0	0			Thunderstorm Wind (G60)
			200 trees blown down. Estimated windspeed.						
<b>Waseca County</b> Waseca	25	0025CST			0	0			Hail (0.75)
<b>Goodhue County</b> Cannon Falls	25	0028CST			0	0			Thunderstorm Wind (G65)
			150 trees blown down. Roof ripped off house. Estimated windspeed.						
<b>Goodhue County</b> Red Wing	25	0028CST			0	0			Thunderstorm Wind (G70)
			Roofs torn off houses. Mobile home destroyed. Businesses damaged. Many trees blown down throughout city. Estimated windspeed.						
<b>Goodhue County</b> 2 NW Vasa	25	0028CST			0	0			Thunderstorm Wind (G65)
			Garage blown down. Roof ripped off house. Silo blown onto barn, killing five cows. Estimated windspeed.						
<b>Ramsey County</b> Vadnais Hgts	25	0030CST			0	0			Thunderstorm Wind (G65)
			More than 40 mobile homes damaged. 6 mobile homes destroyed. Trees blown on top of trailer home. Nursery damaged. Estimated windspeed.						
<b>Washington County</b> Oakdale	25	0030CST			0	0	1M		Thunderstorm Wind (G70)
			40 homes damaged. Some roofs ripped off homes. One house shifted off foundation. Estimated windspeed.						
<b>Washington County</b> Woodbury	25	0030CST			0	0			Thunderstorm Wind (G52)
<b>Anoka County</b> Circle Pines	25	0040CST			0	0			Thunderstorm Wind (G65)
			Roof damage. Shed and trees blown down. Estimated windspeed.						
<b>Washington County</b> Stillwater	25	0040CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed.						
<b>Goodhue County</b> Red Wing	25	0045CST			0	0			Thunderstorm Wind (G55)
			Trees blown down. Estimated windspeed.						
<b>Chisago County</b> Lindstrom	25	0056CST			0	0			Thunderstorm Wind (G50)
			Trees and power lines down. Estimated windspeed.						
<b>Isanti County</b> Cambridge	25	0135CST			0	0			Thunderstorm Wind (G50)
			Power lines down. Estimated windspeed.						
<b>Mille Lacs County</b> 12 NW Wahkon to 8 N Wahkon	25	1015CST 1023CST	6	25	0	0			Tornado (F0)
			Waterspout observed by law enforcement over Lake Mille Lacs.						
<b>Martin County</b> 2 S Wilbert	26	1100CST			0	0			Hail (1.75)
<b>Martin County</b> 9 E Fairmont	26	1150CST			0	0			Hail (1.00)
<b>Faribault County</b> 1 S Guckeen	26	1205CST			0	0			Hail (2.00)
<b>Faribault County</b> 1 S Winnebago	26	1240CST			0	0			Hail (0.75)
<b>Faribault County</b> 2 S Winnebago	26	1240CST			0	0			Hail (0.75)
<b>Meeker County</b> 3 S Grove City	26	1534CST			0	0			Hail (0.75)
<b>Meeker County</b> 4 NE Crow River	26	1610CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Stearns County</b> Paynesville	26	1610CST			0	0			Hail (0.88)
<b>Stearns County</b> 5 SE Paynesville	26	1610CST			0	0			Hail (0.75)
<b>Freeborn County</b> Alden	26	1700CST			0	0			Thunderstorm Wind (G52)
			Trees down. Damage to sheds and barns.						
<b>Steele County</b> Owatonna	26	1745CST			0	0			Thunderstorm Wind (G50)
			Roof ripped off mobile home. Estimated windspeed.						
<b>Freeborn County</b> .5 NW Oakland	26	1750CST	0.1	50	0	0			Tornado (F0)
			Barn down.						
<b>Freeborn County</b> .5 E Oakland	26	1753CST	0.1	50	0	0			Tornado (F0)
			Barn and silo down. Trees blown. Sixteen foot doors blown off cattle shed.						
<b>Sherburne County</b> Elk River	26	1805CST			0	0			Hail (1.50)
			Hailed for 10 minutes.						
<b>Wright County</b> Maple Lake	26	1805CST			0	0			Hail (1.75)
<b>Anoka County</b> Ramsey	26	1808CST			0	0			Hail (1.00)
<b>Anoka County</b> Ramsey	26	1810CST			0	0			Hail (1.75)
<b>Anoka County</b> Andover	26	1820CST			0	0			Hail (0.75)
<b>Stearns County</b> 5 N Kimball	26	1840CST			0	0			Hail (1.75)
<b>Hennepin County</b> Minneapolis	26	1900CST 2300CST			0	0			Flash Flood
			Rapid rainfall of 1 to 3 inches resulted in street flooding. Traffic was halted on Interstate 35W at Diamond Lake Rd. Flooding also reported at Interstate 494 and Penn Ave.						
<b>Sherburne County</b> 4 NW Big Lake	26	1900CST			0	0			Hail (1.00)
<b>Sibley County</b> 2 S Gibbon	26	1907CST	0.1	25	0	0			Tornado (F0)
<b>Le Sueur County</b> 1 E Le Center	26	1912CST	0.5	50	0	0			Tornado (F0)
<b>Sibley County</b> 7 NW Winthrop	26	1915CST			0	0			Hail (1.75)
<b>Wright County</b> 5 W Monticello	26	1915CST			0	0			Hail (1.75)
<b>Mcleod County</b> 6 S Stewart	26	1917CST			0	0			Hail (1.75)
<b>Le Sueur County</b> New Prague	26	1940CST			0	0			Hail (1.75)
<b>Le Sueur County</b> New Prague	26	1940CST			0	0			Thunderstorm Wind (G61)
<b>Scott County</b> New Prague	26	1940CST			0	0			Hail (1.75)
<b>Scott County</b> New Prague	26	1940CST			0	0			Thunderstorm Wind (G61)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Sibley County</b> 4 E Green Isle	26	2000CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed.						
<b>Stearns County</b> Meire Grove	26	2000CST			1	0			Lightning
			Man struck by lightning while working in his hay field. M51OU						
<b>Ramsey County</b> St Paul	26	2005CST			0	0			Thunderstorm Wind (G65)
			Power lines blown down. Estimated windspeed. 1,800 trees blown down in St. Paul by end of night.						
<b>Yellow Medicine County</b> 5 N Burr	26	2005CST			0	0			Hail (0.75)
<b>Dakota County</b> Farmington	26	2010CST			0	0			Thunderstorm Wind (G70)
<b>Rice County</b> 3.5 W Dundas	26	2012CST			0	0			Hail (0.75)
<b>Dakota County</b> 5 E Farmington	26	2015CST 2300CST			0	0			Flash Flood
			Water covered numerous roadways in county.						
<b>Rice County</b> 3 NW Faribault	26	2015CST			0	0			Thunderstorm Wind (G60)
			Trees and small bldg blown down near Roberds Lake. Estimated windspeed.						
<b>Dakota County</b> 3 W Waterford	26	2020CST			0	0			Hail (1.00)
<b>Rice County</b> Faribault	26	2020CST			0	0			Hail (1.00)
<b>Rice County</b> Faribault	26	2020CST			0	0			Thunderstorm Wind (G52)
<b>Rice County</b> 3.5 S Dundas	26	2025CST			0	0			Hail (1.75)
<b>Rice County</b> Faribault	26	2025CST			0	0			Hail (1.75)
			Windshields broken.						
<b>Mcleod County</b> Lester Prairie	26	2029CST			0	0			Thunderstorm Wind (G50)
			Tree blown down. Estimated windspeed.						
<b>Douglas County</b> Carlos	26	2030CST			0	0			Hail (0.75)
<b>Rice County</b> 2.5 S Northfield	26	2031CST			0	0			Hail (1.25)
<b>Douglas County</b> Alexandria	26	2035CST			0	0			Thunderstorm Wind (G55)
			40 trees blown down at golf course. Estimated windspeed.						
<b>Lac Qui Parle County</b> 11 W Madison	26	2035CST			0	0			Hail (0.75)
<b>Swift County</b> 4 SE Appleton	26	2035CST			0	0			Hail (0.75)
<b>Pope County</b> 7 SE Sedan	26	2040CST			0	0			Thunderstorm Wind (G50)
			Trees down. Estimated windspeed.						
<b>Stearns County</b> Brooten	26	2040CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Yellow Medicine County</b>									
Canby	26	2040CST			0	0			Thunderstorm Wind (G55)
			Trees and power lines down. Estimated windspeed.						
<b>Kandiyohi County</b>									
Sunburg	26	2050CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed.						
<b>Todd County</b>									
3 SW Bertha	26	2050CST			0	0			Thunderstorm Wind (G50)
			Garage and grain bins destroyed. Estimated windspeed.						
<b>Todd County</b>									
2 SW Bertha	26	2050CST			0	0			Thunderstorm Wind (G50)
			Roof damage to silo and milking barn. Estimated windspeed.						
<b>Stearns County</b>									
2.5 SE Holdingford	26	2052CST			0	0			Hail (0.75)
<b>Goodhue County</b>									
2 NW Kenyon	26	2100CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed. Also received 5 inches of rain.						
<b>Goodhue County</b>									
Zumbrota	26	2100CST			0	0			Hail (1.75)
<b>Rice County</b>									
Northfield	26	2100CST			0	0			Flash Flood
	27	0200CST	Between 4 and 6 inches of rain resulted in flash flooding in the Northfield area. Portion of county road 78 washed out resulting in train derailment. Highway 19 bridge collapsed under the weight of a semi-truck and trailer. Decker Avenue along Spring Creek washed out between 90th and 100th streets. Extensive flood damage to roadways around Dennison.						
<b>Todd County</b>									
Long Prairie	26	2100CST			0	0			Thunderstorm Wind (G50)
			Large branches down. Estimated windspeed.						
<b>Stearns County</b>									
Albany	26	2101CST 2102CST			0	0			Thunderstorm Wind (G61)
<b>Rice County</b>									
Northfield	26	2102CST			0	0			Thunderstorm Wind (G55)
			Measured at the Northfield Safety Center.						
<b>Dakota County</b>									
2 NW Castle Rock	26	2110CST			0	0			Thunderstorm Wind (G60)
			Roof torn off grain bin. Trees blown down. Estimated windspeed.						
<b>Chippewa County</b>									
1 W Maynard	26	2115CST			0	0			Thunderstorm Wind (G55)
			Large branches down. Estimated windspeed.						
<b>Goodhue County</b>									
Cannon Falls	26	2115CST			2	0	1.5M		Flash Flood
	27	0300CST	Slow moving thunderstorms dumped 4 to 6 inches of rain in three hours over portions of Goodhue county. Zumbrota received 6.46", Sogn 4.38", Wanamingo 5.49". Flash flooding resulted in many road closures. The Shades of Sherwood Campground was evacuated where some campers were washed into the Zumbro River. Several people were rescued when they were carried into the river along with their camper. Over 100 campers were destroyed. Two deaths occurred along the Zumbro River between Wanamingo and Zumbrota. An elderly couple evacuating the campground drove into a washed out section of road, or the road gave way under the weight of their vehicle. It is presumed the couple escaped from their vehicle only to drown in the river. 400 residents of Cannon Falls were evacuated. Flooding also occurred upstream in Sogn where several homes received major flood damage. Damage estimate for entire county. F56VE, M63VE						
<b>Redwood County</b>									
1 E Belview	26	2120CST			0	0			Hail (0.75)
<b>Ramsey County</b>									
3 N St Paul	26	2125CST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
			Large tree limbs blown down. Estimated windspeed.						
<b>Anoka County</b>									
Coon Rapids	26	2130CST			0	0			Thunderstorm Wind (G65)
			Trees uprooted. Roof damage.						
<b>Meeker County</b>									
4 SW Watkins	26	2130CST			0	0			Hail (0.75)
<b>Rice County</b>									
4 W Shieldsville	26	2130CST			0	0			Thunderstorm Wind (G55)
			Trees down. Estimated windspeed.						
<b>Stearns County</b>									
St Cloud	26	2130CST			0	0			Thunderstorm Wind (G69)
			Measured at St Cloud State University Meteorology department. Power lines and trees down throughout eastern two thirds of Stearns county.						
<b>Benton County</b>									
Sauk Rapids	26	2134CST			0	0	40K		Thunderstorm Wind (G70)
			60 large trees damaged. Few businesses and homes damaged from wind or falling trees.						
<b>Stearns County</b>									
St Cloud Muni Arpt	26	2141CST 2153CST			0	0			Thunderstorm Wind (G67)
			Powers lines down in St. Cloud.						
<b>Renville County</b>									
2 W Renville	26	2145CST			0	0			Hail (0.75)
<b>Sherburne County</b>									
Big Lake	26	2150CST			0	0			Thunderstorm Wind (G61)
			Power lines down.						
<b>Rice County</b>									
3.5 W Dundas	26	2152CST			0	0			Hail (0.75)
<b>Wright County</b>									
Maple Lake	26	2155CST			0	0			Thunderstorm Wind (G56)
<b>Anoka County</b>									
Ramsey	26	2215CST			0	0			Thunderstorm Wind (G61)
<b>Hennepin County</b>									
Rogers	26	2215CST			0	0			Funnel Cloud
<b>Renville County</b>									
Olivia	26	2215CST			0	0			Hail (0.75)
<b>Sherburne County</b>									
Big Lake	26	2224CST			0	0			Thunderstorm Wind (G61)
<b>Wright County</b>									
Maple Lake	26	2225CST			0	0			Thunderstorm Wind (G56)
<b>Mcleod County</b>									
Hutchinson	26	2228CST			0	0			Thunderstorm Wind (G50)
			Trees down.						
<b>Isanti County</b>									
Cambridge	26	2230CST			0	0			Thunderstorm Wind (G61)
<b>Mcleod County</b>									
Brownton	26	2231CST			0	0			Thunderstorm Wind (G50)
			Large branches blown down. Estimated windspeed.						
<b>Anoka County</b>									
Anoka	26	2235CST			0	0			Thunderstorm Wind (G50)
			Trees blown down. Estimated windspeed.						
<b>Mcleod County</b>									
Hutchinson	26	2238CST			0	0			Thunderstorm Wind (G50)
			Large branches blown down. Estimated windspeed.						
<b>Hennepin County</b>									
Eden Prairie	26	2243CST			0	0			Thunderstorm Wind (G56)
<b>Anoka County</b>									
Lino Lakes	26	2245CST			0	0			Thunderstorm Wind (G65)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
20 homes sustained roof and structural damage. Trees blown down. Estimated windspeed.									
<b>Goodhue County</b>									
<b>Goodhue</b>	26	2245CST			0	0			<b>Hail (0.75)</b>
Large trees and sign also blown down. Heavy rain flooded basements.									
<b>Washington County</b>									
<b>Scandia</b>	26	2250CST			0	0			<b>Thunderstorm Wind (G55)</b>
Large trees blown down. Other damage reported in Forest Lake. Estimated windspeed.									
<b>Washington County</b>									
<b>Stillwater</b>	26	2250CST			0	0	1M		<b>Thunderstorm Wind (G80)</b>
Marina damaged. Pier broke lose from shore with 25 boats, some still occupied. Two other piers heavily damaged. Wind damage also reported in Oak Park Heights, Lake Elmo and Oakdale. Large tree limbs and power lines down.									
<b>Hennepin County</b>									
<b>Minneapolis/St Paul</b>	26	2255CST			0	0			<b>Thunderstorm Wind (G52)</b>
Trees down around Lake Nokomis.									
<b>McLeod County</b>									
<b>Glencoe</b>	26	2300CST			0	0			<b>Thunderstorm Wind (G50)</b>
Large branch blown down. Estimated windspeed.									
<b>Ramsey County</b>									
<b>St Paul</b>	26	2303CST			0	0			<b>Thunderstorm Wind (G55)</b>
Trees down at Randolph and Hamilton. Estimated windspeed.									
<b>Scott County</b>									
<b>1 S Belle Plaine</b>	26	2307CST 2309CST			0	0			<b>Hail (0.88)</b>
<b>Washington County</b>									
<b>Cottage Grove</b>	26	2307CST			0	0			<b>Thunderstorm Wind (G55)</b>
Large branches down. Estimated windspeed.									
<b>MNZ078</b>									
		<b>Goodhue</b>							
	27	0300CST 2100CST			0	0			<b>Flood</b>
Very heavy rainfall the previous 4 days caused the Cannon River to overflow its banks. The sewage treatment plant in Welch flooded. Roads were closed in Welch, and the Hidden Valley Campground was evacuated. Some locations in Goodhue county received over 11 inches of rainfall the week of June 22 through June 28 with the bulk of the rain falling between June 24 and June 28. One location just east of Zumbrota recorded 11.54". The Cannon River at Welch rose to 15 feet, exceeding the flood of record by 1 foot. The previous record of 14.01 feet occurred in the spring of 1965. By the morning of 6/27, water filled numerous city parks in Cannon Falls and caused washed out roads including portions of highway 19. One home flooded along highway 19. Homes and businesses flooded along highway 20. Hundreds of people were evacuated near the Cannon River in Cannon Falls. The Cannon River crested around noon on 6/27. Damage estimate to homes and businesses in Cannon Falls is 700 K.									
<b>Martin County</b>									
<b>Welcome</b>	27	1512CST			0	0			<b>Hail (0.75)</b>
<b>Martin County</b>									
<b>Fairmont</b>	27	1520CST			0	0			<b>Hail (1.00)</b>
<b>Martin County</b>									
<b>Ormsby</b>	27	1603CST			0	0			<b>Hail (1.00)</b>
<b>Watonwan County</b>									
<b>Ormsby</b>	27	1606CST			0	0			<b>Hail (1.00)</b>
<b>Brown County</b>									
<b>4 E Springfield</b>	27	1618CST			0	0			<b>Hail (1.00)</b>
<b>Martin County</b>									
<b>1.5 W Granada to Granada</b>	27	1636CST 1638CST	1.5	50	0	0			<b>Tornado (F0)</b>
<b>Martin County</b>									
<b>Fairmont</b>	27	1637CST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Martin County</b>									
<b>1.5 E Granada to 4 E Granada</b>	27	1642CST 1646CST	2.5	50	0	0			<b>Tornado (F0)</b>
Tree damage. Carried one half mile into Faribault co to just south of Huntley.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Central and South Central</b>									
<b>Faribault County</b> 4 S Huntley	27	1646CST	0.5	50	0	0			Tornado (F0)
<b>Faribault County</b> 5 S Delavan to 5 SSE Delavan	27	1651CST 1652CST	1	50	0	0			Tornado (F1) Barn and shed damage. Trees down.
<b>Faribault County</b> 3 NE Brush Creek	27	1655CST			0	0			Thunderstorm Wind (G55) Trees down around Walnut Lake. Estimated windspeed.
<b>Waseca County</b> Matawan	27	1655CST			0	0			Hail (0.75)
<b>Waseca County</b> Waldorf	27	1655CST			0	0			Hail (1.00)
<b>Faribault County</b> Wells	27	1658CST			0	0			Funnel Cloud Funnel clouds also sighted south of Easton.
<b>Faribault County</b> Walters	27	1700CST			0	0			Thunderstorm Wind (G60) City garage blown down. Trees and power lines down. Also reported in Kiester. Estimated windspeed.
<b>Sibley County</b> Gaylord	27	1700CST			0	0			Funnel Cloud
<b>Nicollet County</b> 5 NW Nicollet to 2 NW Nicollet	27	1703CST 1710CST	3	50	0	0			Tornado (F0) Remained near/over Swan Lake.
<b>Freeborn County</b> Albert Lea	27	1709CST			0	0			Hail (2.75)
<b>Freeborn County</b> Hartland	27	1715CST			0	0			Thunderstorm Wind (G60) Grain bins blown down. Estimated windspeed.
<b>Steele County</b> 2 S Owatonna	27	1715CST			0	0			Thunderstorm Wind (G58)
<b>Steele County</b> Owatonna Arpt	27	1715CST			0	0			Thunderstorm Wind (G54) Mobile home damaged.
<b>Waseca County</b> New Richland	27	1720CST			0	0			Thunderstorm Wind (G61) Trees and power lines down on southwest side of city. Grain bin lost its top.
<b>Freeborn County</b> 3 W Emmons	27	1725CST			0	0			Thunderstorm Wind (G60) Barns blown down. Estimated windspeed.
<b>Rice County</b> Lonsdale	27	1725CST			0	0			Thunderstorm Wind (G55) Shed blown down. Estimated windspeed.
<b>Waseca County</b> New Richland	27	1725CST			0	0			Hail (0.75)
<b>Rice County</b> Webster	27	1727CST	0.1	25	0	0			Tornado (F0) Remained in open field. Grain bin blown into woods 2 SE of Webster.
<b>Waseca County</b> Waseca	27	1729CST			0	0			Thunderstorm Wind (G56)
<b>Freeborn County</b> 3 E Hayward to 4 E Hayward	27	1730CST	1	50	0	0			Tornado (F1) Barn destroyed. Large power poles knocked down.
<b>Freeborn County</b> Albert Lea	27	1735CST			0	0			Hail (3.25)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MINNESOTA, Central and South Central

Considerable hail damage to county vehicles. Windows and skylights broken at county buildings and schools.

<b>Freeborn County</b>									
Albert Lea	27	1735CST			0	0			Thunderstorm Wind (G55)
Portion of Ventura Foods roof destroyed. Trees blown down. Estimated windspeed.									
<b>Steele County</b>									
Ellendale	27	1740CST			0	0			Thunderstorm Wind (G61)
Trees and power lines down.									
<b>Rice County</b>									
2 NW Shieldsville	27	1749CST			0	0			Funnel Cloud
Sighted over Shields Lake.									
<b>Freeborn County</b>									
(Ael)Albert Lea Arpt	27	1755CST			0	0			Thunderstorm Wind (G50)
<b>Freeborn County</b>									
3 SE Newry	27	1758CST			0	0			Thunderstorm Wind (G60)
Barn blown down. Estimated windspeed.									
<b>Rice County</b>									
Dundas	27	1800CST			0	0			Thunderstorm Wind (G55)
Barn blown down along Co Rd 1. Estimated windspeed.									
<b>Le Sueur County</b>									
Kilkenny	27	1801CST			0	0			Funnel Cloud
<b>Rice County</b>									
Nerstrand	27	1802CST	0.1	25	0	0			Tornado (F0)
<b>Goodhue County</b>									
1 W Cannon Falls	27	1805CST	0.5	50	0	0			Tornado (F0)
Remained near Lake Byllesby.									
<b>Goodhue County</b>									
4 SW Kenyon	27	1805CST	0.1	50	0	0			Tornado (F0)
<b>Goodhue County</b>									
2 S Wanamingo	27	1808CST	0.1	50	0	0			Tornado (F0)
<b>Goodhue County</b>									
4 SE Zumbrota	27	1819CST	0.1	50	0	0			Tornado (F0)
<b>Stevens County</b>									
Morris	27	2016CST			0	0			Thunderstorm Wind (G50)
<b>MN Z069</b>									
Scott	28	0700CST			0	0			Flood
	29	0700CST			0	0			Flood
Repeated heavy rainfall resulted in severe flooding of Sand Creek in the town of Jordan. Described as the worst flooding since 1963. 38,000 sandbags were needed. 2 bridges were washed out. Because of the rapid response of volunteers and emergency personnel in erecting a sandbag wall, flooding damage was minimized. The Jordan NWS cooperative observer reported 6.80 inches of rain between the 24th and the 27th with over 4 inches falling on the 26th.									
<b>Meeker County</b>									
4 W Kingston	30	1415CST	0.5	25	0	0			Tornado (F0)
Observed by law enforcement.									

## MINNESOTA, Northeast

<b>Cass County</b>									
4 W Longville	01	1450CST			0	0			Hail (0.75)
<b>Itasca County</b>									
3 W Keewatin	01	1515CST			0	0			Hail (0.75)
<b>Cass County</b>									
Walker	01	1523CST			0	0			Hail (0.88)
<b>Aitkin County</b>									
10 N Mc Gregor	01	1523CST			0	0			Hail (1.75)
<b>Cass County</b>									
4 W Longville	01	1525CST			0	0			Hail (1.50)
<b>Cass County</b>									
12 SE Hackensack	01	1537CST			0	0			Hail (1.00)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MINNESOTA, Northeast</u></b>									
<b>Cass County</b> 12 SE Hackensack	01	1537CST			0	0			Thunderstorm Wind (G52)
<b>St. Louis County</b> Canyon	01	1545CST			0	0			Hail (1.00)
<b>Cass County</b> Walker	01	1555CST			0	0			Hail (0.75)
<b>Crow Wing County</b> 2 E Emily	01	1555CST			0	0			Hail (1.00)
<b>Cass County</b> Walker	01	1600CST			0	0			Hail (1.25)
<b>St. Louis County</b> Duluth	01	1605CST 1620CST			0	0			Hail (0.75)
<b>Aitkin County</b> 8 N Mc Gregor	01	1630CST			0	0			Thunderstorm Wind (G50) Trees were blown down on State Highway 65. The wind speed is estimated.
<b>Crow Wing County</b> Cross Lake	01	1655CST			0	0			Hail (1.00)
<b>Crow Wing County</b> Fifty Lakes	01	1702CST			0	0			Hail (1.75)
<b>Cass County</b> Hackensack	01	1708CST			0	0			Hail (0.75)
<b>Crow Wing County</b> Baxter	11	0700CST			0	1			Lightning A lightning bolt hit a telephone box, entered a home through a wall phone, and struck a man, throwing him across the room. He was treated for burns at a local hospital and released. Lightning also struck a home across the street, destroying electrical appliances and a television satellite system.
<b>Itasca County</b> 3 E Calumet	15	1657CST			0	0			Hail (0.75)
<b>Aitkin County</b> Hill City	16	1408CST			0	0			Hail (0.75)
<b>St. Louis County</b> Duluth	25	1600CST			0	0	75K		Lightning Lightning struck a house and started a fire that affected mainly the attic and roof. A fire official estimated the damage at \$75,000.
<b>Itasca County</b> Squaw Lake	27	2218CST			0	0			Hail (0.75)
<b>Crow Wing County</b> Cross Lake	27	2250CST			0	0			Thunderstorm Wind (G52) The strong winds destroyed tents at a camping area.
<b>Cass County</b> Remer	27	2333CST			0	0			Thunderstorm Wind (G52)
<b>Crow Wing County</b> Breezy Pt	27	2355CST			0	0			Thunderstorm Wind (G50) Trees and power lines were blown down. Wind speed is estimated.
<b><u>MINNESOTA, Northwest</u></b>									
<b>Clearwater County</b> Lake Itasca	01	1415CST			0	0			Hail (0.75)
<b>Hubbard County</b> Laporte	01	1430CST			0	0	0.50K		Thunderstorm Wind The strong wind blew several trees down.
<b>Wilkin County</b> Lawndale	01	1510CST			0	0			Hail (0.75)
<b>Wilkin County</b> Lawndale	01	1515CST			0	0			Hail (0.75)
<b>Otter Tail County</b> 6 N Pelican Rapids	01	1535CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Northwest</b>									
<b>Becker County</b> 12 SE Detroit Lakes	01	1557CST			0	0			Hail (0.75)
<b>Otter Tail County</b> Vergas	01	1608CST			0	0			Hail (0.75)
<b>Otter Tail County</b> Dent	01	1620CST			0	0			Hail (0.75)
<b>Hubbard County</b> 5 N Akeley	01	1655CST			0	0			Hail (0.75)
<b>Wadena County</b> 2 S Menahga	01	1700CST			0	0			Hail (0.75)
<b>Otter Tail County</b> 3 E New York Mills	01	1905CST			0	0			Hail (0.75)
<b>Otter Tail County</b> 3 S Fergus Falls	01	1909CST			0	0	40K		Lightning
									Lightning struck a barn, igniting a fire that completely destroyed the barn.
<b>Wilkin County</b> Rothsay	10	2310CST			0	0			Hail (0.75)
<b>Otter Tail County</b> Fergus Falls	10	2315CST			0	0			Hail (0.75)
<b>Clay County</b> Moorhead	18	0150CST			0	0			Hail (0.75)
<b>Grant County</b> 3.5 S Ashby	18	0400CST			0	0	75K		Lightning
									The upper level of a house was lost due to a lightning fire. The downstairs was damaged by water that was used to fight the fire. The family escaped unharmed.
<b>Grant County</b> 2.5 NW Barrett	18	1550CST			0	0			Hail (0.75)
<b>Clay County</b> Moorhead	18	1600CST 2010CST			0	0	100K		Flash Flood
									Over 3 inches of rain fell in less than three hours, causing rapid flooding problems in Moorhead.
<b>Becker County</b> Ponsford	19	1317CST 1620CST			0	0			Flash Flood
									Heavy rain closed a local town road.
<b>Clearwater County</b> 2 S Zerkel	19	1317CST 1620CST			0	0			Flash Flood
									A portion of highway 200 was under water from the heavy rain.
<b>Mahnomen County</b> Mahnomen	19	1317CST 1620CST			0	0			Flash Flood
									Water was reported to be covering a portion of highway 200 near Mahnomen.
<b>Mahnomen County</b> Waubun	19	1317CST 1620CST			0	0			Flash Flood
									Heavy rains caused flooding on highway 113 near Waubun.
<b>Norman County</b> 5 NE Twin Vly	19	1317CST 1620CST			0	0			Flash Flood
									Water was reported over a bridge on county road 37.
<b>Polk County</b> Winger	19	1317CST 1620CST			0	0			Flash Flood
									Water was reported to be over route 204.
<b>Polk County</b> Climax	24	1542CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Northwest</b>									
<b>Polk County</b> Climax	24	1546CST			0	0			Hail (0.75)
<b>Polk County</b> 7 S Crookston	24	1636CST			0	0			Hail (0.75)
<b>Polk County</b> Crookston	24	1650CST			0	0			Hail (1.00)
<b>Polk County</b> Euclid	24	1655CST			0	0			Hail (0.75)
<b>Polk County</b> 2 S Mentor	24	1721CST			0	0			Hail (0.75)
<b>Norman County</b> 10 N Ada	24	1755CST			0	0			Hail (0.75)
<b>Polk County</b> 3 S Angus	24	1805CST			0	0			Hail (1.00)
<b>Norman County</b> 9 NW Flaming	24	1817CST			0	0			Hail (1.00)
<b>Norman County</b> 3 NE Lockhart	24	1820CST			0	0			Hail (1.75)
<b>Polk County</b> 9 N Crookston	24	1823CST	0.2	25	0	0			Tornado (F0)
<b>Norman County</b> 3 N Lockhart	24	1828CST			0	0			Hail (0.75)
<b>Polk County</b> 2.5 E Beltrami	24	1847CST			0	0			Hail (0.75)
<b>Polk County</b> Beltrami	24	1907CST			0	0			Hail (1.25)
<b>Polk County</b> 4 W Fertile	24	1919CST			0	0			Hail (1.75)
<b>Polk County</b> Key West	24	1950CST			0	0			Hail (1.00)
<b>Polk County</b> 10 SW Crookston	24	2056CST			0	0			Hail (0.75)
<b>Polk County</b> 8 N Crookston	24	2123CST			0	0			Hail (0.75)
<b>Polk County</b> 10 N Crookston	24	2124CST			0	0			Hail (1.00)
<b>Polk County</b> Crookston	24	2139CST			0	0			Hail (0.75)
<b>Polk County</b> Crookston	24	2150CST			0	0			Hail (1.00)
<b>Polk County</b> Eldred	24	2155CST			0	0			Hail (1.50)
<b>Polk County</b> 7 S Crookston	24	2200CST			0	0			Hail (1.75)
<b>Kittson County</b> Hallock	25	0322CST			0	0			Hail (0.75)
<b>Kittson County</b> Hallock	25	0329CST			0	0			Hail (0.75)
<b>Kittson County</b> Halma	25	0415CST			0	0			Hail (1.00)
<b>Clay County</b> Moorhead	26	1800CST			0	0	10K		Lightning
		A house for sale in Moorhead was struck by lightning, igniting a fire.							
<b>Otter Tail County</b> Fergus Falls	26	1915CST			0	0	10K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Northwest</b>									
			A tree was blown into a house, damaging the roof. Another tree fell on a garage. Power was out for a section of Fergus Falls for over an hour.						
<b>Otter Tail County</b> Dalton	26	1920CST			0	0	3K		Thunderstorm Wind
			A tree was blown into a garage and a truck.						
<b>Grant County</b> Hoffman	26	2000CST			0	0	15K		Thunderstorm Wind
			A cattle barn was damaged by the wind as well as trees and power lines.						
<b>Becker County</b> Detroit Lakes	26	2030CST			0	0	1K		Flash Flood
			Water flowed over US Highway 10 west of the city.						
<b>Otter Tail County</b> 15 E Pelican Rapids	26	2030CST			0	0	0.40K		Thunderstorm Wind
			6 inch diameter trees were downed in the strong wind.						
<b>Becker County</b> 2 W Frazee	26	2035CST			0	0	50K		Thunderstorm Wind
			Seventeen large trees were downed on a farmstead, one landing on a car. Nearby, 2 large turkey barns were damaged, and 30 tree s were flattened.						
<b>Becker County</b> 1 N Frazee	26	2035CST			0	0	0.40K		Thunderstorm Wind
			Trees were downed in the strong wind.						
<b>Becker County</b> 12 E Detroit Lakes	26	2045CST			0	0	0.40K		Thunderstorm Wind
			8 inch diameter trees were knocked down by the strong wind.						
<b>Wadena County</b> Verndale	26	2100CST			0	0	0.50K		Thunderstorm Wind
			10 to 15 trees were blown down in the strong wind.						
<b>Kittson County</b> 4 SW Halma	27	1626CST			0	0			Hail (0.75)
<b>Kittson County</b> 4 SW Halma	27	1635CST			0	0			Hail (1.00)
			Hail was reported to be 3 inches deep.						
<b>Roseau County</b> Badger	27	1708CST			0	0	0.20K		Thunderstorm Wind
<b>Roseau County</b> Roseau	27	1720CST			0	0			Hail (1.00)
<b>Roseau County</b> Roseau	27	1723CST			0	0			Hail (0.75)
<b>Roseau County</b> Roseau	27	1730CST			0	0	10K		Thunderstorm Wind
			Power lines were blown down in the strong wind.						
<b>Roseau County</b> 1 N Warroad	27	1755CST			0	0			Hail (1.25)
<b>Lake Of The Woods County</b> 11 NW Williams	27	1812CST			0	0			Hail (1.00)
<b>Becker County</b> Detroit Lakes	27	1957CST			0	0			Hail (0.75)
<b>Becker County</b> Detroit Lakes	27	1957CST			0	0	0.20K		Thunderstorm Wind
<b>Beltrami County</b> Bemidji	27	2006CST			0	0			Hail (0.75)
<b>Becker County</b> Detroit Lakes	27	2010CST			0	0	0.20K		Thunderstorm Wind
<b>Beltrami County</b> Bemidji	27	2027CST			0	0	0.20K		Thunderstorm Wind
			Trees were blown down in the strong wind.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MINNESOTA, Northwest</u></b>									
<b>Clearwater County</b> 11 SW Bagley	27	2030CST			0	0	0.20K		Thunderstorm Wind
			The strong wind blew down large branches.						
<b>Beltrami County</b> 22 NE Bemidji	27	2035CST			0	0	0.40K		Thunderstorm Wind
			Trees were blown down in the strong wind.						
<b><u>MINNESOTA, Southeast</u></b>									
<b>Houston County</b> Houston	16	1342CST			0	0			Hail (0.75)
			Dime size hail was reported.						
<b>Olmsted County</b> Byron	18	1200CST			0	0	2K		Thunderstorm Wind (G58)
<b>Olmsted County</b> Byron	18	1205CST			0	0	2K		Thunderstorm Wind (G61)
<b>Olmsted County</b> Salem Corners	18	1207CST			0	0	0.50K		Thunderstorm Wind
<b>Fillmore County</b> Mabel	18	1545CST			0	0	17K		Thunderstorm Wind (G54)
<b>Houston County</b> 1 S Houston	18	1600CST			0	0	12K		Thunderstorm Wind (G53)
<b>Houston County</b> Caledonia	18	1607CST			0	0	4K		Thunderstorm Wind (G52)
<b>Houston County</b> 3 E Caledonia	18	1610CST			0	0	35K	28K	Thunderstorm Wind (G52)
			Storm spotters reported winds gusts as high as 70 mph at Byron, blowing shingles off a house and knocking down several large trees and branches. Later that afternoon, a few farm buildings were damaged and several large trees and limbs were knocked down in communities closer to the Iowa border.						
<b>Mower County</b> 5 W Waltham	20	1205CST			0	0	20K	40K	Hail (0.75)
<b>Mower County</b> Austin	20	1225CST			0	0	45K	35K	Hail (1.50)
<b>Mower County</b> Austin	20	1236CST			0	0	35K	50K	Hail (1.50)
<b>Mower County</b> 3 E Waltham	20	1239CST			0	0		25K	Hail (0.75)
<b>Mower County</b> 3 E Sargeant	20	1245CST			0	0			Hail (0.75)
<b>Mower County</b> Waltham	20	1247CST			0	0	35K		Hail (1.25)
<b>Mower County</b> 2 E Grand Meadow	20	1318CST			0	0			Funnel Cloud
<b>Fillmore County</b> 1 NW Ostrander	20	1337CST			0	0		25K	Hail (0.75)
<b>Fillmore County</b> Ostrander	20	1351CST			0	0	13K		Thunderstorm Wind (G61)
<b>Fillmore County</b> Ostrander	20	1400CST			0	0	5K	20K	Thunderstorm Wind (G56)
<b>Fillmore County</b> Spring Vly	20	1410CST			0	0	18K	40K	Hail (1.25)
<b>Fillmore County</b> Ostrander	20	1415CST			0	0	25K	30K	Hail (1.75)
<b>Fillmore County</b> 5 S Spring Vly	20	1415CST			0	0		45K	Hail (1.75)
<b>Fillmore County</b> Harmony	20	1420CST			0	0	50K		Thunderstorm Wind (G61)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Southeast</b>									
<b>Fillmore County</b>									
Canton	20	1450CST			0	0	45K	25K	Thunderstorm Wind
<b>Fillmore County</b>									
Mabel	20	1505CST			0	0	50K	22K	Thunderstorm Wind
<b>Houston County</b>									
Spring Grove	20	1533CST			0	0	12K		Thunderstorm Wind (G52)
<b>Houston County</b>									
Spring Grove	20	1538CST			0	0		25K	Hail (0.75)
<b>Houston County</b>									
4 S Caledonia	20	1553CST			0	0	10K	20K	Hail (1.25)
A cluster of thunderstorms produced large hail and wind gusts up to 70 mph across southeast Minnesota with the most concentrated area of damage from Austin east through Fillmore County and into extreme southwest Houston County.									
The combination of heavy rain, small stream flooding, and large hail damaged many crops from Austin east-southeast through Ostrander and along Highway 44. A school was heavily damaged in Canton and several business just north of Highway 44 in Mabel had roofs torn off. Farm equipment was thrown across Highway 43 just north of Mabel with numerous trees down. In Spring Grove, a cattle barn had the roof blown off and numerous trees in a nearby park were blown down demolishing a shelter. Nearly every camper at a Recreational Vehicle sales lot in Spring Grove was demolished as well.									
<b>Mower County</b>									
Grand Meadow	20	1341CST 1458CST			0	0	0.40K	1.3K	Flash Flood
<b>Fillmore County</b>									
Harmony to Mabel	20	1530CST 2000CST			0	0	25K	35K	Flash Flood
Flash flooding caused road wash outs as torrential rains hit parts of southeast Minnesota. A nursing home in Mabel (Fillmore County) was evacuated due to rising water.									
<b>Olmsted County</b>									
Byron	24	2021CST			0	0			Hail (0.75)
<b>Olmsted County</b>									
2 S Byron	24	2033CST 2036CST	0.2	50	0	0		25K	Tornado (F0)
<b>Olmsted County</b>									
4 NW Rochester	24	2050CST			0	0	25K		Hail (1.75)
<b>Wabasha County</b>									
5 N Elgin	24	2115CST			0	0			Hail (0.75)
<b>Wabasha County</b>									
Plainview	24	2140CST			0	0	10K		Hail (0.75)
<b>Wabasha County</b>									
Kellogg	24	2156CST			0	0			Hail (0.75)
Hail up to golf ball size was reported by storm spotters and law enforcement officials. A brief tornado touched down in a corn field near Byron with little damage.									
<b>Olmsted County</b>									
Oronoco	26	2149CST			0	0	20K	10K	Thunderstorm Wind (G70)
<b>Wabasha County</b>									
Zumbro Falls	26	2153CST			0	0	55K		Thunderstorm Wind (G60)
<b>Olmsted County</b>									
1 W Oronoco	26	2155CST			0	0	10K	5K	Thunderstorm Wind (G61)
<b>Winona County</b>									
Goodview	26	2205CST			0	0	22K		Hail (0.75)
<b>Winona County</b>									
Winona	26	2205CST			0	0	30K		Hail (0.75)
<b>Olmsted County</b>									
Dover	26	2233CST			0	0	10K		Thunderstorm Wind (G61)
<b>Winona County</b>									
Minneiska	26	2238CST			0	0	12K		Thunderstorm Wind (G52)
<b>Winona County</b>									
Minneiska	26	2240CST			0	0	15K		Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Southeast</b>									
<b>Wabasha County</b> Zumbro Falls	26	2244CST			0	0	40K	60K	Thunderstorm Wind (G61)
<b>Wabasha County</b> Wabasha	26	2245CST			0	0	1.5K		Thunderstorm Wind (G61)
<b>Olmsted County</b> 1 NW Oronoco	26	2312CST			0	0	15K	5K	Hail (0.88)
<b>Wabasha County</b> Lake City	26	2316CST			0	0	35K		Thunderstorm Wind (G61)
<b>Olmsted County</b> 1 E Oronoco	26	2352CST			0	0		2K	Hail (0.88)
<b>Olmsted County</b> 3 E Oronoco	27	0025CST			0	0			Thunderstorm Wind (G53)
<b>Winona County</b> 1 N Nodine	27	0106CST			0	0		15K	Hail (0.75)
A cluster of thunderstorms brought large hail and damaging wind gusts to parts of southeast Minnesota. Numerous large trees were blown down along with minor roof damage to area homes. A marina in Lake City also sustained some damage to piers and boats.									
<b>Wabasha County</b> Zumbro Falls	26 27	2330CST 0700CST			0	0	55K	40K	Flash Flood
<b>Winona County</b> Stockton	26 27	2330CST 0700CST			0	0	15K	1.7K	Flash Flood
<b>Olmsted County</b> Rochester	27	0045CST 0245CST			0	0	15K		Flash Flood
Flash flooding was observed on numerous small creeks and streams across both Winona and Wabasha Counties. Crops sustained some damage and many county roads had wash outs or were closed. Flash flooding was also observed in the Rochester area with some basements flooded.									
<b>Dodge County</b> 4 W Hayfield	27	1748CST			0	0		1K	Hail (1.00)
<b>Mower County</b> Austin	27	1756CST			0	0	1.9M	41.5K	Thunderstorm Wind (G61)
<b>Dodge County</b> Claremont	27	1759CST			0	0	100K	120K	Thunderstorm Wind (G52)
<b>Dodge County</b> West Concord	27	1800CST			0	0	110K	80K	Thunderstorm Wind (G52)
<b>Mower County</b> Austin	27	1800CST			0	0	3.2M	250K	Thunderstorm Wind (G61)
<b>Dodge County</b> 3 W Hayfield	27	1810CST			0	0	22K	80K	Thunderstorm Wind (G52)
<b>Mower County</b> Austin Arpt	27	1814CST			0	0	1.5M	190K	Thunderstorm Wind (G81)
<b>Dodge County</b> 5 W Hayfield	27	1815CST 1900CST			0	0	120K	60K	Flash Flood
<b>Mower County</b> Sargeant	27	1817CST			0	0	50K	80K	Thunderstorm Wind (G70)
<b>Mower County</b> Racine	27	1825CST			0	0	35K	60K	Thunderstorm Wind
<b>Olmsted County</b> Stewartville	27	1827CST			0	0	10K	5K	Thunderstorm Wind (G56)
<b>Olmsted County</b> Stewartville	27	1829CST			0	0	3K	2K	Thunderstorm Wind (G70)
<b>Olmsted County</b> Oronoco	27	1830CST			0	0	24K	0.90K	Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA, Southeast</b>									
<b>Olmsted County</b> Rochester	27	1832CST			0	0	320K	150K	Thunderstorm Wind (G70)
<b>Wabasha County</b> Mazeppa	27	1835CST			0	0	24K	7K	Thunderstorm Wind (G61)
<b>Fillmore County</b> Spring Vly	27	1840CST			0	0	0.20K	30K	Hail (1.75)
<b>Wabasha County</b> Zumbro Falls	27	1840CST			0	0	560K	45K	Thunderstorm Wind (G61)
<b>Olmsted County</b> 1 SW Stewartville	27	1841CST			0	0	4K	18K	Thunderstorm Wind (G61)
<b>Olmsted County</b> Byron	27	1845CST 1945CST			0	0			Urban/Sml Stream Fld
<b>Fillmore County</b> Ostrander	27	1850CST			0	0	18K	3K	Thunderstorm Wind (G70)
<b>Fillmore County</b> Spring Vly	27	1850CST			0	0	18K	10K	Thunderstorm Wind (G70)
<b>Wabasha County</b> Plainview	27	1851CST			0	0	85K	40K	Thunderstorm Wind (G61)
<b>Fillmore County</b> Harmony	27	1855CST			0	0	20K	20K	Thunderstorm Wind (G61)
<b>Olmsted County</b> Dover	27	1856CST			0	0	35K	45K	Thunderstorm Wind (G52)
<b>Fillmore County</b> Harmony	27	1900CST 2100CST			0	0	1.6K	2.8K	Urban/Sml Stream Fld
<b>Olmsted County</b> 2 E Dover	27	1900CST			0	0	4K	20K	Thunderstorm Wind (G70)
<b>Winona County</b> Utica	27	1910CST			0	0	15K	25K	Thunderstorm Wind (G56)
<b>Fillmore County</b> Chatfield	27	1913CST			0	0	8K	3K	Thunderstorm Wind (G70)
<b>Winona County</b> Lewiston	27	1914CST			0	0	250K	100K	Thunderstorm Wind
<b>Winona County</b> Stockton	27	1914CST			0	0	2K	14K	Thunderstorm Wind (G61)
<b>Winona County</b> Winona Muni Arpt	27	1918CST			0	0	300K	15K	Thunderstorm Wind (G78)
<b>Fillmore County</b> Preston	27	1922CST			0	0	18K	5K	Thunderstorm Wind (G52)
<b>Houston County</b> Caledonia	27	1930CST			0	0	40K	5K	Thunderstorm Wind
<b>Winona County</b> Winona	27	1930CST			0	0	400K	50K	Thunderstorm Wind (G65)
<b>Houston County</b> Hokah	27	1939CST			0	0	30K	20K	Thunderstorm Wind
<b>Houston County</b> La Crescent	27	1939CST			0	0	10K	0.90K	Thunderstorm Wind
<b>Houston County</b> Brownsville	27	1946CST			0	0	46K	7K	Thunderstorm Wind (G82)

A line of intense thunderstorms swept through southeast Minnesota with two distinct downburst damage paths.

The northern track hit southern Wabasha County and then passed through central Winona County hitting the city of Winona directly. Thousands of trees were knocked down from wind gusts of 70 to 90 mph, along with power lines down and sporadic property damage.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MINNESOTA, Southeast

The southern track was more intense and passed from Austin through Fillmore and Houston Counties before crossing into Wisconsin. The City of Austin has widespread property and tree damage with power loss to almost the entire city for over 24 hours. Many streets in town were impassable due to the downed trees and power lines. A furniture store downtown sustained heavy damage when a brick wall collapsed. The courthouse also was damaged. The Cedar River also rose quickly and caused minor damage in Austin.

There were reports of large hail and hundreds of trees down as the line of storms moved east from Austin and hit Spring Valley and Harmony. Many buildings were also damaged. Near the Mississippi River, the community of Brownsville nearly lost every tree in town from estimated wind gusts over 100 mph.

Six southeast Minnesota counties were declared Federal Disaster areas with estimated damage costs exceeding 8 Million dollars in Mower County (Austin) alone. Other damage estimates included \$1.2 Million in Winona County, \$550,000 in Olmsted County, \$250,000 in Wabasha County, \$126, 000 in Houston County, and \$100,000 in Fillmore County.

## MINNESOTA, Southwest

<b>Cottonwood County</b> 5 SE Delft	20	0751CST			0	0			Hail (0.75)
<b>Cottonwood County</b> Mountain Lake	20	0754CST			0	0			Hail (1.00)
<b>Cottonwood County</b> 1 E Mountain Lake	20	0830CST			0	0			Hail (0.75)
<b>Jackson County</b> Lakefield to 5 NE Bergen	20	0759CST 0828CST			0	0	100K	50K	Hail (2.75)
Large hail dented cars and damaged crops. The amount of hail was not great and there were only a few of the largest stones.									
<b>Rock County</b> Luverne	23	2110CST			0	0			Hail (0.75)
<b>Pipestone County</b> 5 E Pipestone to Edgerton	24	2125CST 2130CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage.									
<b>Lyon County</b> Russell	24	2135CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage.									
<b>Murray County</b> Fulda	24	2145CST 2200CST			0	0	50K		Thunderstorm Wind (G52)
Thunderstorm winds caused tree and power line damage, minor damage to vehicles from tree debris, and damaged a school roof.									
<b>Nobles County</b> Rushmore to Reading	24	2230CST 2237CST			0	0			Thunderstorm Wind (G52)
Thunderstorm winds caused tree damage, including two large trees which were uprooted. Wind blown tree debris also caused roof damage.									
<b>Nobles County</b> Adrian	27	1505CST 1512CST			0	0			Hail (1.75)
<b>Nobles County</b> Worthington	27	1526CST			0	0			Hail (0.75)
<b>Nobles County</b> 5 W Round Lake	27	1615CST			0	0			Hail (0.75)
<b>Jackson County</b> Jackson	27	1509CST 1511CST			0	0			Hail (0.75)
<b>Jackson County</b> Jackson	27	1532CST			0	0			Hail (1.50)
<b>Jackson County</b> 1 NE Lakefield	27	1535CST			0	0			Hail (0.75)
<b>Rock County</b> Hills	27	1513CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MINNESOTA, Southwest

<b>Rock County</b> 9 S Magnolia	27	1545CST			0	0			Hail (1.00)
<b>Jackson County</b> 4 W Lakefield to 2 W Lakefield	27	1515CST 1520CST	2	100	0	0	100K	5K	Tornado (F0)
A tornado knocked down power poles and lines, closing part of Interstate 90. The tornado also destroyed a barn and silo and damaged other buildings on a farm.									
<b>Jackson County</b> 1 N Jackson	27	1525CST			0	0	10K		Thunderstorm Wind (G61)
Thunderstorm winds blew down power lines.									
<b>Jackson County</b> 12 S Lakefield	27	1615CST			0	0	5K		Thunderstorm Wind (G61)
Thunderstorm winds blew over a grain bin.									
<b>Jackson County</b> 9 SW Jackson	27	1650CST 1656CST			0	0			Hail (1.75)

## MINNESOTA, West

NONE REPORTED.

## MINNESOTA, West Central

NONE REPORTED.

## MISSISSIPPI, Central

<b>Bolivar County</b> Countywide	05	0110CST			0	0	10K		Thunderstorm Wind
Numerous trees were blown down throughout the county.									
<b>Washington County</b> Greenville	05	0117CST			0	0			Thunderstorm Wind (G61)
Television station in Greenville recored a 70 mile an hour gust.									
<b>Sunflower County</b> Drew	05	0130CST			0	0	5K		Thunderstorm Wind (G52)
Numerous trees were blown down.									
<b>Grenada County</b> Countywide	05	0210CST			0	0	10K		Thunderstorm Wind
Numerous trees were blown down throughout the county.									
<b>Issaquena County</b> Mayersville	05	1100CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Sharkey County</b> Rolling Fork	05	1100CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Warren County</b> Vicksburg	05	1100CST			0	0			Hail (0.75)
<b>Warren County</b> Vicksburg	05	1100CST			0	0	10K		Thunderstorm Wind
Numerous trees and power lines were blown down.									
<b>Yazoo County</b> Yazoo City	05	1128CST			0	0	10K		Thunderstorm Wind
Many trees were blown down. Some of the trees fell on houses.									
<b>Madison County</b> 5 N Flora	05	1130CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Madison County</b> Madison	05	1140CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Sunflower County</b> Parchman	05	1144CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
<b>Hinds County</b>									
<b>Jackson</b>	<b>05</b>	<b>1150CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Holmes County</b>									
<b>Countywide</b>	<b>05</b>	<b>1150CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Many trees were blown down across the county.									
<b>Hinds County</b>									
<b>Clinton</b>	<b>05</b>	<b>1155CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Yazoo County</b>									
<b>Yazoo City</b>	<b>05</b>	<b>1155CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down and a mobile home was damaged.									
<b>Carroll County</b>									
<b>Countywide</b>	<b>05</b>	<b>1200CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees and power lines were blown down across the county.									
<b>Hinds County</b>									
<b>Jackson</b>	<b>05</b>	<b>1200CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Attala County</b>									
<b>Ethel</b>	<b>05</b>	<b>1210CST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b>
A large tree fell on a house and causes structural damage.									
<b>Grenada County</b>									
<b>Countywide</b>	<b>05</b>	<b>1215CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees and power lines were blown down across the county.									
<b>Montgomery County</b>									
<b>Countywide</b>	<b>05</b>	<b>1215CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees and power lines were blown down across the county.									
<b>Choctaw County</b>									
<b>Ackerman</b>	<b>05</b>	<b>1220CST</b>			<b>0</b>	<b>0</b>	<b>30K</b>		<b>Thunderstorm Wind</b>
Several roofs of houses were blown off. A metal awning was ripped off a house. Many trees were blown down.									
<b>Attala County</b>									
<b>Kosciusko</b>	<b>05</b>	<b>1230CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down.									
<b>Choctaw County</b>									
<b>Ackerman</b>	<b>05</b>	<b>1230CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind (G62)</b>
Numerous trees were blown down.									
<b>Leake County</b>									
<b>Countywide</b>	<b>05</b>	<b>1230CST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down across the county. Two cars were crushed by falling trees.									
<b>Rankin County</b>									
<b>Countywide</b>	<b>05</b>	<b>1230CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees and power line were blown down across the county.									
<b>Scott County</b>									
<b>Countywide</b>	<b>05</b>	<b>1230CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees and power lines were blown down across the county.									
<b>Choctaw County</b>									
<b>2 W Ackerman</b>	<b>05</b>	<b>1235CST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
Several trees were blown down.									
<b>Choctaw County</b>									
<b>Countywide</b>	<b>05</b>	<b>1240CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
Several trees were blown down across the county.									
<b>Leake County</b>									
<b>Countywide</b>	<b>05</b>	<b>1240CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down across the county.									
<b>Webster County</b>									
<b>Countywide</b>	<b>05</b>	<b>1240CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down across the county.									
<b>Webster County</b>									
<b>4 W Eupora</b>	<b>05</b>	<b>1240CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Numerous trees were blown down.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
<b>Winston County</b> 3 NE Louisville	05	1240CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Neshoba County</b> Countywide	05	1245CST			0	0	10K		Thunderstorm Wind
			Numerous trees and power lines were blown down across the county.						
<b>Smith County</b> Countywide	05	1245CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down.						
<b>Kemper County</b> Countywide	05	1300CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down across the county.						
<b>Noxubee County</b> Countywide	05	1300CST			0	0	30K		Thunderstorm Wind
			A mobile home was destroyed and several homes suffered structural damage. Numerous trees and power lines were blown down across the county.						
<b>Oktibbeha County</b> Countywide to 4 W Starkville	05	1300CST			0	0	10K		Thunderstorm Wind (G61)
			Numerous trees were blown down across the county.						
<b>Newton County</b> Countywide	05	1305CST			0	0	5K		Thunderstorm Wind
			Trees and power lines were blown down across the county.						
<b>Lauderdale County</b> Countywide	05	1310CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down across the county.						
<b>Jasper County</b> Countywide	05	1330CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down across the county.						
<b>Clarke County</b> Quitman	05	1350CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Lauderdale County</b> 5 SE Meridian	05	1400CST			0	0			Hail (0.88)
<b>Warren County</b> Le Tourneau	05	1930CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Claiborne County</b> Countywide	05	1940CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down throughout the county.						
<b>Adams County</b> Countywide	05	1945CST			0	0	30K		Thunderstorm Wind (G52)
			Numerous trees were blown down across the county. Several trees fell on houses.						
<b>Hinds County</b> Bolton	05	2000CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Copiah County</b> Countywide	05	2015CST			0	0	10K		Thunderstorm Wind
			Trees and power lines at several locations across the county.						
<b>Jefferson County</b> Countywide	05	2020CST			0	0	10K		Thunderstorm Wind
			Numerous trees were blown down throughout the county.						
<b>Franklin County</b> Mc Call Creek	05	2025CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down across the roads.						
<b>Simpson County</b> Mendenhall	05	2035CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
<b>Lincoln County</b> Bogue Chitto	05	2040CST			0	0			Thunderstorm Wind (G56)
<b>Rankin County</b> Puckett	05	2040CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Lawrence County</b> 7 SW Monticello	05	2100CST			0	0	2K		Thunderstorm Wind
Several trees were blown down.									
<b>Smith County</b> Taylorsville	05	2115CST			0	0	4K		Thunderstorm Wind
Several trees and power lines were blown down.									
<b>Marion County</b> Columbia	05	2127CST			0	0			Thunderstorm Wind (G61)
<b>Covington County</b> Countywide	05	2130CST			0	0	10K		Thunderstorm Wind
Numerous trees and power lines were blown down across the county.									
<b>Jasper County</b> Countywide	05	2130CST			0	0	10K		Thunderstorm Wind
Numerous trees were blown down across the county.									
<b>Jefferson Davis County</b> Countywide	05	2130CST			0	0	10K		Thunderstorm Wind
Trees were blown down throughout the county.									
<b>Marion County</b> Countywide	05	2130CST			0	0	30K		Thunderstorm Wind
Trees and power lines were blown down throughout the county. Five homes, three mobile homes and three cars were damaged by fallen trees.									
<b>Jefferson Davis County</b> Melba	05	2135CST			0	0	25K		Thunderstorm Wind
The roofs of several houses were blown off.									
<b>Lauderdale County</b> Countywide	05	2145CST			0	0	5K		Thunderstorm Wind
Trees were blown down at several locations over the county.									
<b>Lawrence County</b> Countywide	05	2145CST			0	0	10K		Thunderstorm Wind
Trees and power lines were blown down across the county.									
<b>Lamar County</b> Countywide	05	2150CST			0	0	100K		Thunderstorm Wind
Numerous trees were blown down across the county. One house was destroyed and the roofs of several houses were blown off. Many cars were damaged by fallen trees. Twenty five families had to be evacuated when the storm caused damage to a natural gas pipeline.									
<b>Forrest County</b> Hattiesburg	05	2200CST			2	45	1M		Thunderstorm Wind
Numerous trees and power lines were blown down across the city of Hattiesburg blocking many of the roads and highways. Wind s heavily damaged twenty-five homes and twenty-five mobile homes. Forty-five people were injured and two people were killed. The two fatalities were both in automobiles which ran into falling trees or the trees fell on them. M20VE, M40VE									
<b>Jones County</b> Laurel	05	2200CST			0	0	20K		Thunderstorm Wind
Numerous trees were and signs were blown down. On car was damaged by a fallen tree.									
<b>Clarke County</b> Countywide	05	2210CST			0	0	20K		Thunderstorm Wind
Numerous trees were blown down across the county.									
<b>Forrest County</b> 10 SE Hattiesburg	05	2210CST	1.5	50	0	0	20K		Tornado (F1)
This tornado blew down trees and a couple of signs. It also removed part of a roof of a building.									
<b>Choctaw County</b> French Camp	14	2250CST			0	0	50K		Hail (2.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
			Many automobiles and roofs were damaged.						
<b>Montgomery County</b> Stewart	14	2300CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Attala County</b> Ethel	14	2310CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Hinds County</b> Jackson	15	0115CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down. A couple of the trees fell across power lines.						
<b>Lauderdale County</b> 5 NE Meridian	15	0355CST			0	0	2K		Thunderstorm Wind
			Several trees and large limbs were blown down.						
<b>Sharkey County</b> Onward	15	1510CST			0	0	100K		Hail (2.25)
			Many automobiles and roofs were damaged.						
<b>Yazoo County</b> 4 ENE Satartia	15	1540CST			0	0			Hail (0.75)
<b>Yazoo County</b> Bentonia	15	1545CST			0	0			Hail (0.75)
<b>Yazoo County</b> Benton	15	1555CST			0	0			Hail (0.75)
<b>Madison County</b> Flora	15	1610CST			0	0	100K		Hail (1.75)
			Many automobiles and roofs were damaged.						
<b>Yazoo County</b> 1 S Satartia	15	1630CST			0	0	50K		Hail (1.75)
			Cars and roofs were damaged.						
<b>Carroll County</b> Black Hawk	15	1640CST			0	0	50K		Hail (1.75)
			Cars and roofs were damaged.						
<b>Madison County</b> Madison	15	1648CST			0	0			Hail (1.00)
<b>Carroll County</b> Centerville	15	1650CST			0	0	100K		Hail (2.75)
			Many roofs and automobiles were damaged from baseball size hail.						
<b>Rankin County</b> 3 SW Fannin	15	1650CST			0	0			Hail (0.75)
<b>Lauderdale County</b> Meridian	15	1653CST			0	0			Hail (0.88)
<b>Humphreys County</b> Louise	15	1656CST			0	0			Hail (0.75)
<b>Leake County</b> Walnut Grove	15	1659CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Leake County</b> Walnut Grove	15	1700CST			0	0	2K		Thunderstorm Wind
			Several trees were blown down.						
<b>Carroll County</b> 1 W Carrollton	15	1701CST			0	0	50K		Hail (2.75)
			Many automobiles and roofs were damaged.						
<b>Sharkey County</b> 5 N Anguilla	15	1710CST			0	0			Hail (0.75)
<b>Montgomery County</b> Duck Hill	15	1720CST			0	0	100K		Hail (2.75)
			Many automobile and roofs were damage from baseball size hail.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
<b>Scott County</b> 1 NE Morton	15	1725CST	1	40	0	0			Tornado (F0)
									This tornodo touched down briefly and did not cause any damage.
<b>Grenada County</b> 5 SW Gore Spgs	15	1735CST			0	0			Hail (1.75)
<b>Yazoo County</b> Benton	15	1735CST	1	40	0	0			Tornado (F0)
									This weak tornado touched down briefly and did not cause any damage.
<b>Kemper County</b> Preston	15	1745CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Scott County</b> Lake	15	1752CST			0	0			Hail (0.88)
<b>Newton County</b> Countywide	15	1753CST			0	0			Hail (0.75)
									Three quarter inch hail was reported over most of the county.
<b>Humphreys County</b> 4 E Belzoni	15	1755CST			0	0	50K		Hail (1.75)
									Houses and automobiles were damaged.
<b>Lauderdale County</b> 5 N Meridian	15	1800CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Leflore County</b> Sidon	15	1800CST			0	0			Hail (0.75)
<b>Issaquena County</b> 3 E Fittler	15	1827CST			0	0			Hail (1.75)
<b>Attala County</b> Countywide	15	1830CST			0	0	10K		Thunderstorm Wind
									Many trees were blown down throughout the county.
<b>Leake County</b> Thomastown	15	1830CST			0	0	20K		Thunderstorm Wind
									Several trees were blown down. One tree fell on a house.
<b>Issaquena County</b> Fittler	15	1850CST			0	0			Hail (1.75)
<b>Sharkey County</b> Onward	15	1855CST			0	0	100K		Hail (1.75)
									An entire cotton crop was destroyed.
<b>Neshoba County</b> Philadelphia	15	1900CST			0	0	100K		Hail (1.75)
									Considerable damage occurred to automobiles and houses.
<b>Yazoo County</b> 7 SW Yazoo City	15	1915CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Madison County</b> Canton	15	1930CST			0	0	2K		Thunderstorm Wind
									Several trees and large limbs were blown down.
<b>Neshoba County</b> Philadelphia	15	1930CST			0	0	100K		Hail (1.75)
									Numerous automobiles were damaged by golfball size hail.
<b>Neshoba County</b> Philadelphia	15	1930CST			0	0	10K		Thunderstorm Wind
									Many trees were blown down. Several of the trees fell on cars.
<b>Lauderdale County</b> Kewanee	15	2004CST			0	0			Hail (0.75)
<b>Lauderdale County</b> 4 S Meridian	16	1525CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Central</b>									
<b>Jones County</b> 4 SW Ellisville	20	1830CST			0	0	50K		Hail (1.75)
									Houses and automobiles were damaged.
<b>Covington County</b> 3 NE Sanford	20	2020CST			0	0	5K		Thunderstorm Wind
									Several trees and power lines were blown down.
<b>Jasper County</b> 2 E Bay Spgs	20	2035CST			0	0	50K		Hail (2.50)
									Many roofs and cars were damaged.
<b>Forrest County</b> 4 NE Glendale	20	2100CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Lamar County</b> Sumrall	20	2100CST			0	0	5K		Thunderstorm Wind
									Several trees were blown down and the tin of a barn roof was peeled off.
<b>Rankin County</b> Brandon	20	2120CST			0	0			Hail (1.00)
<b>Forrest County</b> 2 SW Hattiesburg	20	2145CST			0	0	4K		Thunderstorm Wind
									Several trees and power lines were blown down.
<b>Adams County</b> 3 E Natchez	22	1625CST			0	0			Hail (1.00)
<b>Adams County</b> 5 E Natchez	22	1630CST			0	0	20K		Hail (1.75)
									Minor damage was done to some automobiles.
<b>Copiah County</b> 2 S Carpenter	22	1730CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Claiborne County</b> 5 NE Port Gibson	22	1800CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Hinds County</b> Utica	22	1830CST			0	0			Hail (0.75)
<b>Hinds County</b> 1 S Learned	22	1850CST			0	0			Hail (1.75)
<b>Warren County</b> 3 SE Vicksburg	22	1915CST			0	0	2K		Thunderstorm Wind
									Several trees were blown down.
<b>Hinds County</b> Edwards	22	1935CST			0	0	30K		Hail (1.75)
									Several automobiles were damaged.
<b>Hinds County</b> Edwards	22	1935CST			0	0	10K		Thunderstorm Wind
									Numerous trees were blown down.
<b>Lauderdale County</b> Collinsville	24	1850CST			0	0			Hail (0.75)
<b>Newton County</b> 1 E Little Rock	24	1900CST			0	0	1K		Thunderstorm Wind
									A few trees and large limbs were blown down.
<b>MISSISSIPPI, North</b>									
<b>Itawamba County</b> Fulton	04	1340CST 1345CST			0	0	0.75K		Hail (1.75)
<b>Tunica County</b> Tunica	05	0045CST			0	0	10K		Thunderstorm Wind (G70)
									An 80 mph wind gust was reported by the North Tunica Fire Department. Several trees were knocked down as well.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, North</b>									
<b>Coahoma County</b> Clarksdale	05	0100CST 0105CST			0	0	10K		Thunderstorm Wind
									Several tents were damaged and several small structures were blown down at the Delta Jubilee. Several trees were knocked down.
<b>Coahoma County</b> Stovall	05	0100CST 0105CST			0	0	0.01K	25K	Hail (0.75)
									About 500 acres of cotton plants were damaged by hail.
<b>Quitman County</b> Countywide	05	0100CST 0115CST			0	0	25K		Thunderstorm Wind
									Several trees were knocked down across the county. One large pecan tree fell on a house damaging the roof and windows of the structure.
<b>De Soto County</b> Countywide	05	0105CST 0115CST			0	0	2.5M		Thunderstorm Wind (G65)
									A 75 mph wind gust was reported along U.S. highway 51 near Horn Lake. The winds caused damage to several houses, apartment s and buildings across the county. A radio tower was pulled from its concrete footing in Horn Lake. Twenty-one planes were damaged at the Olive Branch airport. Numerous trees were blown down as well.
<b>Tate County</b> Coldwater	05	0115CST 0120CST			0	0	10K		Thunderstorm Wind
									A roof was blown off of a business.
<b>Panola County</b> Countywide	05	0130CST 0140CST			0	0	20K		Thunderstorm Wind
									Numerous trees were blown down across the county.
<b>Tate County</b> Countywide	05	0130CST 0140CST			0	0	10K		Thunderstorm Wind
									Several trees and power lines were knocked down across the county.
<b>Marshall County</b> Countywide	05	0135CST 0145CST			0	0	10K		Thunderstorm Wind
									Some trees were knocked down across the county.
<b>Lafayette County</b> Oxford	05	0150CST 0155CST			0	0	50K		Thunderstorm Wind
									Several service stations lost their awnings. Several roofs were also damaged. Numerous trees were also knocked down.
<b>Tallahatchie County</b> Countywide	05	0150CST 0200CST			0	0	20K		Thunderstorm Wind
									Numerous trees were blown down across the county.
<b>Benton County</b> Ashland	05	0153CST 0200CST			0	0	5K		Thunderstorm Wind
									A few trees were knocked down.
<b>Yalobusha County</b> Water Vly	05	0200CST 0205CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
<b>Tippah County</b> Ripley to Walnut	05	0210CST 0220CST			0	0	50K		Thunderstorm Wind
									A Budget Inn lost about one-third of its roof in Walnut. Several trees were blown down in around the city of Ripley. Several barns and other structures were damaged. An historical sign was also destroyed.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MISSISSIPPI, North</b>									
<b>Pontotoc County</b>									
<b>Pontotoc</b>	<b>05</b>	<b>0215CST</b> <b>0220CST</b>			<b>0</b>	<b>0</b>	<b>25K</b>		<b>Thunderstorm Wind</b>
									An awning was blown off a convenience store. Numerous trees were also knocked down.
<b>Union County</b>									
<b>Countywide</b>	<b>05</b>	<b>0215CST</b> <b>0225CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind</b>
									Numerous trees and power poles were blown down across the county. Some of the trees fell on homes. One tree that fell in New Albany was estimated to have been 169 years old.
<b>Calhoun County</b>									
<b>Pittsboro</b>	<b>05</b>	<b>0230CST</b> <b>0235CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
									Several trees were knocked down.
<b>Chickasaw County</b>									
<b>Countywide</b>	<b>05</b>	<b>0230CST</b> <b>0235CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
									Numerous trees were knocked down across the county.
<b>Prentiss County</b>									
<b>Booneville</b>	<b>05</b>	<b>0240CST</b> <b>0245CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind (G66)</b>
									A couple of buildings were damaged. Numerous trees and power lines were blown down in the Booneville area.
<b>Alcorn County</b>									
<b>Countywide</b>	<b>05</b>	<b>0245CST</b> <b>0255CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind</b>
									Numerous trees were blown down across the county.
<b>Lee County</b>									
<b>Countywide</b>	<b>05</b>	<b>0245CST</b> <b>0255CST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Thunderstorm Wind</b>
									Numerous trees were knocked down across the county.
<b>Tishomingo County</b>									
<b>Countywide</b>	<b>05</b>	<b>0250CST</b> <b>0300CST</b>			<b>0</b>	<b>0</b>	<b>30K</b>		<b>Thunderstorm Wind</b>
									Numerous trees were knocked down across the county. Three cars were damaged by fallen trees.
<b>Itawamba County</b>									
<b>Countywide</b>	<b>05</b>	<b>0300CST</b> <b>0310CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
									Several trees and power lines were blown down across the county. One tree fell on a van.
<b>Monroe County</b>									
<b>Countywide</b>	<b>05</b>	<b>1325CST</b> <b>1335CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
									Several trees were knocked down across the county.
<b>Clay County</b>									
<b>West Pt</b>	<b>05</b>	<b>1320CST</b> <b>1325CST</b>			<b>0</b>	<b>0</b>	<b>25K</b>		<b>Thunderstorm Wind</b>
									Several trees were knocked down. One fallen tree damaged the second story of a house.
<b>Lowndes County</b>									
<b>Artesia</b>	<b>05</b>	<b>1320CST</b> <b>1325CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
									Some trees and power lines were blown down.
<b>Lowndes County</b>									
<b>New Hope</b>	<b>05</b>	<b>1330CST</b> <b>1335CST</b>	<b>1</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>250K</b>		<b>Tornado (F1)</b>
									The tornado touched down near the town of New Hope. Thirteen houses had major damage and another 129 homes had minor damage. Twenty-two mobile homes were either damaged or destroyed.
<b>Monroe County</b>									
<b>Aberdeen to Amory</b>	<b>13</b>	<b>0405CST</b> <b>0415CST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind</b>
									Numerous trees were knocked down. Trees fell on several houses in Aberdeen causing damage. Two campers were destroyed and four others were damaged at a camper dealership.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MISSISSIPPI, North</b>									
<b>Lee County</b> Nettleton	14	2130CST 2140CST			0	0	25K		Thunderstorm Wind
									A football locker room had its roof blown off. Numerous trees and power lines were knocked down. Some of the downed trees fell on some houses.
<b>Monroe County</b> Aberdeen	14	2200CST 2205CST			0	0	1K		Thunderstorm Wind
									Several large tree limbs were blown down.
<b>Clay County</b> West Pt	15	0700CST 0705CST			0	0	10K		Thunderstorm Wind
									Several trees were blown down. One tree fell on a house.
<b>Calhoun County</b> Big Creek	15	1745CST 1750CST			0	0	0.75K		Hail (1.75)
<b>Calhoun County</b> Big Creek	15	1745CST 1750CST			0	0	10K		Thunderstorm Wind
									The roof of a house was blown off.
<b>Calhoun County</b> Derma	15	1800CST 1805CST			0	0	0.05K		Hail (0.88)
<b>Calhoun County</b> Derma	15	1800CST 1805CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
<b>Chickasaw County</b> Houston	15	1820CST 1825CST			0	0	0.10K		Hail (1.00)
<b>Chickasaw County</b> Okolona	15	1830CST 1835CST			0	0	0.01K		Hail (0.75)
<b>Chickasaw County</b> Okolona	15	1835CST 1840CST			0	0	50K		Thunderstorm Wind
									Some trees were blown down. Several houses were damaged by fallen trees.
<b>Monroe County</b> 5 NW Bigbee	15	1845CST 1850CST			0	0	10K		Thunderstorm Wind
									One house was damaged. Several trees were knocked down.
<b>Itawamba County</b> Evergreen	15	1905CST 1910CST			0	0	25K		Thunderstorm Wind
									Several homes were damaged. Some trees were also blown down.
<b>Calhoun County</b> Slate	15	1930CST 1935CST			0	0	0.01K		Hail (0.75)
<b>Calhoun County</b> Slate	15	1930CST 1935CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
<b>Tallahatchie County</b> Charleston	19	0410CST 0415CST			0	0	50K		Lightning
									A church was destroyed by a fire started by lightning.
<b>MISSISSIPPI, South</b>									
<b>Amite County</b> Crosby	05	2015CST			0	0	5K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MISSISSIPPI, South</u></b>									
<b>Amite County</b>									
Liberty	05	2025CST			0	0	5K		Thunderstorm Wind
									Severe thunderstorm wind gusts downed trees in several areas of Amite County. Two mobile homes were damaged by fallen trees. Wind gusts were estimated in excess of 60 mph.
<b>Pike County</b>									
Countywide	05	2040CST 2055CST			0	0	25K		Thunderstorm Wind
									Severe thunderstorms produced wind gusts which downed a large number of trees throughout the county. Wind gusts were estimated in excess of 60 mph by the emergency management director. A campground suffered considerable property damage with over 50 camps damaged by wind gusts and falling tree limbs.
<b>Walthall County</b>									
Countywide	05	2110CST 2130CST			0	0	50K		Thunderstorm Wind
									Thunderstorm wind gusts blew down trees and power lines in several parts of the county, especially in the northeast portion. In Tylertown, a roof was blown off of a house, and barn had roof damage.
<b>Pearl River County</b>									
Countywide	05	2215CST			0	0	5K		Thunderstorm Wind
									Sheriff's office reported trees and large limbs down in several areas of the county with most reports from the north half.
<b>Hancock County</b>									
5 NW Sellers	05	2255CST			0	0	1K		Thunderstorm Wind
									Several trees and power poles were downed by thunderstorm wind gusts.
<b>Jackson County</b>									
Pascagoula	05	2325CST			0	0	0.50K		Thunderstorm Wind
									Amateur radio storm spotters reported several trees were downed by thunderstorm wind gusts.
<b>Harrison County</b>									
Saucier	21	1450CST			0	0	0.50K		Thunderstorm Wind
<b>Hancock County</b>									
Kiln	21	1520CST			0	0	0.50K		Thunderstorm Wind
									Thunderstorm wind gusts knocked down several trees and power lines in a couple of location along the Mississippi coast.
<b><u>MISSISSIPPI, Southeast</u></b>									
<b>Greene County</b>									
Leakesville	05	1645CST 1647CST			0	0	15K		Thunderstorm Wind (G50)
									High winds downed several trees and power lines in the community.
<b>Greene County</b>									
Leakesville	05	1720CST 1722CST			0	0	5K		Thunderstorm Wind (G50)
									Several trees were blown down near Leakesville.
<b>Perry County</b>									
Countywide	05	2150CST 2230CST			0	0	500K		Thunderstorm Wind (G80)
									A line of severe thunderstorms moved through the county between 950 pm and 1030 pm. The storms moved from west to east and blew down trees and power lines across the county. The most damage occurred along State Highway 42 leading into Richton from the west. In Richton several businesses were damaged or destroyed in the downtown area. The fire station had most of its roof and the west side of its building blown in. The police station suffered damage and a floral shop in the same area was heavily damaged. A car wash and a small barber shop were also destroyed. All the damage appeared to be caused by straight line winds. It appeared the winds were funnelled into the downtown area from the west as the line of storms moved through. No injuries were reported.
<b>Wayne County</b>									
Countywide	05	2150CST 2235CST			0	0	75K		Thunderstorm Wind (G60)
									A line of severe thunderstorms moved through the county between 950 and 1035 pm. Trees and power lines were blown down throughout the county. No injuries were reported.
<b>Greene County</b>									
Countywide	05	2220CST 2300CST			0	0	1.4M	130K	Thunderstorm Wind (G70)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSISSIPPI, Southeast</b>									
A line of severe thunderstorms moved across the county from west to east. The storms entered the county around 1020 pm and moved out of the county around 1100 pm. Trees and power lines were blown down throughout the county. Many trees were blown on homes. Four homes, six mobile homes and one business were completely destroyed. Eighteen homes, seven mobile homes and two businesses had major damage and twenty homes, four mobile homes and one business had minor damage. No injuries were reported.									
<b>Stone County Countywide</b>	<b>05</b>	<b>2220CST 2250CST</b>			<b>0</b>	<b>0</b>	<b>30K</b>		<b>Thunderstorm Wind (G60)</b>
A line of severe thunderstorms moved across the county from west to east between 1020 pm and 1050 pm. Trees and power lines were blown down throughout the county. No injuries were reported.									
<b>George County Lucedale</b>	<b>05</b>	<b>2230CST</b>			<b>0</b>	<b>0</b>	<b>70K</b>		<b>Lightning</b>
Lightning struck an apartment building and the residence burned to the ground. No one was injured.									
<b>George County Countywide</b>	<b>05</b>	<b>2235CST 2310CST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind (G60)</b>
A line of severe thunderstorms moved through the county between 1035 pm and 1110 pm. Trees and power lines were blown down throughout the county. In Lucedale two mobile homes were damaged when trees fell on them. No injuries were reported.									
<b>MISSOURI, East</b>									
<b>Cole County Countywide</b>	<b>04</b>	<b>1100CST 1300CST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
Up to 4 inches of rain caused minor flash flooding across Cole County. In Jefferson City, flooding was reported along Highway 50/63. Many roads along the Moreau River and its tributaries went under water as did numerous low-water crossings.									
<b>Montgomery County Montgomery City</b>	<b>04</b>	<b>1936CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
Sheriff Department reported golfball size hail.									
<b>Pike County Bowling Green</b>	<b>04</b>	<b>2000CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
County Sheriff reported 3/4 inch hail.									
<b>Jefferson County Countywide</b>	<b>04</b>	<b>2200CST</b>			<b>1</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
Heavy rain caused minor flooding across the county, primarily to flood prone areas. A man was killed when attempting to cross a low-water crossing. He and his wife were driving along Pagel Road, 3 miles south of De Soto, when their car stalled at a low-water crossing on a normally dry creekbed. They got out of their car and attempted to walk to higher ground. He was swept away by the current and drowned. The wife was unhurt. M41IW									
<b>St. Francois County Bismarck</b>	<b>09</b>	<b>1859CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>St. Francois County Bismarck</b>	<b>09</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
The local fire department reported trees down from thunderstorm wind gusts along with 1 inch hail.									
<b>Franklin County New Haven</b>	<b>10</b>	<b>0534CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
The County Sheriff reported golfball size hail on the south side of New Haven.									
<b>Franklin County 7 NW Union</b>	<b>10</b>	<b>0545CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.75)</b>
The county sheriff reported that hail up to baseball size fell northwest of Union.									
<b>Franklin County 3 SW Washington</b>	<b>10</b>	<b>0559CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Franklin County Washington</b>	<b>10</b>	<b>0603CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
The Washington Police Department reported hail from 3/4 to 1 inch fell in and around Washington.									
<b>Montgomery County Montgomery City</b>	<b>12</b>	<b>1515CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
Hail up to golfball size was reported in Montgomery City.									
<b>Lincoln County Troy</b>	<b>12</b>	<b>1555CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, East</b>									
<b>Lincoln County</b> Troy	12	1555CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Lincoln County</b> 2 NE Troy	12	1600CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm wind gusts damaged some siding, shutters and roofs in the Troy area. Some trees were also downed northeast of Troy in Cuivre River State Park.
<b>Franklin County</b> 5 S St Clair	12	1627CST			0	0			<b>Hail (1.75)</b> Golfball size hail was reported south of St. Clair.
<b>St. Louis County</b> Florissant	12	1646CST			0	0			<b>Hail (1.75)</b>
<b>St. Louis County</b> Bellefontaine Neighb	12	1650CST			0	0			<b>Hail (2.75)</b>
<b>St. Louis County</b> Spanish Lake	12	1653CST			0	0			<b>Hail (1.00)</b> Storm spotters reported hail up to baseball size across north and northeast St. Louis County. Several funnel clouds were also reported with the storm.
<b>Jefferson County</b> De Soto	12	1650CST			0	0			<b>Hail (1.75)</b> Golfball size hail was reported in De Soto.
<b>Boone County</b> Ashland	13	2230CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm wind gusts downed some large trees,
<b>Callaway County</b> Fulton	13	2234CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm winds downed a few power lines.
<b>Montgomery County</b> Montgomery City	14	0511CST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Montgomery County</b> Bellflower	14	0516CST			0	0			<b>Thunderstorm Wind (G61)</b> Thunderstorm wind gusts estimated at 70 mph downed numerous trees in Montgomery City and Bellflower.
<b>Lincoln County</b> Truxton	14	0530CST			0	0			<b>Thunderstorm Wind (G57)</b>
<b>Lincoln County</b> Troy	14	0540CST			0	0			<b>Thunderstorm Wind (G57)</b> National Weather Service employees reported trees down in Truxton and Troy.
<b>St. Charles County</b> St Charles Arpt	14	0609CST 0620CST			0	0			<b>Thunderstorm Wind (G70)</b>
<b>St. Charles County</b> West Alton	14	0611CST 0624CST			0	0			<b>Thunderstorm Wind (G70)</b> A severe thunderstorm produced a downburst with winds around 80 mph that lasted for at least 10 minutes across north St. Charles County. A large hanger at the St. Charles Airport was destroyed as were the 12 aircraft inside. Trees and power lines were downed and numerous outbuildings were destroyed in the West Alton area.
<b>St. Louis County</b> Florissant	14	0618CST 0630CST			0	0			<b>Thunderstorm Wind (G70)</b>
<b>St. Louis County</b> Black Jack	14	0620CST 0630CST			0	0			<b>Thunderstorm Wind (G70)</b> An intense line of thunderstorms with wind gusts of at least 80 mph produced some of the worst tree and power line damage in North St. Louis County in some time. The bulk of the damage occurred north of I-270 from Hazelwood across Florissant to Blackjack to Bellefontaine Neighbors. Countless trees were either uprooted or snapped off at the base by the winds. Some homes and automobiles were damaged, mainly by falling trees or limbs. Electricity was out for some people into the next day.
<b>Audrain County</b> 2 ENE Benton City to 5 S Laddonia	14	1255CST 1303CST	4	50	0	0			<b>Tornado (F0)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, East</b>									
A sheriff deputy followed a small rope tornado as it moved across farmland in Audrain County. There was no damage.									
<b>Scotland County Rutledge</b>	14	1400CST			0	0			<b>Hail (1.75)</b>
<b>Pike County Curryville</b>	14	1400CST 1401CST	0.2	50	0	0			<b>Tornado (F0)</b>
A brief tornado touched down near Curryville. No damage was reported.									
<b>Scotland County 2 NE Rutledge</b>	14	1420CST	0.2	25	0	0			<b>Tornado (F0)</b>
Sheriff deputies reported a small rope tornado touched down briefly near Rutledge. There was no damage.									
<b>Clark County 1 SE Wyaconda</b>	14	1430CST	0.2	25	0	0			<b>Tornado (F0)</b>
The thunderstorm that produced the rope tornado near Rutledge produced another rope tornado near Wyaconda. There was no damage reported.									
<b>Lewis County 1 E Lewistown to 5 NE Monticello</b>	14	1435CST 1455CST	9.5	75	0	0			<b>Tornado (F1)</b>
A tornado produced an intermittent damage path as it tracked across Lewis County. The tornado first caused damage along Highway 16 where a machine shed was destroyed. Tree damage was noted northeast of this area until structural damage again occurred near Monticello. Two farm storage buildings lost their roofs and a garage was knocked off its foundation. Two grain bins lost their tops and a home suffered minor damage from flying tree limbs. Several large trees were either snapped at the base or uprooted in this area as well.									
<b>Clark County 1 E Luray</b>	14	1440CST	0.2	25	0	0			<b>Tornado (F0)</b>
The thunderstorm that produced the Rutledge and Wyaconda tornadoes produced yet another rope tornado near Luray. This small tornado touched down briefly in open farmland and caused no damage.									
<b>Clark County 6 SSW Kahoka to 5 SSW Kahoka</b>	14	1450CST 1452CST	1	50	0	0			<b>Tornado (F0)</b>
A small tornado formed over southwest Clark County near the intersection of county roads D and M. Only minor tree damage was reported.									
<b>Clark County 1 SW St Patrick to .5 SW St Patrick</b>	14	1500CST 1501CST	1	50	0	0			<b>Tornado (F0)</b>
A small rope tornado touched down briefly near St. Patrick. There was no damage reported.									
<b>Scotland County 4 N Memphis</b>	18	1545CST			0	0			<b>Thunderstorm Wind (G55)</b>
Thunderstorm wind gusts blew the roof off a barn and damaged other farm buildings north of Memphis.									
<b>Clark County Luray</b>	18	1605CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Clark County Kahoka</b>	18	1630CST			0	0			<b>Thunderstorm Wind (G50)</b>
Thunderstorm wind gusts downed a few trees and power lines. Some roof shingles were also blown off area homes.									
<b>Monroe County Paris</b>	18	1700CST			0	0			<b>Thunderstorm Wind (G52)</b>
Thunderstorm winds downed a few trees. One 35-foot tall black walnut fell on a house with some limbs piercing the roof and inside ceiling.									
<b>Cole County Russellville</b>	18	1746CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Cole County Lohman</b>	18 19	1750CST 1750CST			0	0			<b>Hail (0.88)</b>
Thunderstorm wind gusts down some trees and power lines in the Russellville/Lohman areas. Nickel size hail also fell.									
<b>Cole County Jefferson City</b>	18	1755CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>Cole County Wardsville</b>	18	1755CST			0	0			<b>Thunderstorm Wind (G55)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, East</b>									
<b>Callaway County</b> Holts Summit	18	1800CST			0	0			<b>Thunderstorm Wind (G60)</b> A severe thunderstorm produced scattered wind damage across northern Cole and southern Callaway counties in Central Missouri. In Jefferson City, downed trees and utility lines were scattered about the city. The story was similar in Wardsville. In south Callaway County, in the Holts Summit area, trees and utility lines were downed, some mobile homes lost their skirting, outbuildings were blown over, and 2 parked truck trailers were blown over at a truck stop along Highway 63. South of Holts Summit along Highway 63 near Cedar Creek, 6 utility poles were downed by the wind. At a nearby home, a pole barn was pick up and smashed against the side of a house. A car and truck were also overturned. A feisty little beagle, named Fish, went for a wild ride but escaped injury when the dog house he was chained to was lifted and thrown about 200 feet across the yard.
<b>Cole County</b> Jefferson City	18	1836CST			0	0			<b>Hail (0.88)</b>
<b>Montgomery County</b> 1 E Middletown	18	1840CST			0	0			<b>Thunderstorm Wind (G50)</b> Thunderstorm winds downed a few trees near Middletown.
<b>Lincoln County</b> Foley	18	1925CST			0	0			<b>Thunderstorm Wind (G52)</b> Thunderstorm winds uprooted a few trees.
<b>Crawford County</b> Steelville	18	1950CST			0	0			<b>Thunderstorm Wind (G53)</b> Thunderstorm winds downed trees along Highway B.
<b>Franklin County</b> Sullivan	18	2000CST			0	0			<b>Thunderstorm Wind (G51)</b> Wind gusts around 60 mph downed some trees.
<b>Washington County</b> Old Mines	18	2010CST			0	0			<b>Thunderstorm Wind (G53)</b>
<b>Washington County</b> Potosi	18	2010CST			0	0			<b>Thunderstorm Wind (G53)</b> Thunderstorm wind gusts downed trees in Old Mines and Potosi. A couple of homes in Potosi suffered minor roof damage.
<b>Ste. Genevieve County</b> Bloomsdale	18	2055CST			0	0			<b>Thunderstorm Wind (G55)</b> Thunderstorm wind gusts downed trees around Bloomsdale.
<b>St. Francois County</b> Bonne Terre	18	2100CST			0	0			<b>Thunderstorm Wind (G55)</b>
<b>St. Francois County</b> Doe Run	18	2100CST			0	1			<b>Thunderstorm Wind (G55)</b> Thunderstorm wind gusts downed trees around Bonne Terre and Doe Run. In Doe Run, a tree fell onto a house. One person inside suffered minor injuries from falling debris.
<b>Gasconade County</b> Owensville	19	2202CST			0	0			<b>Hail (1.75)</b> The County Sheriff reported golfball size hail.
<b>Reynolds County</b> Ellington	19	2210CST			0	0			<b>Thunderstorm Wind (G51)</b> Storm spotters reported 60 mph wind gusts.
<b>Warren County</b> Marthasville	19	2230CST			0	0			<b>Hail (0.75)</b> The County Sheriff reported 3/4 inch hail.
<b>Iron County</b> Annapolis	20	0350CST			0	0			<b>Thunderstorm Wind (G55)</b> An estimated 60 trees were blown down by wind gusts from early morning thunderstorms. A couple of homes were damaged by the falling trees as were some outbuildings.
<b>Madison County</b> Fredericktown	20	0400CST			0	0			<b>Tstm</b> The County Sheriff reported trees down in Fredericktown.
<b>Boone County</b> Columbia	22	0300CST			0	0			<b>Thunderstorm Wind (G55)</b> Thunderstorm wind gusts downed trees and power lines across the city. Most of the damage occurred along Providence, Stewart and Stadium roads. Three automobiles were damaged by falling trees near the intersection of Providence and Stewart roads.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, East</b>									
<b>Audrain County Mexico</b>	22	0430CST			0	0			<b>Lightning</b>
									A lightning strike was blamed for a residential fire in Mexico. The home sustained moderate damage from the fire which started in the attic and later spread down a couple of interior walls.
<b>Marion County Hannibal</b>	22	0505CST			0	0			<b>Thunderstorm Wind (G54)</b>
									Thunderstorm wind gusts downed some trees along Highway 168.
<b>MOZ061-063&gt;064- 074-084-099</b>			<b>St. Charles - St. Louis - St. Louis (C) - St. Francois - Iron - Reynolds</b>						
	23	1200CST			3	143			<b>Excessive Heat</b>
	30	1200CST							The first heat wave of the summer caused 3 deaths and at least 143 heat related injuries. High temperatures were in the middle 90s with the heat index from 105 to 110. M92PH, F90PH, M87PH
<b>Callaway County Fulton</b>	29	0300CST			0	0			<b>Thunderstorm Wind (G55)</b>
									Thunderstorm wind gusts damaged the roof of a home and downed several trees in the area.
<b>Callaway County Fulton</b>	29	0330CST			0	0			<b>Thunderstorm Wind (G61)</b>
									An early morning thunderstorm downed numerous trees and power lines across Fulton. Virtually the entire city was without power for about 2 hours. The goalposts on the football field at Westminster College were blown down and the flagpole at the city baseball field was bent at a 45 degree angle. Some windows were broke on area homes by flying tree branches. Automobiles were also damaged by falling trees and limbs.
<b>St. Charles County St Peters</b>	29	0430CST			0	0			<b>Thunderstorm Wind (G54)</b>
									Thunderstorm wind gusts downed a few trees.
<b>St. Louis County Richmond Hgts</b>	29	0500CST			0	0			<b>Thunderstorm Wind (G54)</b>
									Thunderstorm wind gusts uprooted or snapped in half some trees.
<b>Clark County Athens</b>	29	1500CST			0	0			<b>Thunderstorm Wind (G51)</b>
									Storm spotters reported 60 mph wind gusts which caused some tree damage.
<b>Shelby County 2 S Shelbyville</b>	29	1845CST			0	0			<b>Thunderstorm Wind (G58)</b>
									Thunderstorm wind gusts downed several trees south of Shelbyville.
<b>Audrain County Mexico</b>	29	1925CST			0	0			<b>Thunderstorm Wind (G60)</b>
									Thunderstorm wind gusts caused scattered tree and power line damage across town. A couple of power poles were downed on the south side of town. About 1000 customers were without electricity at various times.
<b>Monroe County Paris</b>	29	1940CST			0	0			<b>Thunderstorm Wind (G58)</b>
									Thunderstorm wind gusts downed several trees and utility lines across town. Virtually the entire city was without power for a couple of hours.
<b>Audrain County Countywide</b>	29	2100CST			0	0			<b>Flash Flood</b>
	30	0000CST							
<b>Boone County Countywide</b>	29	2100CST			0	0			<b>Flash Flood</b>
	30	0000CST							
<b>Monroe County Countywide</b>	29	2100CST			0	0			<b>Flash Flood</b>
	30	0000CST							
<b>Shelby County Countywide</b>	29	2100CST			0	0			<b>Flash Flood</b>
	30	0000CST							

Very heavy rain caused flash flooding across parts of central Missouri. In northern Boone County, County roads NN and CC went under water. In western Audrain County, Route NN went under water. Route 15 between Shelbina and Paris in Shelby and Monroe counties went under water. Route J near Granville in Monroe County was under water. Route 151 near Duncan's Bridge was flooded by Middle Fork Creek.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MISSOURI, East

### **Boone County Centralia**

	29	2130CST			0	0			<b>Thunderstorm Wind (G53)</b> Thunderstorm wind gusts caused scattered tree and utility line damage across town. The metal frame of a warehouse for the A. B. Chance Company being constructed along Highway 22 was completely blown down by the wind.
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## MISSOURI, Lower

### **Dunklin County**

#### **Holcomb**

	14	1556CST 1605CST			0	0	0.75K		<b>Hail (1.75)</b>
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### **Pemiscot County**

#### **Wardell**

	14	1618CST 1625CST			0	0	0.75K		<b>Hail (1.75)</b>
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### **Pemiscot County**

#### **Wardell**

	14	1618CST 1625CST			0	0	5K		<b>Thunderstorm Wind</b> Several trees were knocked down.
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### **Pemiscot County**

#### **Wardell to Hayti**

	14	1626CST 1635CST			0	0	25K		<b>Hail (2.75)</b> Several houses had all of their windows broken between Wardell and Hayti.
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### **Pemiscot County**

#### **Wardell to Hayti**

	14	1626CST 1635CST			0	0	25K		<b>Thunderstorm Wind</b> A roof was blown off of a trailer near Hayti. Several trees were knocked down between Wardell and Hayti.
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### **Pemiscot County**

#### **Steele**

	15	2235CST 2240CST			0	0	0.05K		<b>Hail (0.88)</b>
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### **Dunklin County**

#### **Campbell**

	20	0020CST 0025CST			0	0	10K		<b>Thunderstorm Wind</b> Numerous trees were knocked down.
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### **Pemiscot County**

#### **Hayti to Caruthersville**

	20	0040CST 0050CST			0	0	10K		<b>Thunderstorm Wind</b> Several large trees were blown down in Hayti. A house trailer was damaged by some the downed trees. Several power lines were knocked down in Caruthersville.
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### **Pemiscot County**

#### **Cooter to Steele**

	20	0630CST 0800CST			0	0	1K		<b>Flash Flood</b> Several roads were covered by water between Cooter and Steele.
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## MISSOURI, Northwest

### **MOZ046**

#### **Cooper**

	04	0000CST			0	0			<b>Flood</b>
	05	2359CST							

Minor to moderate river flooding occurred along the Lamine River on June 4th and 5th.

Lamine River  
Otterville, MO

Flood Stage	15 ft
Above Flood Stage	6/4 to 6/5
Crest	18.24 ft on 6/5

### **Clay County**

#### **Smithville**

	04	0607CST			0	0			<b>Hail (1.00)</b>
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A Kansas City television station reported one inch diameter hail at Smithville. This hail was also reported to cover the ground.

### **Johnson County**

#### **8 SE Holden**

	04	1244CST			0	0			<b>Hail (0.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## MISSOURI, Northwest

A television meteorologist from Kansas City reported dime-size hail at the intersection of Route 2 and Route O 8 miles southeast of Holden.

**MOZ044-046-054**

**Johnson - Cooper - Henry**

**08 0000CST**  
**10 2359CST**

**0      0**

**Flood**

Minor river flooding occurred along streams in West Central Missouri during early June.

Blackwater River  
Valley City, MO

Flood Stage	22 ft
Above Flood Stage	6/8 to 6/9
Crest	23.15 ft on 6/9

Lamine river  
Otterville, MO

Flood Stage	15 ft
Above Flood Stage	6/8 to 6/9
Crest	20.8 ft on 6/9

South Grand River  
Urich, MO

Flood Stage	24 ft
Above Flood Stage	6/8 to 6/10
Crest	24.8 ft on 6/8

Big Creek  
Blairstown, MO

Flood Stage	20 ft
Above Flood Stage	6/8 to 6/9
Crest	20.2 ft on 6/9

## **Howard County**

**Fayette**

**08 2008CST**

**0      0**

**Hail (0.75)**

The Howard County Emergency Management Director reported dime-size hail during a severe thunderstorm in Fayette.

**MOZ020-037>040-046**

**Buchanan - Jackson - Lafayette - Saline - Howard - Cooper**

**10 0000CST**  
**25 2359CST**

**0      0**

**Flood**

Minor to moderate river flooding occurred along the Missouri river between June 10th and 24th.

Missouri River  
St. Joseph, MO

Flood Stage	17 ft
Above Flood Stage	6/10 to 6/23
Crest	23.69 ft on 6/16

Sibley, MO

Flood Stage	22 ft
Above Flood Stage	6/13 to 6/24
Crest	25.4 ft on 6/17

Napoleon, MO

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MISSOURI, Northwest

Flood Stage 17 ft  
Above Flood Stage 6/15 to 6/24  
Crest 20.51 ft on 6/17

Waverly, MO

Flood Stage 20 ft  
Above Flood Stage 6/14 to 6/25  
Crest 23.58 ft on 6/17

Miami, MO

Flood Stage 18 ft  
Above Flood Stage 6/15 to 6/24  
Crest N/A

Glasgow, MO

Flood Stage 25 ft  
Above Flood Stage 6/16 to 6/24  
Crest 26.55 ft on 6/20

Boonville, MO

Flood Stage 21 ft  
Above Flood Stage 6/15 to 6/25  
Crest 24.3 ft on 6/23

### **Howard County**

**New Franklin 10 0405CST 0 0 Hail (0.75)**  
The Chief of Police reported dime-size hail during a severe thunderstorm at New Franklin.

### **Cooper County**

**Boonville 10 0406CST 0 0 Hail (0.88)**  
Nickel-size hail was reported during a severe thunderstorm in Boonville by the Cooper County Sheriff's Office.

### **Buchanan County**

**2 W Easton 10 1100CST 0 0 Hail (1.75)**  
Golfball-size hail was reported by the public during a severe thunderstorm 2 miles west of Easton.

### **Clinton County**

**Cameron 10 1105CST 0 0 Hail (1.00)**  
Golfball-size hail was reported by the public along I-35 in Cameron.

### **De Kalb County**

**Stewartsville 10 1111CST 0 0 Hail (1.75)**  
A Missouri state trooper reported golfball-size hail during a severe thunderstorm in Stewartsville.

### **Caldwell County**

**12 SW Kidder 10 1130CST 0 0 Hail (0.88)**  
Nickel-size hail was reported by the public 12 miles southwest of Kidder during a severe thunderstorm.

### **Livingston County**

**Chillicothe 10 1215CST 0 0 Hail (1.75)**  
Golfball-size hail was reported during a severe thunderstorm by the Livingston County Sheriff's Office at Chillicothe.

### **Linn County**

**1 NE Meadville 10 1240CST 0 0 Hail (1.75)**  
Golfball-size hail was reported by the public a mile northeast of Meadville.

### **Platte County**

**Weatherby Lake 10 2100CST 0 0 Thunderstorm Wind (G60)**  
Local police reported 6 to 8 inch diameter trees blown down in Weatherby Lake during a severe thunderstorm.

### **Jackson County**

**Kansas City 10 2105CST 0 0 Thunderstorm Wind (G66)**  
A local television station reported a 66 MPH wind gust in Kansas City. In Swobe Park Skywam staff reported 12 inch diameter trees blown down from the thunderstorm winds.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
<b>MOZ001</b>									
	<b>11</b>	<b>0000CST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		<b>2359CST</b>							
	Minor river flooding occurred along the Tarkio River on June 11th.								
	Tarkio River Fairfax, MO								
		Flood Stage		17 ft					
		Above Flood Stage		6/11					
		Crest		18.0 ft					
<b>Nodaway County</b>									
<b>1 S Hopkins</b>	<b>11</b>	<b>1110CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
	Dime-size hail was reported during a severe thunderstorm a mile south of Hopkins.								
<b>Worth County</b>									
<b>Sheridan</b>	<b>11</b>	<b>1135CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
	The Worth County Sheriff's Office reported dime-size hail during a severe thunderstorm in Sheridan.								
<b>De Kalb County</b>									
<b>Clarksdale</b>	<b>12</b>	<b>2323CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
	<b>13</b>	<b>2323CST</b>							
	The De Kalb County Sheriff's Office reported golfball-size hail in Clarksdale during a severe thunderstorm.								
<b>Clinton County</b>									
<b>Cameron</b>	<b>12</b>	<b>2343CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
	Missouri Highway Patrol reported golfball-size hail in Cameron.								
<b>Holt County</b>									
<b>Oregon</b>	<b>13</b>	<b>1852CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
	Nickel-size hail was reported by the Holt county Sheriff's Office in Oregon.								
<b>Andrew County</b>									
<b>4 N Fillmore</b>	<b>13</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.00)</b>
	Storm spotters in Andrew County reported large hail ranging from golfball-size to baseball-size 4 miles north of Fillmore.								
<b>Nodaway County</b>									
<b>3.5 S Graham</b>	<b>13</b>	<b>1910CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
	Dime-size hail was reported by a storm spotter 3.5 miles south of Graham.								
<b>Buchanan County</b>									
<b>St Joseph Arpt</b>	<b>13</b>	<b>2248CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G67)</b>
	A 67 MPH wind gust was measured at the St Joseph Airport.								
<b>Andrew County</b>									
<b>Savannah</b>	<b>13</b>	<b>2257CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
	Dime-size hail was reported in Savannah by the Andrew County Sheriff's Office.								
<b>Clinton County</b>									
<b>Cameron</b>	<b>13</b>	<b>2343CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
		<b>2356CST</b>							
	The Clinton County Sheriff's Office reported golfball-size hail in Cameron. The large hail resulted in several reports of broken windows.								
<b>Clinton County</b>									
<b>2 N Plattsburg</b>	<b>13</b>	<b>2356CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
	The Clinton County Sheriff's Office reported large trees down 2 miles north of Highway 116 which is 2 miles north of Plattsburg.								
<b>Randolph County</b>									
<b>5 NE Moberly</b>	<b>14</b>	<b>0121CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
	Severe thunderstorm winds blew 2 large billboards down 5 miles northeast of Moberly.								
<b>Caldwell County</b>									
<b>Polo to Braymer</b>	<b>14</b>	<b>0000CST</b>			<b>0</b>	<b>0</b>	<b>70K</b>		<b>Thunderstorm Wind (G75)</b>
		<b>0200CST</b>							
	A storm survey team from the National Weather Service Office in Pleasant Hill, MO reported straight line wind damage in Polo and Braymer. Several sheds were damaged in Polo. On County Road KK along the southeast side of Braymer, a doublewide mobile home was destroyed. Diagonally across the street from the destroyed mobile home, a barn, a chicken house and a grain bin were destroyed on a farmstead. A horse on this property was killed by flying debris.								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

**MISSOURI, Northwest**

**Carroll County  
8 SW Plymouth**

**14 0025CST** **0 0** **20K** **Thunderstorm Wind (G60)**  
 A barn was destroyed by severe thunderstorm winds along County Line Rd, 8 miles southwest of Plymouth.

**Livingston County  
9 SW Chillicothe**

**14 0030CST** **0 0** **100K 50K** **Thunderstorm Wind (G60)**  
 Missouri State Troopers reported several trees blown down as a result of severe thunderstorm winds along D Highway 9 mile s southwest of Chillicothe.

**Chariton County  
Triplet**

**14 0116CST** **0 0** **Thunderstorm Wind (G60)**  
 The Chariton County Sheriff's Office reported 8 grain bins destroyed by severe thunderstorm winds at a private farm in Triplet. On another farm, 2 hog houses were destroyed by the damaging winds. The storms also knocked power out of most of the homes in the Triplet community for 14 hours. Heavy rain and small hail accompanying the thunderstorms resulted in damage to a corn field just east of Triplet.

**MOZ001>002-020-028-032-040  
Atchison - Nodaway - Buchanan - Platte - Chariton - Howard**

**14 0000CST** **0 0** **Flood**  
**19 2359CST**

Minor to moderate river flooding occurred over Northwest and Northcentral Missouri on June 14th through June 17th. A levee break on the Big Tarkio River occurred on June 15th which enhanced the flooding along the Tarkio, 102, Grand and Platte Rivers.

Tarkio River  
Fairfax, MO

Flood Stage 17 ft  
 Above Flood Stage 6/14 to 6/16  
 Crest 25.0 ft on 6/15

102 River  
Maryville, MO

Flood Stage 14 ft  
 Above Flood Stage 6/14  
 Crest 14.7 ft

Moniteu Creek  
Fayette, MO

Flood Stage 14 ft  
 Above Flood Stage 6/14  
 Crest 17.0 ft

Platte River  
Agency, MO

Flood Stage 20 ft  
 Above Flood Stage 6/14 to 6/17  
 Crest 24.48 ft

Sharps Station, MO

Flood Stage 26 ft  
 Above Flood Stage 6/15 to 6/19  
 Crest 28.7 ft on 6/18

Platte City, MO

Flood Stage 20 ft  
 Above Flood Stage 6/15 to 6/19  
 Crest 22.78 ft on 6/18

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
		Grand River Sumner, MO							
		Flood Stage		26 ft					
		Above Flood Stage		6/14 to 6/16					
		Crest		30.56 ft on 6/15					
		Brunswick, MO							
		Flood Stage		19.0 ft					
		Above Flood Stage		6/15 to 6/17					
		Crest		19.9 ft on 6/16					
<b>Macon County</b>									
Atlanta	14	1230CST 1235CST	0.3	25	0	0	10K		Tornado (F1)
		An F1 tornado briefly touched down in Atlanta. Power lines and trees were downed on the southwest side of Atlanta and there was minor roof damage to two buildings. A hatchback car was overturned as the approaching strong wind caught the opened hatch thereby overturning the vehicle.							
<b>Adair County</b>									
3 NW Kirksville to 7 N Kirksville	14	1240CST 1250CST	5	25	0	0			Tornado (F0)
		A weak F0 tornado touched down 3 miles northwest of Kirksville near Route 6 then tracked to a position about 7 miles north of Kirksville along Highway 63. Trees were downed at several locations along the path.							
<b>Clay County</b>									
Claycomo	15	1640CST			0	0			Hail (0.75)
		Dime-size hail was reported by the public in Claycomo.							
<b>Pettis County</b>									
Sedalia	18	0656CST 0710CST			0	0			Thunderstorm Wind (G60)
		Thunderstorm winds gusted to 60 MPH at Sedalia Airport.							
<b>Cooper County</b>									
Prairie Home to Bunceton	18	1000CST			0	0			Thunderstorm Wind (G60)
		Thunderstorm winds blew down trees and uprooted trees along Route O near Prairie Home. In Bunceton the damaging thunderstorm winds blew the roof off of a house and damaged a trailer.							
<b>Macon County</b>									
1 N Macon	18	1103CST			0	0			Hail (0.75)
		The Macon County Sheriff's Office reported dime-size hail a mile north of Macon.							
<b>Saline County</b>									
10 N Marshall	18	0755CST			0	0			Thunderstorm Wind (G60)
		The Saline County Sheriff's Office reported a large tree blown down across a railroad track 10 miles north of Marshall.							
<b>Holt County</b>									
Forbes	18	1205CST			0	0			Hail (0.75)
		Dime-size hail was reported by the public during a severe thunderstorm at Forbes.							
<b>Andrew County</b>									
Rosendale	18	1225CST			0	0			Hail (1.50)
		The Andrew County Sheriff's Office reported walnut-size hail during a severe thunderstorm at Rosendale.							
<b>Worth County</b>									
Grant City	18	1248CST			0	0			Thunderstorm Wind (G60)
		60 MPH winds were reported by the Worth County Sheriff's Office during a severe thunderstorm.							
<b>Gentry County</b>									
Albany Meml Arpt	18	1250CST			0	0	100K		Thunderstorm Wind (G60)
		Severe thunderstorm winds overturned a small aircraft at Albany Airport.							
<b>Jackson County</b>									
Greenwood to Lees Summit	18	1415CST 1420CST			0	0			Hail (1.00)
		Nickel to quarter-size hail was reported by off duty National Weather Service employees in Greenwood and Lees Summit.							
<b>Lafayette County</b>									
Lexington	18	1440CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
The Lexington Police reported dime-size hail in Lexington.									
<b>Carroll County</b> 10 W Carrollton	18	1442CST			0	0			Hail (1.00)
Quarter-size hail was reported by a spotter 10 miles west of Carrollton.									
<b>Adair County</b> 12 SE Kirksville	18	1500CST			0	0			Thunderstorm Wind (G60)
A severe weather spotter reported large trees blown over 12 miles southeast of Kirksville.									
<b>Schuyler County</b> Queen City to Downing	18	1515CST			0	0			Thunderstorm Wind (G60)
The Schuyler County Sheriff's Office reported 2 large trees down in Queen City and several power poles blown down in Downing as a result of severe thunderstorm winds.									
<b>Bates County</b> Adrian	18	1518CST			0	0			Hail (0.75)
Dime-size hail was reported by the Adrian Police Department.									
<b>Bates County</b> Adrian	18	1518CST			0	0			Thunderstorm Wind (G65)
The Adrian Police Department reported thunderstorm wind gusts to 65 MPH. The winds knocked down numerous tree limbs and power lines in Adrian.									
<b>Randolph County</b> Darksville	18	1535CST			0	0			Hail (0.75)
Dime-size hail was reported by the public during a severe thunderstorm in Darksville.									
<b>Henry County</b> 1 S Clinton to Windsor	18	1540CST 1555CST			0	0	20K		Thunderstorm Wind (G60)
Henry County Emergency Management officials reported power lines down in Windsor as a result of severe thunderstorm winds. The damaging thunderstorm winds also separated a trailer from a truck which obstructed traffic a mile south of Clinton.									
<b>Pettis County</b> Sedalia	18	1610CST			0	0			Hail (1.75)
Golfball-size hail was reported during a severe thunderstorm by the Sedalia Police Department.									
<b>Pettis County</b> Sedalia	18	1610CST			0	0			Thunderstorm Wind (G60)
Thunderstorm winds knocked down trees and blew several sheds over in Sedalia.									
<b>Cooper County</b> Otterville	18	1620CST			0	0			Thunderstorm Wind (G60)
Thunderstorm winds knocked down a large tree limb onto a power line in Otterville.									
<b>Platte County</b>	18	1238CST 1241CST			0	0			Thunderstorm Wind (G58)
Severe thunderstorm winds gusted to 58 MPH.									
<b>Clay County</b> 1 SW Kearney	18	1259CST			0	0			Thunderstorm Wind (G70)
A storm spotter reported 70 MPH winds along I-29 a mile southwest of Kearney.									
<b>Ray County</b> 1 E Lawson	18	1330CST			0	0			Thunderstorm Wind (G60)
Thunderstorm wind gusts to 60 MPH were reported a mile east of Lawson by a HAM Radio operator.									
<b>Ray County</b> Lawson	18	1340CST			0	0			Hail (1.00)
A HAM Radio operator reported one inch diameter hail in Lawson.									
<b>Clay County</b> Liberty	18	1355CST			0	0			Thunderstorm Wind (G60)
A HAM Radio operator reported power poles snapped in half in Liberty at the intersection of I-35 and Highway 291.									
<b>Jackson County</b> Atherton	18	1355CST			0	0			Hail (0.75)
Dime-size hail was reported by the public in Atherton.									
<b>Ray County</b> Richmond	18	1419CST			0	0			Thunderstorm Wind (G60)
The Ray County Sheriff's Office reported 2 to 3 inch tree limbs blown down as a result of thunderstorm winds.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
<b>Cass County</b>									
Belton	18	1420CST			0	0			Hail (0.88)
			A storm spotter reported nickel-size hail in Belton.						
<b>Cass County</b>									
Belton to Archie	18	1420CST 1503CST			0	0			Thunderstorm Wind (G65)
			Severe thunderstorm winds gusted to 65 MPH at Belton and Archie.						
<b>Lafayette County</b>									
Lexington	18	1440CST			0	0			Hail (0.75)
			Lexington Police Deptment reported dime-size hail during a severe thunderstorm over Lexington County.						
<b>Lafayette County</b>									
Lexington	18	1440CST			0	0			Thunderstorm Wind (G60)
			Thunderstorm wind gusts downed 3 inch tree limbs in Lexington.						
<b>Adair County</b>									
Kirksville	18	1500CST			0	0	50K		Thunderstorm Wind (G75)
			Severe thunderstorm winds gusted up to 75 MPH in the Kirksville area resulting in uprooted trees and downed power lines. Large trees blew on top of the roofs of houses causing significant damages along the 900 block of Michigan Avenue and the 800 block of South Fifth Street. Ameren Union Electric reported that 7,700 customers lost power during the storm.						
<b>MOZ032</b>									
			<b>Chariton</b>						
	19	0000CST 2359CST			0	0			Flood
			Minor river flooding occurred along the Chariton River on June 19th.						
			Chariton River Prairie Hill, MO						
			Flood Stage	15 ft					
			Above Flood Stage	6/19					
			Crest	15.65 ft					
<b>Cooper County</b>									
Boonville	19	0620CST			0	0			Hail (0.75)
			The Cooper County Sheriff's Office reported dime-size hail during a severe thunderstorm at Boonville.						
<b>Howard County</b>									
Glasgow	19	0630CST			0	0			Hail (0.75)
			Dime-size hail was reported by the public during a thunderstorm in Glasgow.						
<b>Cass County</b>									
5 E Lisle	19 20	2150CST 2150CST			0	0			Thunderstorm Wind (G60)
			A spotter reported a 60 MPH wind gust during a thunderstorm over Cass County. The winds were reported 5 miles east of Lisle.						
<b>Harrison County</b>									
Bethany	20	0503CST			0	0			Hail (0.75)
			Dime-size hail was reported on the south side of Bethany by a local radio station.						
<b>Linn County</b>									
1 NE Fountain Grove	20	0710CST			0	0			Hail (0.88)
			Nickel-size hail was reported a mile northeast of Fountain Grove near the Wildlife area.						
<b>Johnson County</b>									
5 NE Leeton	20	0910CST 0930CST			0	0			Hail (1.00)
			Quarter-size hail was reported by the Johnson County Sheriff's Office 5 miles northeast of Leeton.						
<b>Pettis County</b>									
Green Ridge to 5 N Green Ridge	20	0940CST 0950CST			0	0			Hail (0.75)
			Pettis County spotters reported dime-size hail at Green Ridge and 5 miles north of Greenridge.						
<b>Pettis County</b>									
Sedalia	20	0955CST 1010CST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MISSOURI, Northwest

Thunderstorms over Pettis County dropped 2 to 3 inches of rain on the morning of June 20. Flash flooding resulting in Sedalia with a foot of water reported at the intersection of Wilkerson and Park. There was also a foot of water on the eastbound lanes of U.S. Highway 50 which runs through Sedalia.

**Johnson County**  
(Szl)Whiteman Afb

19	1123CST				0	0			<b>Thunderstorm Wind (G70)</b>
----	---------	--	--	--	---	---	--	--	--------------------------------

Thunderstorm winds gusted to 70 MPH at Whiteman Airforce Base.

**Cass County**  
Lone Tree

19	1925CST 1945CST				0	0			<b>Hail (1.75)</b>
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Golfball-size hail was reported by a spotter at Lone Tree.

**Cooper County**  
Otterville

19	2125CST				0	0			<b>Hail (1.00)</b>
----	---------	--	--	--	---	---	--	--	--------------------

The Cooper County Sheriff's Office reported quarter-size hail at Otterville.

**Bates County**  
Foster

19	2210CST				0	0			<b>Thunderstorm Wind (G60)</b>
----	---------	--	--	--	---	---	--	--	--------------------------------

Thunderstorm winds knocked trees and power lines down throughout Foster. The city was completely without power for several hours.

**Chariton County**  
Keytesville

19	2320CST				0	0			<b>Hail (1.75)</b>
20	2320CST								

Golfball-size hail was reported in Keytesville by a local radio station.

**Bates County**  
Rich Hill

19	2322CST				0	0			<b>Hail (1.00)</b>
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One inch diameter hail was reported in Rich Hill by the Bates County Sheriff's Office.

**Carroll County**  
Norborne

20	0215CST				0	0			<b>Hail (1.00)</b>
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The Carroll county Sheriff's office reported dime to quarter-size hail in Norborne.

**Carroll County**  
4 SE Roads

20	0235CST				0	0			<b>Hail (0.88)</b>
----	---------	--	--	--	---	---	--	--	--------------------

Nickel-size hail was reported by the public 4 miles southeast of Roads.

**Johnson County**  
5 NE Leeton

20	0930CST				0	0			<b>Hail (1.00)</b>
----	---------	--	--	--	---	---	--	--	--------------------

Spotters reported one inch diameter hail 5 miles northeast of Leeton.

**Johnson County**  
5 NE Leeton

20	0930CST				0	0			<b>Thunderstorm Wind (G60)</b>
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Thunderstorm winds knocked down trees onto a roadway and also knocked down powerlines 5 miles northeast of Leeton.

**MOZ028>032-  
039>040-044-046-054** **Platte - Clay - Ray - Carroll - Chariton - Saline - Howard - Johnson - Cooper - Henry**

20	0000CST				0	0			<b>Flood</b>
26	2359CST								

Heavy rains from thunderstorms resulted in minor river flooding in Northwest and West Central Missouri June 20th through the 24th.

Petite Saline Creek  
Boonville, MO

Flood Stage	16 ft
Above Flood Stage	6/21 to 6/22
Crest	17.85 ft on 6/21

Blackwater River  
Valley City, MO

Flood Stage	22 ft
Above Flood Stage	6/22 to 6/24
Crest	25.9 ft on 6/22

Blue Lick, MO

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
	Date			Killed	Injured	Property	Crops	

## MISSOURI, Northwest

Flood Stage		24 ft						
Above Flood Stage		6/22 to 6/26						
Crest		28.19 ft on 6/25						
Lamine River Otterville, MO								
Flood Stage		15 ft						
Above Flood Stage		6/22 to 6/23						
Crest		18.51 ft on 6/23						
Moniteau Creek Fayette, MO								
Flood Stage		16 ft						
Above Flood Stage		6/22 to 6/23						
Crest		18.65 ft on 6/22						
South Grand River Urich, MO								
Flood Stage		24 ft						
Above Flood Stage		6/22 to 6/24						
Crest		24.9 ft on 6/22						
Big Creek Blirstown, MO								
Flood Stage		20 ft						
Above Flood Stage		6/22 to 6/23						
Crest		22.3 ft on 6/22						
Wakenda Creek Carrollton, MO								
Flood Stage		20 ft						
Above Flood Stage		6/20 to 6/24						
Crest		22 ft on 6/24						
Little Platte River Smithville, MO								
Flood Stage		24 ft						
Above Flood Stage		6/23						
Crest		24.82 ft						
Fishing River Mosby, MO								
Flood Stage		18 ft						
Above Flood Stage		6/2						
Crest		22.5 ft						
Crooked River Richmond, MO								
Flood Stage		20 ft						
Above Flood Stage		6/23 to 6/24						
Crest		21.7 ft on 6/24						
Grand River								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
			Sumner, MO						
			Flood Stage	26 ft					
			Above Flood Stage	6/20-6/21					
			Crest	26.86 ft on 6/21					
<b>Clay County</b>									
<b>Gladstone</b>	<b>20</b>	<b>1920CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			Thunderstorm winds knocked down trees and powerlines in Gladstone at the intersection of I-29 and Vivian Road.						
<b>Platte County</b>									
<b>2 W Parkville to 5 W Parkville</b>	<b>20</b>	<b>1954CST 2015CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
			Quarter-size to golfball-size hail was reported 2 to 5 miles west of Parkville.						
<b>Jackson County</b>									
<b>Lees Summit</b>	<b>20</b>	<b>2000CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			A National Weather Service employee reported 6 inch diameter trees downed from thunderstorm winds in Lee's Summit.						
<b>Cooper County</b>									
<b>Boonville</b>	<b>20</b>	<b>2115CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G59)</b>
			A spotter reported trees down in Boonville as a result of a 59 MPH gust during a thunderstorm. The damaging thunderstorm winds also blew a 10 inch diameter tree on top of a house in Boonville.						
<b>Cass County</b>									
<b>Harrisonville</b>	<b>20</b>	<b>2119CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
			The Harrisonville Police Department reported golfball-size hail during a severe thunderstorm over Cass County.						
<b>Cass County</b>									
<b>Pleasant Hill to East Lynne</b>	<b>22</b>	<b>0120CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
			Severe thunderstorm winds gusted to 55 MPH at the National Weather Service office in Pleasant Hill. The Pleasant Hill Police reported several power lines blown down. Several telephone poles were knocked down in East Lynn at K Highway and 227th St.						
<b>Jackson County</b>									
<b>Greenwood</b>	<b>22</b>	<b>0120CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
			A National Weather Service employee reported a 70 MPH wind gust during a severe thunderstorm at Greenwood. Several large trees were blown down as a result of the winds.						
<b>Ray County</b>									
<b>Richmond</b>	<b>22</b>	<b>0130CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
			Thunderstorm winds blew down 4 inch diameter tree limbs in Richmond.						
<b>Lafayette County</b>									
<b>Concordia</b>	<b>22</b>	<b>0210CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
			Severe thunderstorm winds blew a large tree onto the roof of a house in Concordia.						
<b>Saline County</b>									
<b>Marshall</b>	<b>22</b>	<b>0230CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			The Marshall Police department reported numerous trees and power lines down as a result of the thunderstorm winds. Marshall PD estimated wind gusts to 60 MPH while a local radio station reported wind gusts to 53 MPH in Marshall.						
<b>Howard County</b>									
<b>Armstrong</b>	<b>22</b>	<b>0330CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			Severe thunderstorm winds knocked over 6 inch diameter tree limbs in Armstrong.						
<b>Randolph County</b>									
<b>Moberly</b>	<b>22</b>	<b>0345CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			Severe thunderstorm winds gusted to 60 MPH at Moberly resulting in numerous reports of downed large trees.						
<b>Jackson County</b>									
<b>Kansas City</b>	<b>22</b>	<b>0515CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
			Severe thunderstorm winds knocked down two large trees in Kansas City. The first tree blocked the flow of traffic at 63rd and Walrond and the second tree fell at 96th and Blue Ridge.						
<b>Cass County</b>									
<b>Pleasant Hill</b>	<b>22</b>	<b>0522CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
			A 61 MPH wind was recorded at the National Weather Service Office in Pleasant Hill as the same line of storms that produced wind damage in Kansas City moved through.						
<b>Johnson County</b>									
<b>Warrensburg</b>	<b>22</b>	<b>0600CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G59)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
A local television station reported a 59 MPH wind gust during a severe thunderstorm in Warrensburg.									
<b>Ray County</b> Richmond	22	0600CST 1800CST			0	0			<b>Lightning</b>
Lightning during a thunderstorm knocked out the power to the City of Richmond's wells. The Mayor of Richmond was forced to temporarily order the closing of laundromats and car washes until the 60-horsepower motor and water pressure were restored.									
<b>Henry County</b> Clinton	23	0100CST			0	0			<b>Hail (0.75)</b>
A severe weather spotter reported dime-size hail on the south side of Clinton.									
<b>Clay County</b> Liberty	23	0303CST			0	0			<b>Hail (1.00)</b>
One inch diameter hail was reported by the public at Liberty.									
<b>Platte County</b> Riverside	23	0320CST			0	0			<b>Thunderstorm Wind (G60)</b>
Thunderstorm winds knocked down 8 inch diameter tree limbs in Riverside.									
<b>Jackson County</b> Kansas City	23	0322CST			0	0			<b>Thunderstorm Wind (G80)</b>
A local television station in Kansas City reported an 80 MPH wind gust at 31 st and Main. A large tree was downed near the station and several 4 to 6 inch diameter branches were downed from a tree at 31st and Harrison. Winds gusted to 62 MPH at Downtown Kansas City Airport. Elsewhere in Kansas City, Holmes Road was closed during rush hour due to a large tree blown down across the street at 74th Terrace.									
<b>Jackson County</b> Levasy	23	0335CST			0	0	50K		<b>Thunderstorm Wind</b>
Severe thunderstorm winds blew the roof off of a trailer in Levasy and took the garage door off a house. Minor crop damage was also reported.									
<b>Lafayette County</b> Wellington to Waverly	23	0340CST 0400CST			0	0	75K		<b>Thunderstorm Wind</b>
Severe thunderstorm winds snapped 3 large trees at their bases and flattened a gazebo in Wellington. Also in Wellington, a porch which was still intact blew on top of the roof of a trailer. Power lines and numerous trees were blown down in Lexington. In Waverly, several trees 12 to 24 inches in diameter were blown down. Numerous power outages were reported in Odessa as a result of the thunderstorms.									
<b>Clay County</b> Gladstone to Liberty	23	0400CST 0430CST			0	0			<b>Flash Flood</b>
Very heavy rain from thunderstorms resulted in several reports of flash flooding in Clay County. In Gladstone, several evacuations of people trapped in cars were required at 60th and Shoul Rd. In Liberty, 3 cars were submerged and one person was trapped but successfully rescued. The intersection of Route 152 and Flintlock was under water and impassable.									
<b>Jackson County</b> Kansas City	23	0400CST 0500CST			0	0			<b>Urban/Sml Stream Fld</b>
Thunderstorms produced 1 to 2 inches of rain in less than an hour. This heavy rain resulted in numerous flooded streets and intersections in Kansas City. I-70 was closed through the downtown loop due to flooding shortly before morning rush hour.									
<b>MOZ020</b> <b>Buchanan</b>	26	0000CST			0	0			<b>Flood</b>
	27	2359CST							
Minor flooding occurred along the Missouri River at St Joseph on June 26th and 27th.									
Missouri River St. Joseph, MO									
			Flood Stage	17 ft					
			Above Flood Stage	6/26 to 6/27					
			Crest	17.75 ft on 6/26					
<b>Howard County</b> Fayette	28	1730CST			0	0			<b>Hail (0.88)</b>
Nickel-size hail was reported by an emergency management coordinator during a severe thunderstorm at Fayette.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MISSOURI, Northwest

<b>Ray County</b> Millville	28	1950CST			0	0			<b>Hail (1.00)</b> Quarter-size hail was reported by the public during a severe thunderstorm at Millville.
<b>Buchanan County</b> 4 N Agency	28	2025CST			0	0			<b>Hail (1.75)</b> Golfball-size hail was reported during a severe thunderstorm 4 miles north of Agency.
<b>Macon County</b> Macon	28	2055CST			0	0			<b>Hail (1.75)</b> Golfball-size hail was reported during a severe thunderstorm in Macon by the Macon Police.
<b>Grundy County</b> Tindall	28	2105CST			0	0			<b>Hail (1.75)</b> Golfball-size hail was reported in Tindall by a Trenton radio station.
<b>Cass County</b> 5 E Lisle	28	2150CST			0	0			<b>Thunderstorm Wind (G60)</b> A wind gust to 60 MPH was reported by the public during a severe thunderstorm 5 miles east of Lisle.
<b>Clinton County</b> Turney	28	2154CST			0	0	10K		<b>Thunderstorm Wind</b> Severe thunderstorm winds blew a tree into a window at a house in Turney. The brick chimney was also blown down as a result of the winds.
<b>Mercer County</b> 5 S Princeton	28	2200CST 2230CST			0	0			<b>Hail (0.75)</b> Dime-size hail was reported by a spotter as a severe thunderstorm moved through Mercer County. The hail fell 5 miles south of Princeton.
<b>Mercer County</b> 5 S Princeton	28	2200CST 2230CST			0	0			<b>Thunderstorm Wind (G55)</b> The same severe thunderstorm that produced dime-size hail 5 miles south of Princeton also blew down 4 inch diameter tree limbs.
<b>Adair County</b> 4 W Kirksville	28	2208CST			0	0			<b>Hail (1.00)</b> One inch diameter hail was reported by a spotter during a severe thunderstorm 4 miles west of Kirksville.
<b>MOZ017-023-032</b>	<b>29</b>	<b>0000CST</b>			<b>0</b>	<b>0</b>			<b>Adair - Livingston - Chariton</b> <b>Flood</b> Thunderstorms on June 28th and 29th produced 3 to 8 inches rain over Northeast and Central Missouri. This heavy rain resulted in minor to moderate flooding along the Grand River and Chariton River.
	<b>30</b>	<b>2359CST</b>							
									Grand River Chillicothe, MO
									Flood Stage 24 ft Above Flood Stage 6/29 to 6/30 Crest 24.82 ft on 6/29
									Sumner, MO
									Flood Stage 26 ft Above Flood Stage 6/29 to 6/30 Crest 31.76 ft
									Chariton River Novinger, MO
									Flood Stage 20 ft Above Flood Stage 6/30 Crest 26.11 ft
									Prairie Hill, MO
									Flood Stage 15 ft

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>MISSOURI, Northwest</b>									
		Above Flood Stage		6/29 to 6/30					
		Crest		16.33 ft on 6/29					
<b>MOZ020-038</b>		<b>Buchanan - Lafayette</b>							
	29	0000CST			0	0			<b>Flood</b>
	30	2359CST							
		Heavy rain from thunderstorms across Southeast Nebraska and Southern Iowa in late June resulted in minor to moderate flooding along the Missouri River on June 29th and 30th.							
		Missouri River St. Joseph, MO							
		Flood Stage		17 ft					
		Above Flood Stage		6/29 to 6/30					
		Crest		17.15 ft on 6/29					
		Waverly, MO							
		Flood Stage		20 ft					
		Above Flood Stage		6/30					
		Crest		20.63 ft					
<b>Jackson County</b>									
<b>Kansas City to Oak Grove</b>	29	0255CST 0314CST			0	0			<b>Thunderstorm Wind (G71)</b>
		Severe thunderstorm winds in Kansas City gusted to 71 MPH at 31st and Main and to 62 MPH at 63rd and Troost. Numerous large trees were blown down and many homes temporarily lost power. East of Kansas City in Oak Grove, thunderstorm winds gusted to 65 MPH.							
<b>Lafayette County</b>									
<b>Odessa</b>	29	0330CST			0	0			<b>Thunderstorm Wind (G60)</b>
		The Odessa Fire Department reported 4 inch diameter tree limbs blown down in Odessa.							
<b>Johnson County</b>									
<b>1 W Pittsville</b>	29	0338CST			0	0			<b>Thunderstorm Wind (G70)</b>
		The Johnson County heriff's Office reported a wind gust to 70 MPH during a severe thunderstorm along Route W a mile west of Pittsville.							
<b>Jackson County</b>									
<b>Martin City to Grandview</b>	29	0400CST 0600CST			0	0			<b>Flash Flood</b>
		Heavy rain from thunderstorms produced flash flooding in sections of Martin City and Grandview. A National Weather Service employee reported 2 to 4 feet of water on Wyandotte Street between 135th and 138th Streets. The East Creek also overflowed its banks along Route 150 near Grandview.							
<b>Grundy County</b>									
<b>Trenton</b>	29	0445CST			0	0			<b>Urban/Sml Stream Fld</b>
		Up to 3.5 inches of rain fell during thunderstorms over Grundy County. Several intersections were reported flooded in Trenton.							
<b>Putnam County</b>									
<b>Lucerne</b>	29	1705CST			0	0			<b>Hail (0.75)</b>
		Dime-size hail was reported during a severe thunderstorm in Lucerne.							
<b>Buchanan County</b>									
<b>De Kalb to South St Joseph</b>	29	1745CST 1805CST			0	0	50K		<b>Thunderstorm Wind (G80)</b>
		The Buchanan County Sheriff's Office reported damage to the roof of a school in De Kalb as a result of severe thunderstorm winds. Thunderstorm winds also blew a semi tractor trailer off the road along Highway 59 in South St. Joseph. There was also the report of structural damage to a home in South St. Joseph as a result of the strong winds. St. Joseph Power and Light reported that four main transmission line structures were destroyed in the storm resulting in a power loss for many customers for over 24 hours. Two barns were destroyed between De Kalb and Taos, and several other outbuildings were damaged.							
<b>Platte County</b>									
	29	1804CST			0	0			<b>Thunderstorm Wind (G67)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MISSOURI, Northwest

Severe thunderstorm winds were clocked at 67 MPH at Kansas City International Airport. Two parked airliners were knocked together as a result of the wind gusts.

### **Clay County**

#### **Liberty**

<b>29</b>	<b>1843CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G90)</b>
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Severe thunderstorm winds gusted to 90 MPH in Liberty resulting in a crane toppling into Liberty Hospital. A 200 foot, fully extended crane smashed into the hospital garage just a few feet shy of the emergency room roof. A window adjacent to a hospital waiting room was shattered. There were no injuries but 10 to 15 patients were evacuated from the emergency room due to a leaking roof. Two ambulance attendants were placed at the front door of the hospital to accept emergencies.

The damaging thunderstorm winds also caused widespread power and telephone outages in the Liberty area. The winds also resulted in fallen large tree limbs on many lawns.

### **Jackson County**

#### **Kansas City to Blue Spgs**

<b>29</b>	<b>1930CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
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Severe thunderstorm winds damaged a section of the roof at the Liberty Hall Museum in Kansas City. In Blue Springs, the police department reported several downed trees as a result of thunderstorm winds. The downed trees were reported at the intersection of 10th and Jones.

### **Johnson County**

#### **Elm**

<b>29</b>	<b>1945CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
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A cooperative observer reported 4 inch tree limbs down in Powell Gardens as a result of severe thunderstorm winds.

### **Macon County**

#### **4 S New Cambria**

<b>29</b>	<b>1945CST</b>				<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
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The Macon Police department reported golfball-size hail during a severe thunderstorm 4 miles south of New Cambria.

### **Lafayette County**

#### **Waverly**

<b>29</b>	<b>1955CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
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A National Weather Service employee reported large trees, 18 inches in diameter and 50 feet tall, blown over by severe thunderstorm winds. The winds also knocked down telephone lines in the Waverly area.

### **Cass County**

#### **Belton to Drexel**

<b>29</b>	<b>2000CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G75)</b>
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Severe thunderstorm winds gusted to 60 MPH at 195th and Holmes Streets in Belton. Other wind reports were from the Cass County Emergency Management officials were 75 MPH a mile north of Drexel and a 70 MPH gust in Drexel.

### **Bates County**

#### **Butler**

<b>29</b>	<b>2050CST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G60)</b>
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The Bates County Sheriff's Office reported a 60 MPH wind gust during a severe thunderstorm in Butler.

## MISSOURI, Southeast

### **Cape Girardeau**

#### **County**

#### **Cape Girardeau**

<b>09</b>	<b>0230CST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind (G50)</b>
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Numerous trees and limbs were blown down. About 7,000 utility customers lost power. A number of streets were blocked by downed trees.

### **Ripley County**

#### **Fairdealing**

<b>11</b>	<b>0230CST</b>				<b>0</b>	<b>0</b>	<b>40K</b>		<b>Thunderstorm Wind (G65)</b>
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Thunderstorm winds blew windows out of a store and overturned mobile homes. A post-storm survey conducted by local emergency managers indicated a microburst was the likely cause of the damage. The damage path was about half a mile long and 1.5 miles wide, centered half a mile east of Flatwoods. The damage path was oriented from south to north, and included numerous downed trees and power lines. A roof was blown off a mobile home.

### **Butler County**

#### **Poplar Bluff**

<b>11</b>	<b>0300CST</b>				<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind (G55)</b>
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Numerous large trees were down, mainly in the south part of Poplar Bluff. A convenience store lost part of its roof. A tractor trailer was overturned. A garage was moved from its foundation and demolished. Several vehicles were damaged by falling trees.

### **Cape Girardeau**

#### **County**

#### **4 NW Cape Girardeau**

<b>11</b>	<b>0430CST</b>				<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind (G52)</b>
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Numerous trees were blown down in a concentrated area between Jackson and Cape Girardeau. There were no injuries. Several roofs and a boat were damaged in the storm.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southeast</b>									
<b>Perry County</b> Perryville	12	1918CST 1927CST			0	0	10K		Thunderstorm Wind (G54)
									A wind gust to 63 MPH was measured in Perryville. Trees were blown down, including a few that fell on vehicles.
<b>Stoddard County</b> 2 E Advance to Painton	12	2055CST			0	0			Thunderstorm Wind (G52)
									A cooperative observer reported several trees down between Advance and Painton.
<b>Scott County</b> Commerce to Lusk	12	2113CST 2136CST			0	0	100K		Thunderstorm Wind (G59)
									Thunderstorms moved slowly south across the county, producing spotty but significant wind damage along their paths. In the community of Commerce, numerous trees and power lines were blown down in the north portion of town. One tree fell on a two-story home, and several trees were across roadways. A mobile home was moved several feet. In and around the community of Lusk, several large trees were down. One tree narrowly missed a house. Another fell across power lines. A farmer in this area recorded a wind gust to 68 MPH.
<b>Mississippi County</b> 4 NE Wyatt	12	2136CST			0	0	3K		Thunderstorm Wind
									Near the Mississippi River just off U.S. Highway 60, three large trees were fractured about halfway from their base. A road sign, inserted in the ground on two 4 inch by 4 inch stakes, was snapped near the base.
<b>Butler County</b> Harviell to Poplar Bluff	14	1530CST			0	0			Hail (1.00)
									Nickel to quarter size hail fell from Harviell to Poplar Bluff.
<b>Cape Girardeau County</b> Neelys Lndg	14	1535CST			0	0			Hail (1.00)
									Quarter size hail occurred on Route 177.
<b>Butler County</b> Stringtown	15	2040CST			0	0	4K		Thunderstorm Wind (G52)
									An area about a mile wide and four miles long received heavy tree damage. About ten large trees were blown down across county roads.
<b>Stoddard County</b> Advance to Bloomfield	19	0145CST			0	0	4K		Thunderstorm Wind (G50)
									Large tree limbs and a large tree were blown down in northern Stoddard County.
<b>MOZ076-087-112</b>									<b>Perry - Cape Girardeau - Mississippi</b>
	19	2000CST			0	0			Flood
	30	2359CST							
									The Mississippi River crested at 35.9 feet at Cape Girardeau on June 25. Flood stage there is 32 feet. This resulted in minor to moderate flooding of agricultural bottomland.
<b>Wayne County</b> Silva	19	2220CST			0	0			Thunderstorm Wind (G52)
									Spotters estimated wind gusts to 60 MPH.
<b>Carter County</b> Van Buren	19	2256CST			0	0			Hail (1.00)
<b>Wayne County</b> Wappapello	19	2305CST			0	0			Thunderstorm Wind (G50)
									County sheriff deputies estimated gusts to 58 MPH. Power outages were common.
<b>Stoddard County</b> Puxico	19	2335CST			0	0			Thunderstorm Wind (G52)
									Wind gusts to 60 MPH and half inch hail occurred.
<b>Butler County</b> Poplar Bluff	19	2346CST			0	0			Thunderstorm Wind (G54)
									Wind gusts up to 65 MPH were reported.
<b>Butler County</b> Poplar Bluff	20	0009CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southeast</b>									
<b>Butler County</b>									
<b>Poplar Bluff</b>	20	0009CST			0	0	8K		<b>Thunderstorm Wind (G52)</b>
									Wind gusts around 60 MPH downed numerous trees in and around Poplar Bluff.
<b>Butler County</b>									
<b>Poplar Bluff</b>	20	0030CST 1400CST			0	0	30K		<b>Flash Flood</b>
									Persistent thunderstorms during the early morning hours produced very heavy rainfall amounts, estimated by radar over 5 inches in isolated spots. Flooding of roads became commonplace, and some roads were closed for extended periods.
<b>MOZ100</b>									
<b>Wayne</b>									
<b>Wayne</b>	20	0800CST 1900CST			0	0			<b>Flood</b>
									The St. Francis River crested a few inches above the 16-foot flood stage at Patterson. Minor flooding of adjacent lowlands in parks and farm fields occurred.
<b>Wayne County</b>									
<b>Patterson</b>	20	1045CST 1500CST			0	0			<b>Flash Flood</b>
									Persistent thunderstorms during the morning produced flooding rains. The St. Francis River rose rapidly and threatened Route 34 for a time. Water was reported over a road south of Greenville.
<b>MISSOURI, Southwest</b>									
<b>Morgan County</b>									
<b>Countywide</b>	04	0645CST 2100CST			0	0	0	0	<b>Flood</b>
<b>Benton County</b>									
<b>Northeast Portion</b>	04	1400CST 2100CST			0	0	0	0	<b>Flood</b>
<b>Camden County</b>									
<b>North Portion</b>	04	1400CST 2100CST			0	0	0	0	<b>Flood</b>
<b>Maries County</b>									
<b>North Portion</b>	04	1400CST 2100CST			0	0	0	0	<b>Flood</b>
<b>Miller County</b>									
<b>North Portion</b>	04	1400CST 2100CST			0	0	0	0	<b>Flood</b>
									One and one half inches to five inches of rain fell across the area producing the flooding of numerous low water crossings across the area. Both secondary and some state highways were affected.
<b>Laclede County</b>									
<b>5 E Phillipsburg</b>	04	1706CST			0	0	0		<b>Hail (0.88)</b>
<b>Taney County</b>									
<b>Ridgedale</b>	04	1811CST			0	0	0		<b>Hail (0.75)</b>
<b>Christian County</b>									
<b>Nixa</b>	04	2050CST			0	0	7K		<b>Hail (1.75)</b>
									A few vehicles were damaged by hail.
<b>Webster County</b>									
<b>Rogersville</b>	04	2105CST			0	0	0		<b>Hail (1.75)</b>
<b>Phelps County</b>									
<b>Rolla</b>	04	2309CST			0	0	0		<b>Hail (0.75)</b>
<b>Mcdonald County</b>									
<b>Jane</b>	08	0745CST			0	0	0	0	<b>Hail (0.75)</b>
<b>Lawrence County</b>									
<b>Mt Vernon</b>	08	0912CST			0	0	5K	0	<b>Hail (1.75)</b>
<b>Barton County</b>									
<b>Lamar</b>	08	1330CST			0	0	10K		<b>Lightning</b>
									Lightning hit the KHST radio station damaging electrical equipment and knocking the station off the air for over two days.
<b>Benton County</b>									
<b>East Portion</b>	08 09	1500CST 0200CST			0	0	0	0	<b>Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southwest</b>									
<b>Maries County</b> West Portion	08 09	1500CST 0000CST			0	0	0	0	Flood
<b>Miller County</b> Countywide	08 09	1500CST 0000CST			0	0	0	0	Flood
<b>Morgan County</b> South Portion	08 09	1500CST 0200CST			0	0	0	0	Flood
	Widespread one to three inch rainfall caused the flooding of low water crossings on numerous secondary roads and a few state highways.								
<b>Howell County</b> West Plains	08	1715CST 1745CST			0	0	8K		Lightning
	Two homes were struck by lightning in West Plains. One home had seven windows blown out and extensive electrical and smoke damage.								
<b>Jasper County</b> Sarcoxie	08	2045CST			0	0	3K		Thunderstorm Wind
	Thunderstorm winds blew down trees and power lines.								
<b>Barton County</b> Lamar	08	2056CST			0	0	0		Thunderstorm Wind (G60)
<b>Barton County</b> Golden City	08	2056CST			0	0	0	0	Thunderstorm Wind (G70)
<b>Dade County</b> 2 E Lockwood	08	2115CST			0	0	30K		Thunderstorm Wind
	Thunderstorm winds severely damaged two large buildings and scattered debris several hundred yards.								
<b>Greene County</b> Ash Grove	08	2200CST			0	0	0	0	Hail (0.75)
<b>Wright County</b> 4 W Grovespring	08	2323CST			0	0	0	0	Hail (0.75)
<b>Benton County</b> Edmonson	10	0315CST			0	0	1K		Thunderstorm Wind
	Thunderstorm winds damaged and uprooted trees.								
<b>Dent County</b> South Portion	11	0500CST 0800CST			0	0			Flash Flood
<b>Texas County</b> Northeast Portion	11	0500CST 0800CST			0	0			Flash Flood
	Two inches of rain fell in a one hour period producing flooding of low water crossings and small creeks.								
<b>Ozark County</b> Dugginsville	13	1825CST			0	0			Hail (0.88)
<b>Vernon County</b> 8 S Nevada to Nevada	13	1945CST			0	0	50K		Thunderstorm Wind
	Thunderstorm winds downed trees and power lines and did extensive damage to barns and farm equipment near and south of Nevada.								
<b>St. Clair County</b> 5 SW Tiffin	13	2022CST			0	0	2K		Tstm Wind/Hail
	Thunderstorm winds blew farm equipment off of Hwy 82.								
<b>Benton County</b> Warsaw	13	2035CST			0	0	1K		Thunderstorm Wind
	Thunderstorm winds blew down large trees..								
<b>Hickory County</b> Wheatland	13	2050CST			0	0	2K		Thunderstorm Wind
	Thunderstorm winds downed power lines.								
<b>Cedar County</b> 5 S Stockton	13	2110CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southwest</b>									
<b>Polk County</b> Fair Play	13	2115CST			0	0			Hail (0.75)
<b>Webster County</b> 3 SW Seymour	13	2116CST			0	0	5K		Hail (1.75)
<b>Polk County</b> 3 SE Pleasant Hope	13	2119CST			0	0			Hail (0.75)
<b>Camden County</b> Stoutland	13	2119CST			0	0			Hail (0.75)
<b>Webster County</b> 3 NW Elkland	13	2126CST			0	0			Hail (0.88)
<b>Wright County</b> 2 N Mountain Grove	13	2210CST			0	0			Thunderstorm Wind (G50)
<b>Texas County</b> 5 WNW Cabool	13	2215CST			0	0	1K		Tstm Wind/Hail Thunderstorm winds gusting over 60 mph and dime sized hail caused minor damage around the Austin community lake area.
<b>Greene County</b> Fair Grove	13	2220CST			0	0			Hail (0.75)
<b>Texas County</b> Dunn	13	2240CST			0	0	2K		Thunderstorm Wind Thunderstorm winds downed power lines and trees east of Mountain Grove near Dunn.
<b>Jasper County</b> Joplin	15	1610CST			0	0	10K		Hail (1.75) Hail damaged some cars.
<b>Dade County</b> Everton	15	1650CST			0	0	0		Thunderstorm Wind Thunderstorm winds downed large tree limbs.
<b>Greene County</b> Walnut Grove	15	1655CST			0	0			Hail (0.75)
<b>Greene County</b> Springfield	15	1712CST			0	0			Hail (0.75)
<b>Christian County</b> Ozark	15	1720CST			0	0	3K		Thunderstorm Wind Thunderstorm winds downed tree limbs in multiple locations in Christian County.
<b>Webster County</b> Rogersville	15	1743CST			0	0	0		Thunderstorm Wind Thunderstorm winds downed trees.
<b>Douglas County</b> 6 NW Ava	15	1835CST			0	0	0		Thunderstorm Wind Thunderstorm winds downed a tree onto state highway 14.
<b>Howell County</b> White Church	15	1858CST			0	0			Tstm Wind/Hail
<b>Benton County</b> Warsaw	18	0615CST			0	0			Hail (1.00)
<b>Benton County</b> 6 SE Warsaw	18	0630CST			0	0	1K		Thunderstorm Wind (G52)
<b>Benton County</b> 4 W Lincoln	18	0643CST			0	0			Hail (1.00) Thunderstorm winds uprooted several trees in Benton County.
<b>Newton County</b> Countywide	18	0750CST			0	0	30K		Thunderstorm Wind (G75) Thunderstorm winds knocked down power lines, trees, and a 90 foot communications tower was destroyed.
<b>Lawrence County</b> Pierce City	18	0835CST			0	0			Hail (0.75)
<b>Benton County</b> Lakeview Hgt	18	0915CST			0	0	15K		Hail (2.00) Hail damaged some boats, cars, and windows.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southwest</b>									
<b>Morgan County</b> Stover	18	0925CST			0	0			Hail (0.75)
<b>Barry County</b> Cassville	18	1043CST			0	0			Hail (0.75)
<b>Webster County</b> 1 NW Marshfield	18	1135CST			0	0			Hail (0.88)
<b>Laclede County</b> Lebanon	18	1205CST			0	0			Hail (0.75)
<b>Camden County</b> Osage Beach	18	1220CST			0	0			Hail (0.88)
<b>Laclede County</b> Sleeper	18	1249CST			0	0			Hail (0.75)
<b>Dade County</b> Lockwood	18	1310CST			0	0			Hail (0.88)
<b>Miller County</b> Iberia	18	1312CST 1321CST			0	0	20K		Tstm Wind/Hail
Thunderstorm winds estimated at 70 knots damaged trees and downed power lines and produced some roof damage. One inch hail also damaged some cars and trucks.									
<b>Maries County</b> Brinktown	18	1330CST			0	0			Hail (0.88)
<b>Miller County</b> Tuscumbia	18	1335CST			0	0			Hail (0.75)
<b>Hickory County</b> Preston	18	1345CST			0	0			Hail (0.75)
<b>Vernon County</b> 1 N Nevada	18	1545CST			0	0			Hail (1.75)
<b>Vernon County</b> 2 S Horton	18	1546CST			0	0			Thunderstorm Wind (G52)
<b>St. Clair County</b> Tiffin	18	1615CST			0	0			Hail (1.00)
<b>Vernon County</b> Bronaugh	18	1635CST			0	0			Hail (0.75)
<b>St. Clair County</b> Vista	18	1645CST			0	0	5K		Thunderstorm Wind
Thunderstorm winds damaged numerous trees and a vehicle.									
<b>St. Clair County</b> Collins	18	1657CST			0	0			Hail (1.00)
<b>Barton County</b> Liberal	18	1658CST			0	0			Hail (1.00)
<b>Barton County</b> Irwin	18	1700CST			0	0			Hail (0.75)
<b>Hickory County</b> Weaubleau	18	1700CST			0	0			Hail (0.75)
<b>Cedar County</b> Stockton	18	1725CST			0	0			Hail (0.75)
<b>Camden County</b> Camdenton	18	1735CST			0	0			Hail (0.75)
<b>Polk County</b> Humansville	18	1738CST			0	0	2K		Thunderstorm Wind (G52)
Thunderstorm winds damage trees in the Humansville area.									
<b>Barton County</b> Milford	18	1740CST			0	0			Hail (0.75)
<b>Polk County</b> 1 W Humansville	18	1740CST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southwest</b>									
<b>Barton County</b> 2 SW Milford	18	1750CST			0	0	4K		Thunderstorm Wind
									Thunderstorm winds snapped power lines and damaged tree limbs.
<b>Camden County</b> Camdenton	18	1805CST			0	0			Hail (1.00)
<b>Dallas County</b> 2 W Buffalo	18	1814CST			0	0	5K		Hail (1.75)
									Nickel (0.88 inch) to golf ball (1.75 inch) sized hail was reported from Louisburg to Buffalo.
<b>Dallas County</b> 2 E Windyville	18	1833CST			0	0			Thunderstorm Wind (G61)
<b>Laclede County</b> 4 W Lebanon	18	1838CST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds caused structural damage to a barns, roofs, and a carport.
<b>Dade County</b> Greenfield	18	1845CST			0	0			Hail (0.75)
<b>Barton County</b> Golden City	18	1845CST			0	0			Hail (1.00)
<b>Greene County</b> Walnut Grove	18	1900CST			0	0			Hail (0.75)
<b>Newton County</b> Tipton Ford	18	1925CST			0	0			Hail (1.75)
<b>Newton County</b> Spring City	18	1925CST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds caused trees to be damaged and uprooted from Spring City to Neosho.
<b>Greene County</b> 2 N Strafford	18	1940CST			0	0			Hail (0.75)
<b>Webster County</b> North View Hill	18	1950CST			0	0			Hail (1.00)
<b>Dade County</b> Greenfield	18	1955CST			0	0			Hail (0.75)
<b>Greene County</b> 5 NNE Springfield	18	2009CST			0	0			Hail (0.88)
									Nickel sized hail fell near Fellow Lake.
<b>Webster County</b> 1 S Marshfield	18	2015CST			0	0			Hail (1.75)
<b>Texas County</b> Houston	18	2100CST			0	0			Hail (0.75)
<b>Texas County</b> Raymondville	18	2105CST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds did considerable damage to tress. One tree fell on a parked car.
<b>Dent County</b> Gladden	18	2109CST			0	0	55K		Thunderstorm Wind
									Thunderstorm winds did considerable damage, mainly to the south portion of town. Winds damage consisted of mainly of barn and roof damage. One trailer was picked up and moved 5 feet by the winds. Power lines were also knocked down.
<b>Taney County</b> Kissee Mills	18	2155CST			0	0			Hail (0.88)
<b>Shannon County</b> Alley Spg	18	2218CST			0	0	8K		Thunderstorm Wind (G70)
									Thunderstorm winds estimated at near 80 mph uprooted trees and downed power lines.
<b>Shannon County</b> 2 N Eminence	18	2219CST			0	0			Hail (0.88)
<b>Taney County</b> Protom	18	2228CST			0	0			Hail (1.00)
<b>Morgan County</b> 9 N Gravois Mills	19	1052CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MISSOURI, Southwest</b>									
<b>Hickory County</b> Weaubleau	19	1815CST			0	0			Hail (0.75)
<b>Dallas County</b> Buffalo	19	1900CST			0	0			Hail (1.00)
<b>Webster County</b> Elkland	19	1905CST			0	0			Hail (0.75)
<b>Dallas County</b> Buffalo	19	1940CST			0	0			Hail (0.88)
<b>Dallas County</b> Pumpkin Center	19	1945CST			0	0			Hail (1.75)
<b>Laclede County</b> Phillipsburg	19	2009CST			0	0			Hail (1.00)
<b>Laclede County</b> Phillipsburg	19	2032CST			0	0			Hail (0.88)
<b>Texas County</b> Roby	19	2042CST			0	0			Hail (0.75)
<b>Laclede County</b> 3 N Lebanon	19	2048CST			0	0			Hail (1.25)
<b>Benton County</b> 3 W Edmonson	19	2145CST			0	0	2K		Thunderstorm Wind
									Thunderstorms winds blew down trees and knocked down large limbs.
<b>Shannon County</b> 3 S Winona	19	2213CST			0	0			Hail (0.75)
<b>St. Clair County</b> 5 E Lowry City	19	2255CST			0	0			Hail (0.75)
<b>Morgan County</b> 8 S Gravois Mills	19	2315CST 2347CST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds blew trees down near Laurie in southern Morgan County.
<b>Vernon County</b> 3 N Nevada	19	2325CST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds in excess of 60 mph blew down tents and booths north of Nevada.
<b>Hickory County</b> Hermitage	20	0020CST			0	0	1K		Thunderstorm Wind
									Thunderstorm wind blew trees down.
<b>Benton County</b> Countywide	20	0100CST 0900CST			0	0			Flash Flood
<b>Camden County</b> Countywide	20	0200CST 0900CST			0	0			Flash Flood
									Two to four inches of rain produced the flooding of low lying areas such as low water crossings.
<b>Laclede County</b> 6 N Lebanon	20	0250CST			0	0			Hail (0.88)
<b>Laclede County</b> Sleeper	20	0314CST			0	0			Hail (0.88)
<b>Texas County</b> Countywide	20	0400CST 0800CST			0	0	400K		Flash Flood
									Heavy rain of 2 to 5 inches caused flash flooding across the county. Numerous businesses in Houston sustained flood damage including a bowling alley and an apartment complex. The apartment complex had to be evacuated for a short time. Numerous low water bridges and crossings were flooded.
<b>Camden County</b> 2 NW Osage Beach	20	0520CST			0	0	5K		Hail (1.75)
<b>Laclede County</b> Countywide	20	0900CST 1100CST			0	0			Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MISSOURI, Southwest</u></b>									
<b>Shannon County</b> Countywide	20	0900CST 1100CST			0	0	10K		Flash Flood
									Rainfall from a complex of thunderstorms dropped 3 to 4 inches of rain in a short time in some areas. Numerous low water crossings were flooded. Camp grounds in Round Springs in Shannon County were flooded.
<b>St. Clair County</b> Osceola	20	1110CST			0	0			Hail (0.75)
<b>Miller County</b> Countywide	20	1300CST 1345CST			0	0			Flash Flood
									Heavy rainfall flooded low water crossings across the county including Hwy 87 near Eldon.
<b>Cedar County</b> 7 N Stockton	20	2334CST			0	0			Hail (0.75)
<b>Polk County</b> 3 S Flemington	20	2355CST			0	0			Hail (0.75)
<b>Greene County</b> Springfield	21	0030CST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds knocked several trees and large limbs down. One roof was severely damaged by a downed tree.
<b>Texas County</b> 3 S Roby	22	1845CST			0	0			Hail (1.00)
<b>Vernon County</b> Bronaugh	29	2200CST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds downed tree limbs.
<b>Barton County</b> Countywide	29	2230CST			0	0	75K		Thunderstorm Wind
									Thunderstorm winds produced widespread tree and power line damage throughout the county. Western sections of Barton County were particularly hard hit.
<b>Jasper County</b> Webb City	29	2310CST			0	0	3K		Thunderstorm Wind
									Thunderstorm winds knocked trees and large limbs down.
<b>Jasper County</b> Countywide	30	0205CST 0240CST			0	0	50K		Thunderstorm Wind
									Thunderstorm winds produced widespread tree and structural damage. ASOS at the Joplin Municipal Airport (KJLN) recorded a 57kt wind gust at 227 am CST. Damage reports were received from Asbury, Joplin, and Carl Junction.
<b>Newton County</b> Countywide	30	0305CST			0	0	35K		Thunderstorm Wind
									Thunderstorm winds produced widespread damage of trees, power lines, and utility poles.
<b>Mcdonald County</b> Countywide	30	0330CST			0	0	100K		Thunderstorm Wind
									Thunderstorm winds produced widespread damage to trees, power lines and utility poles. Hundreds of power lines were reported down across the county.
<b><u>MONTANA, Central</u></b>									
<b>Teton County</b> 15 NE Dutton	01	1300MST 1330MST			0	0	1K	1M	Tstm Wind/Hail
<b>Pondera County</b> 12 E Brady	01	1300MST 1330MST			0	0	1K	1M	Tstm Wind/Hail
<b>Chouteau County</b> 2 SW Shonkin	19	1430MST	1	20	0	0	50K		Tornado (F1)
<b>MTZ013</b> Fergus / Judith Basin	27	1030MST			0	0			High Wind (G64)
<b>Hill County</b> 25 S Havre to 15 S Havre	27 28	2200MST 0400MST			0	0	233K		Flash Flood



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>MONTANA, Central</u></b>									
<b>Lewis And Clark County</b>									
Wolf Creek	30	1520MST			0	0			Hail (1.00)
<b>Teton County</b>									
12 W Fairfield	30	1750MST			0	0			Hail (1.00)
<b>Judith Basin County</b>									
Hobson	30	1820MST			0	0			Hail (0.75)
<b><u>MONTANA, East</u></b>									
<b>Garfield County</b>									
5 W Edwards	10	1700MST			0	0			Hail (0.75)
<b>Petroleum County</b>									
8 SE Winnett	23	1222MST			0	0			Hail (1.00)
<b>Valley County</b>									
10 NW Opheim	23	1315MST			0	0			Hail (1.00)
<b>Prairie County</b>									
10 E Fallon	23	1718MST 1730MST			0	0			Hail (0.88)
<b>Roosevelt County</b>									
10 E Poplar	23	1800MST			0	0			Hail (0.75)
<b>Richland County</b>									
Crane	23	1811MST			0	0			Hail (1.00)
<b>Daniels County</b>									
12 N Peerless	23	1815MST			0	0			Hail (0.75)
<b>Roosevelt County</b>									
2 NE Poplar	23	1822MST			0	0			Hail (0.75)
<b>Valley County</b>									
Glasgow	23	1900MST			0	0			Hail (0.75)
<b>Roosevelt County</b>									
1 W Brockton	23	1905MST			0	0			Hail (0.75)
<b>Roosevelt County</b>									
Brockton	23	1925MST			0	0			Hail (1.75)
<b>Roosevelt County</b>									
Brockton	23	1937MST			0	0			Hail (1.00)
<b>Roosevelt County</b>									
Brockton	23	2031MST 2230MST			0	0	50K	25K	Flash Flood

Approximately 5 inches of rain fell in less than two hours over the Brockton area. Flash flooding caused propane tanks to float through town and portions of Hwy 2 were closed due to water covering the road. Several men had to be rescued from their car after it was swept off of the road in flood water.

## **MONTANA, South**

**MTZ034**

**Stillwater**

02 2100MST  
04 0500MST

0 0 Heavy Snow

A slow moving low pressure system over the Great Basin spread moisture over an unseasonably cold airmass which was in place over South Central Montana from the evening of June 2 through the morning of June 4. The result was a heavy snowfall in the Beartooth Mountains with snow falling as low as 5000 feet. Red Lodge received 6 inches of snow and Roberts picked up 4 inches.

**Yellowstone County**  
Billings Logan Arpt

13 1956MST

0 0 Thunderstorm Wind (G53)

A thunderstorm produced 61 mph wind gusts at Logan International Airport.

**MTZ028-034**

**Wheatland - Stillwater**

16 0200MST  
2200MST

0 0 Heavy Snow

A strong low pressure system produced heavy snows above 7000 feet in the mountains of South Central Montana as it moved slowly east across the state. Cooke City at 7600 feet received 4 inches of snow on the 16th, and 7 campers had to be evacuated from the Red Lodge Creek Plateau 5 miles east of Rosebud Lake in the Beartooth Mountains.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## MONTANA, South

### MTZ028

#### Wheatland

20 0100MST  
1430MST

0 0

Flood

Emergency Officials in Livingston reported flooding at 9th street island near interstate 90. The Yellowstone River crested near the 8.0 foot flood stage as moderate rainfall in the mountains combined with rapidly melting snow to cause the Yellowstone river to rise nearly a foot and a half in 24 hours.

### Carter County

4 S Belltower

23 1455MST

0 0

Hail (1.75)

### Fallon County

Baker

23 1625MST  
1945MST

0 0

Flash Flood

### Fallon County

10 N Baker

23 1625MST

0 0

Hail (1.00)

### Powder River County

Broadus

23 1700MST  
1720MST

0 0

50K

Thunderstorm Wind

A cluster of thunderstorms produced large hail over Carter and Fallon Counties in southeastern Montana. Flash flooding was reported south of Baker as a creek overflowed its banks. Wind gusts to 56 mph in Powder River County produced several thousand dollars of property damage in the Broadus area. Roofs were blown off of several buildings and residences, a barn was blown down and a greenhouse was damaged.

### Fallon County

Baker

25 2225MST

0 0

Hail (0.88)

A spotter in Baker reported nickel sized hail from a thunderstorm.

### Treasure County

25 SSE Hysham

26 1345MST

0 0

Hail (0.88)

A thunderstorm produced nickel sized hail 25 miles SSE of Hysham.

### MTZ028

#### Wheatland

26 2000MST  
27 0800MST

0 0

Flood

Heavy runoffs caused the Yellowstone River to overflow its banks in Livingston. Flooding was reported in the 9th street island area.

### Wheatland County

Twodot

30 1828MST

0 0

Hail (1.00)

### Wheatland County

20 SE Harlowton

30 2025MST

0 0

Funnel Cloud

A thunderstorm produced one inch diameter hail in Twodot and a high based funnel cloud in extreme southeastern Wheatland County.

## MONTANA, West

NONE REPORTED.

## NEBRASKA, Central

### Hooker County

21 SSW Mullen

02 2330MST

0 0

Hail (0.75)

### Arthur County

16 SW Arthur

03 0100MST

0 0

Hail (0.75)

### Chase County

Lamar

07 1751MST

0 0

Hail (1.00)

### Chase County

12 NNW Champion

07 1810MST

0 0

2K

15K

Hail (1.75)

### Deuel County

7 SW Chappell

09 1725MST

0 0

Hail (0.75)

### Hayes County

2 SW Hayes Center

09 2125CST

2

10

0 0

Tornado (F0)

The tornado touched down and traveled for two miles in open country and did no damage.

### Hayes County

11 ENE Hayes Center

09 2145CST

0.1

10

0 0

Tornado (F0)

The tornado touched down briefly and did no damage.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, Central</b>									
<b>Frontier County</b> 8 SSW Maywood	09	2155CST			0	0			Hail (0.88)
<b>Deuel County</b> Chappell	10	0102MST			0	0	50K	50K	Hail (1.75)
<b>Deuel County</b> 4 W Big Spgs	10	0145MST			0	0	50K	50K	Hail (1.75)
			Hail stripped bark from trees and paint from houses. Hail piled in drifts with some street flooding.						
<b>Keith County</b> Ogallala	10	0246MST			0	0	250K	100K	Hail (1.50)
			Hail, accumulating several inches deep, produced widespread damage to roofs, cars, and crops in and around Ogallala. Hail was accompanied by extensive street flooding.						
<b>Keith County</b> Keystone	10	0300MST			0	0	75K	10K	Hail (1.75)
			Hail accompanied by 45 to 50 mph winds. Damage to cars, campers, and mobile homes.						
<b>Lincoln County</b> 8 NNW Sutherland	10	0445CST			0	0		25K	Hail (1.75)
<b>Lincoln County</b> North Platte Arpt	10	0441CST			0	0			Funnel Cloud
			Funnel observed northwest of NWS office.						
<b>Lincoln County</b> Hershey	10	0449CST			0	0			Funnel Cloud
			Funnel observed north of Hershey.						
<b>Lincoln County</b> North Platte	10	0510CST			0	0			Funnel Cloud
			Funnel observed north of North Platte.						
<b>Lincoln County</b> 12 N North Platte	10	0540CST			0	0			Hail (0.75)
<b>Logan County</b> 7 S Stapleton	10	0545CST			0	0			Hail (0.75)
<b>Custer County</b> 3 SE Arnold	10	0600CST			0	0			Hail (0.88)
<b>Custer County</b> 7 NNE Broken Bow	10	0630CST			0	0			Hail (0.75)
<b>Cherry County</b> 11 NE Brownlee	11	1458CST			0	0			Hail (0.88)
<b>Brown County</b> 21 SSW Ainsworth	11	1550CST			0	0			Hail (0.88)
<b>Rock County</b> 6 WSW Bassett	11	1550CST			0	0			Hail (0.88)
<b>Holt County</b> 2 S Chambers	11	1650CST			0	0			Hail (1.50)
<b>Holt County</b> 5 SE Chambers	11	1705CST			0	0			Hail (1.00)
<b>Sheridan County</b> 4 ESE White Clay	13	1422MST			0	0			Hail (0.75)
<b>Keith County</b> 11 NW Brule	13	1427MST			0	0			Hail (1.00)
			Large tree limbs blown down.						
<b>Deuel County</b> 4 N Big Spgs	13	1430MST			0	0			Hail (1.00)
<b>Perkins County</b> 9 NE Elsie	13	1445MST			0	0			Hail (0.75)
<b>Sheridan County</b> 4 W Lakeside	13	1530MST			0	0			Hail (0.75)
<b>Garden County</b> 23 NNE Lisco	13	1538MST			0	0			Hail (1.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, Central</b>									
<b>Lincoln County</b> 7 NNW Wallace	13	1545CST			0	0			Hail (1.00)
<b>Cherry County</b> Merriman	13	1555MST			0	0			Hail (1.00)
<b>Lincoln County</b> 5 SSW North Platte	13	1610CST			0	0			Hail (0.88)
<b>Lincoln County</b> North Platte	13	1631CST			0	0	10K		Hail (1.25)
									Minor damage to trees and a few cars.
<b>Lincoln County</b> 5 SSW Maxwell to 2 WSW Maxwell	13	1645CST 1653CST	4	75	0	0	250K		Tornado (F1)
									Tornado was on the ground intermittently for a distance of 4 miles from 5 miles south southwest of Maxwell (2 miles southwest of Ft McPherson Cemetery) to 2 miles west southwest of Maxwell near the Platte river. It struck the Marantha Bible Camp downing approximately 160 trees, destroying a small shed, and damaging several vehicles in the parking lot. Tornado then crossed Interstate 80, blew down two large billboards and struck a house 1 mile north of I-80 where a camper was also destroyed. Tornado then did minor damage to another home approximately 1 mile to the north northeast.
<b>Lincoln County</b> 3 ESE North Platte Arpt	13	1656CST	0	0	0	0			Tornado (F0)
									Brief tornado touchdown in open country.
<b>Lincoln County</b> 1 W Brady	13	1702CST	0	0	0	0			Tornado (F0)
									Brief tornado touchdown in open country.
<b>Custer County</b> 2 SW Callaway	13	1750CST	0	0	0	0			Tornado (F0)
									Brief tornado touchdown in open country.
<b>Custer County</b> 5 E Callaway	13	1820CST			0	0			Hail (0.88)
<b>Lincoln County</b> 27 NE North Platte	13	1830CST			0	0			Hail (0.75)
<b>Logan County</b> Stapleton	13	1830CST			0	0	10K		Thunderstorm Wind
									Small shed blown over. Tree branches down.
<b>Grant County</b> 16 SSE Whitman	16	1850MST			0	0			Hail (0.75)
<b>Hooker County</b> 21 SSW Mullen	16	1855MST			0	0	5K		Hail (1.75)
<b>Mcpherson County</b> 19 NW Tryon	16	2015CST			0	0			Hail (1.00)
<b>Garden County</b> 8 NE Oshkosh	16	2115MST			0	0	5K		Hail (0.75)
									Large tree limbs blown down
<b>Thomas County</b> 21 SSE Seneca	16	2115CST			0	0	5K		Hail (1.00)
									Large tree limbs blown down
<b>Grant County</b> 20 SW Hyannis	16	2135MST			0	0			Hail (0.75)
<b>Keith County</b> 17 N Ogallala	16	2155MST			0	0	5K		Hail (1.75)
<b>Arthur County</b> 9 S Arthur	16	2201MST			0	0	5K		Hail (1.75)
<b>Blaine County</b> 8 E Dunning	16	2230CST			0	0	10K		Thunderstorm Wind
									Numerous large tree limbs blown down
<b>Arthur County</b> 15 NE Arthur	16	2245MST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, Central</b>									
<b>Grant County</b> 5 NE Whitman	16	2315MST			0	0			Hail (1.00)
<b>Loup County</b> 7 NW Taylor	16	2330CST			0	0	5K		Hail (1.75)
<b>Garfield County</b> 5 N Burwell	17	0015CST			0	0			Hail (0.75)
<b>Wheeler County</b> 5 NE Ericson	17	0100CST			0	0			Hail (0.75)
<b>Wheeler County</b> 5 SE Ericson	17	1805CST			0	0			Hail (0.75)
<b>Wheeler County</b> 5 NE Ericson	17	1815CST			0	0			Hail (1.50)
<b>Garfield County</b> 15 E Burwell	17	1830CST			0	0	10K		Hail (1.75)
<b>Holt County</b> 11 SE Chambers	17	1840CST			0	0	5K		Hail (0.75)
		Large tree limbs blown down.							
<b>Holt County</b> 2 E Page to 6 NE Page	17	1845CST 1855CST			0	0	200K	150K	Thunderstorm Wind
		Downburst thunderstorm winds struck 5 farmsteads east and northeast of Page damaging or destroying several out buildings. Five center pivot irrigation systems were damaged. Hail accompanying the winds produced extensive crop damage.							
<b>Wheeler County</b> 12 SE Bartlett	17	1905CST			0	0	5K		Hail (0.75)
		Large tree limbs blown down.							
<b>Custer County</b> 12 SSE Mason City	17	1925CST			0	0			Hail (1.50)
<b>Boyd County</b> 3 S Bristow	17	1935CST			0	0	5K		Thunderstorm Wind
		Large tree limbs blown down							
<b>Holt County</b> 17 NNE O Neill	17	1945CST			0	0			Hail (0.75)
<b>Custer County</b> 9 SSW Berwyn	17	2230CST			0	0			Hail (0.75)
<b>Garden County</b> Lisco	21	1420MST			0	0	25K	50K	Hail (1.75)
		Damage to vehicles and buildings in Lisco.							
<b>Garden County</b> 4 W Oshkosh	21	1444MST			0	0	100K	50K	Hail (2.00)
		Extensive damage to vehicles. Windows broken in homes.							
<b>Garden County</b> Oshkosh	21	1500MST			0	0	50K	50K	Hail (1.75)
		Damage to vehicles and buildings in Oshkosh.							
<b>Garden County</b> 15 W Oshkosh	21	1530MST			0	0			Hail (1.00)
<b>Garden County</b> Lisco to Lewellen	21	1600MST 2200MST			0	0	200K		Flash Flood
		Flash flooding along and south of the North Platte river from near Lisco to near Lewellen washed out several county roads with many county roads closed.							
<b>Keith County</b> 12 W Lemoyne	21	1600MST			0	0			Hail (1.00)
<b>Keith County</b> 7 WNW Lemoyne	21	1625MST			0	0	50K		Hail (1.75)
		Damage to vehicles and campers.							
<b>Keith County</b> 8 W Ogallala	21	1630MST			0	0	10K		Hail (1.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, Central</b>									
<b>Garden County</b> 12 S Oshkosh	21	1634MST			0	0			Hail (0.75)
<b>Keith County</b> 7 E Lemoyne	21	1650MST			0	0	15K		Hail (1.50)
Damage to vehicles.									
<b>Keith County</b> 4 E Roscoe	21	1730MST			0	0			Hail (1.00)
<b>Keith County</b> Paxton	21	1735MST			0	0			Hail (1.00)
<b>Lincoln County</b> 10 S North Platte	21	1920CST			0	0			Thunderstorm Wind (G55)
<b>Frontier County</b> Curtis	21	2000CST			0	0	25K		Thunderstorm Wind
Thunderstorm wind estimated at 80 MPH caused extensive tree damage.									
<b>Custer County</b> Broken Bow	23	0145CST			0	0	15K		Thunderstorm Wind
Thunderstorm downburst wind damaged building and fence at fairgrounds.									
<b>Sheridan County</b> 3 ESE Hay Spgs	23	1734MST			0	0			Hail (0.75)
<b>Hooker County</b> 14 WSW Mullen	24	1345MST			0	0			Hail (1.75)
<b>Cherry County</b> 22 WSW Brownlee	24	1403MST			0	0			Hail (1.00)
<b>Hooker County</b> Mullen	24	1425MST			0	0			Hail (0.88)
<b>Cherry County</b> 11 NE Brownlee	24	1540CST			0	0			Hail (0.75)
<b>Garden County</b> 5 S Oshkosh	24	1542MST			0	0			Hail (0.75)
<b>Thomas County</b> Seneca	24	1550CST			0	0			Hail (1.25)
<b>Thomas County</b> 3 W Thedford	24	1555CST			0	0			Hail (1.00)
<b>Garden County</b> Lewellen	24	1602MST			0	0			Hail (1.00)
<b>Cherry County</b> 20 NE Brownlee	24	1620CST			0	0			Hail (0.75)
<b>Sheridan County</b> Hay Spgs	24	1635MST			0	0	5K		Hail (1.75)
<b>Keith County</b> Martin	24	1648MST			0	0			Hail (1.00)
<b>Brown County</b> 31 S Johnstown	24	1700CST			0	0			Hail (1.00)
<b>Sheridan County</b> Rushville	24	1720MST			0	0			Hail (0.88)
<b>Blaine County</b> 9 NNW Brewster	24	1725CST			0	0			Hail (1.00)
<b>Rock County</b> 6 SW Rose	24	1735CST			0	0	5K		Hail (1.75)
<b>Cherry County</b> 35 SSW Merriman	24	1740MST			0	0	5K		Hail (0.75)
Large tree limbs blown down									
<b>Keya Paha County</b> 18 E Springview	24	1750CST			0	0			Hail (0.75)
<b>Rock County</b> 5 NE Newport	24	1750CST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NEBRASKA, Central</u></b>									
<b>Holt County</b> 16 SW Amelia	24	1800CST			0	0	25K	25K	Hail (2.50)
									Tennis ball size hail damaged vehicles, buildings and crops.
<b>Rock County</b> 4 SE Rose	24	1805CST			0	0	50K	25K	Hail (3.50)
									Damage to vehicles and buildings
<b>Holt County</b> 13 N O Neill	24	1835CST			0	0			Hail (0.75)
<b>Boyd County</b> 4 N Bristow	24	1850CST			0	0			Hail (0.75)
<b>Holt County</b> 17 NE O Neill	24	1900CST			0	0			Hail (1.00)
<b>Holt County</b> 22 N O Neill	29	0840CST			0	0			Hail (1.00)
<b>Holt County</b> 33 N O Neill	29	0850CST			0	0	10K		Hail (2.00)
									Damage to buildings and vehicle
<b>Boyd County</b> 4 SSE Lynch	29	0855CST			0	0			Hail (1.00)
<b><u>NEBRASKA, East</u></b>									
<b>Dodge County</b> Dodge	03	0305CST			0	0			Hail (0.75)
<b>Dodge County</b> Snyder	03	0305CST			0	0			Hail (0.75)
<b>Lancaster County</b> 1 E Hickman	08	1544CST			0	0			Hail (1.25)
<b>Sarpy County</b> 1 S La Platte	08	1720CST			0	0			Thunderstorm Wind (G60)
									Large tree limbs blown down.
<b>Washington County</b> Herman	08 09	2306CST 2306CST			0	0			Flash Flood
									Some flooding near homes southwest of Herman. 8 to 12 inches of water flowed over Highway 75.
<b>Cedar County</b> 2 N Randolph	11	1725CST			0	0			Hail (0.88)
<b>Cedar County</b> Randolph	11	1730CST			0	0			Hail (0.75)
<b>Pierce County</b> 10 NE Pierce	11	1730CST			0	0			Hail (0.88)
<b>Wayne County</b> 12 WNW Wayne	11	1750CST			0	0			Hail (0.75)
									Hail partially covered the ground.
<b>Cass County</b> 3 SE Greenwood	11	2048CST			0	0			Funnel Cloud
<b>Sarpy County</b> La Vista	11	2050CST			0	0			Funnel Cloud
<b>Cass County</b> 3 E Eagle	11	2109CST			0	0			Funnel Cloud
<b>Cass County</b> 5 N Manley	11	2110CST			0	0			Hail (1.75)
<b>Jefferson County</b> 3 E Reynolds	13	1758CST			0	0			Funnel Cloud
<b>Jefferson County</b> 1 N Diller	13	1827CST			0	0			Hail (3.00)
<b>Jefferson County</b> 5 NNE Reynolds	13	1830CST			0	0			Funnel Cloud

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, East</b>									
<b>Gage County</b> Blue Spgs	13	1845CST			0	0			Funnel Cloud
<b>Gage County</b> 1 E Liberty	13	1900CST			0	0			Hail (1.75)
<b>Pawnee County</b> 7 SW Burchard	13	1900CST			0	0			Hail (1.75)
<b>Pawnee County</b> 7 SW Burchard	13	1901CST			0	0	5K		Thunderstorm Wind (G60) Roof blown off a barn.
<b>Richardson County</b> Falls City	13	2000CST			0	0			Thunderstorm Wind (G52)
<b>Richardson County</b> Falls City	13	2005CST			0	0			Thunderstorm Wind (G56)
<b>Seward County</b> Utica	13	2049CST			0	0			Thunderstorm Wind (G50) Tree limbs downed.
<b>Saline County</b> 7 SSW Friend	13	2049CST			0	0			Thunderstorm Wind (G50) Tree limbs downed.
<b>Platte County</b> .5 E Columbus	13	2055CST			0	0	10K		Lightning Lightning struck an apartment building and started a fire.
<b>Saline County</b> Tobias	13	2126CST			0	0			Hail (1.50)
<b>Saline County</b> Crete	13	2130CST			0	0			Thunderstorm Wind (G72) Large trees downed and uprooted.
<b>Saline County</b> 2.5 S Western to 2 S Western	13	2138CST			0	0	60K		Thunderstorm Wind (G62) Strong winds downed trees. One trees fell onto a pickup truck causing significant damage. A center pivot irrigation system was damaged two miles south of Western.
<b>Otoe County</b> Nebraska City	13	2145CST			0	0			Thunderstorm Wind (G57) Tree limbs downed.
<b>Saline County</b> 3 W Friend	13	2145CST			0	0			Hail (1.00)
<b>Saline County</b> 2 N Western	13	2150CST			0	0			Hail (1.00)
<b>Saline County</b> 2 S Western	13	2150CST	0.5	50	0	0			Tornado (F0) Large trees uprooted. Fence damaged.
<b>Gage County</b> 3 W Pickrell to 6 W Pickrell	13	2225CST 2250CST			0	0	200K		Thunderstorm Wind (G60) High winds caused damage to several buildings, irrigation systems, and trees.
<b>Lancaster County</b> 2 S Hickman	13	2235CST			0	0			Hail (0.75)
<b>Cass County</b> 5 NW Plattsmouth	13	2325CST			0	0			Flash Flood Water over Highway 75 Platte River Bridge 2-3 feet deep.
<b>Sarpy County</b> 2 S La Platte	13	2325CST			0	0			Flash Flood Water over Highway 75 Platte River bridge 2-3 feet deep.
<b>Otoe County</b> Syracuse	13	2345CST			0	0			Flash Flood Significant street flooding. A trailer park was evacuated.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, East</b>									
<b>Otoe County</b> Nebraska City	13	2345CST			0	0			Flash Flood
		Significant street flooding.							
<b>Otoe County</b> Unadilla	13	2345CST			0	0			Flash Flood
		Significant street flooding.							
<b>Cass County</b> Mynard	14	0000CST			0	0			Flash Flood
		A creek went out of its banks near Mill Road and Church St.. Water flowed over a nearby road to a depth of 8 to 9 inches.							
<b>Boone County</b> Loretto	17	0200CST			0	0			Thunderstorm Wind (G55)
		Power poles downed. Damage to farm buildings. Trees downed.							
<b>Boone County</b> 5 E Petersburg	17	0207CST			0	0	70K		Lightning
		Lightning struck a home causing a fire.							
<b>Boone County</b> 11 SE Raeville	17	0214CST			0	0	100K		Thunderstorm Wind (G68)
		Strong winds lifted a barn up and tossed it into a house.							
<b>Boone County</b> 9 ENE Albion	17	0235CST			0	0			Thunderstorm Wind (G55)
		Power poles downed. Damage to farm buildings and houses. Trees downed.							
<b>Madison County</b> Newman Grove	17	0245CST			0	0			Thunderstorm Wind (G55)
		Power poles downed. Tree damage.							
<b>Stanton County</b> 5 S Pilger	17	0320CST			0	0			Thunderstorm Wind (G55)
		Power poles downed.							
<b>Boone County</b> Petersburg to Loretto	17	1925CST 1940CST			0	0			Thunderstorm Wind (G54)
		Center pivots overturned in Petersburg and Loretto areas							
<b>Boone County</b> 1 SW Petersburg	17	1955CST 2005CST			0	0			Hail (1.75)
		Hail shredded crops.							
<b>Boone County</b> 8 E Petersburg	17	2100CST			0	0			Hail (0.88)
		Hail caused some crop damage in combination with strong winds.							
<b>Boone County</b> 8 E Petersburg	17 18	2130CST 0000CST			0	0			Flash Flood
		Thunderstorms produced heavy rains which forced creeks out of their banks.							
<b>Stanton County</b> Stanton	18	0004CST			0	0			Hail (1.00)
<b>Boone County</b> Petersburg to 10 E Loretto	18	0500CST 0730CST			0	0			Flash Flood
		Heavy rains caused a rapid rise along Shell Creek causing flooding of agricultural lowlands.							
<b>NEZ031</b>	18	0600CST 0930CST			0	0	500K		Flood
		Flooding along the Shell Creek caused significant damage to homes and businesses in the Newman Grove area.							
<b>NEZ042</b>	18	0900CST 1500CST			0	0			Flood
		Heavy upstream rains caused flooding along the Shell Creek. Some damage was reported in the Lindsay area.							
<b>Lancaster County</b> Lincoln	20	1355CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, East</b>									
<b>Lancaster County</b> 3 NE Waverly	20	1401CST			0	0			Hail (0.75)
<b>Lancaster County</b> 5 NE Lincoln	20	1415CST			0	0			Hail (1.00)
<b>Saline County</b> Wilber	20	1415CST			0	0			Hail (0.75)
<b>Gage County</b> 3 S Pickrell	20	1431CST			0	0			Funnel Cloud
<b>Gage County</b> 1 NW Beatrice	20	1432CST			0	0			Funnel Cloud
<b>Saline County</b> 1 NW Wilber	20	1434CST			0	0			Hail (1.50)
<b>Gage County</b> 3 N Beatrice	20	1448CST			0	0			Hail (1.00)
<b>Gage County</b> 4 N Beatrice	20	1455CST			0	0			Funnel Cloud
<b>Lancaster County</b> 2 NE Waverly	20	1509CST			0	0			Hail (1.00)
<b>Otoe County</b> Unadilla	20	1515CST			0	0			Hail (0.75)
<b>Otoe County</b> Unadilla	20	1523CST			0	0			Hail (1.00)
<b>Gage County</b> 1 NW Filley	20	1525CST			0	0			Hail (1.00)
<b>Gage County</b> Filley	20	1533CST			0	0			Hail (1.75)
<b>Pawnee County</b> Burchard	20	1553CST			0	0			Funnel Cloud
<b>Pawnee County</b> 1 S Burchard	20	1605CST	0.2	100	0	0			Tornado (F0)
<b>Otoe County</b> 9 S Nebraska City	20	1622CST			0	0			Hail (1.75)
<b>Stanton County</b> Stanton	23	1810CST			0	0			Hail (2.75)
		Many cars and windows damaged.							
<b>Colfax County</b> 10 SSE Clarkson to 11.5 SSE Clarkson	23	1813CST 1817CST	2	800	0	0			Tornado (F1)
<b>Thurston County</b> 1 N Macy	23	1815CST	0.2	50	0	0			Tornado (F0)
		Tornado touched down in Missouri river bluffs.							
<b>Stanton County</b> Stanton	23	1825CST			0	0			Hail (1.75)
<b>Platte County</b> 5 NE Columbus to 11.5 NE Columbus	23	1825CST 1836CST	6	1760	0	17	4M	500K	Tornado (F2)
		Two farm houses destroyed. Six farm houses severely damaged. One house blown off foundation. Bar destroyed. Center pivot s overturned. Severe crop damage.							
<b>Stanton County</b> 7 S Stanton	23	1830CST			0	0			Thunderstorm Wind (G61)
		3 farmsteads heavily damaged.							
<b>Madison County</b> 2 SE Norfolk	23	1830CST	2	50	0	0			Tornado (F0)
<b>Stanton County</b> 10 NW Stanton	23	1830CST	2	50	0	0			Tornado (F0)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>NEBRASKA, East</b>									
<b>Colfax County</b> 1 N Richland	23	1835CST	2	500	0	0			Tornado (F1)
		Two tornados reported.							
<b>Dodge County</b> Snyder	23	1910CST 1930CST			0	0			Thunderstorm Wind (G68)
		One home lost a roof. Grain bins were blown over.							
<b>Knox County</b> Wausa	23	1915CST			0	0			Hail (4.50)
<b>Knox County</b> Wausa	23	1915CST			0	0			Thunderstorm Wind (G56)
		Large tree limbs downed.							
<b>Colfax County</b> 9 SSW Howells to 9 S Howells	23	1915CST 1919CST	2.8	880	0	0			Tornado (F1)
		Two farm houses destroyed. Eight farm houses damaged.							
<b>Dodge County</b> 10 NW Fremont	23	1924CST			0	0			Funnel Cloud
<b>Seward County</b> Utica	23	1934CST			0	0			Hail (1.75)
<b>Seward County</b> 1 N Utica	23	1945CST			0	0			Hail (2.00)
<b>Seward County</b> 1 NW Staplehurst	23	1945CST			0	0			Hail (1.75)
<b>Cedar County</b> Coleridge	23	1945CST			0	0			Hail (1.75)
<b>Cedar County</b> 5 W Coleridge	23	1945CST			0	0			Hail (1.75)
<b>Colfax County</b> 10 N Schuyler to 11.5 NNE Schuyler	23	1948CST 1953CST	2.7	1000	0	0			Tornado (F2)
		Debris on highway.							
<b>Dodge County</b> 1.5 E Snyder to 4.3 E Snyder	23	2007CST 2012CST	2.8	500	0	0	500K		Tornado (F1)
		Several outbuildings and grain bins destroyed. A house was destroyed. A machine shed destroyed. A chimney was blown off the back porch of a house. Hog barn destroyed.							
<b>Platte County</b> Duncan	23	2008CST 2010CST	2	500	0	0			Tornado (F1)
<b>Butler County</b> 2 W Bruno	23	2010CST			0	0			Thunderstorm Wind (G56)
		Widespread tree damage/limbs downed.							
<b>Saunders County</b> Prague	23	2015CST			0	0			Hail (1.75)
<b>Platte County</b> 4 N Columbus	23	2023CST			0	0			Funnel Cloud
<b>Dodge County</b> 15 NE North Bend	23	2035CST			0	0			Funnel Cloud
		Several reported							
<b>Colfax County</b> Howells	23	2037CST			0	0			Thunderstorm Wind (G53)
<b>Saunders County</b> Cedar Bluffs	23	2040CST			0	0			Hail (0.75)
<b>Dodge County</b> Hooper	23	2100CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, East</b>									
<b>Colfax County</b> Howells	23	2122CST			0	0			Thunderstorm Wind (G53)
<b>Cedar County</b> Coleridge	23	2130CST			0	0			Hail (1.25)
<b>Burt County</b> Oakland	23	2145CST			0	0			Thunderstorm Wind (G56)
		Numerous trees damaged.							
<b>Knox County</b> 5 NW Verdigre	24	1921CST			0	0			Hail (1.75)
<b>Knox County</b> Niobrara	24	1930CST			0	0			Hail (0.88)
<b>Knox County</b> Santee	24	1935CST			0	0			Funnel Cloud
<b>Dodge County</b> Hooper	24	2120CST			0	0			Hail (1.75)
<b>Burt County</b> Craig	24	2132CST			0	0			Thunderstorm Wind (G52)
<b>Pawnee County</b> 3 S Burchard	24	2145CST			0	0			Thunderstorm Wind (G52)
<b>Pawnee County</b> Pawnee City	24	2145CST			0	0			Thunderstorm Wind (G52)
<b>Douglas County</b> 2 W Boys Town	26	0525CST			0	0			Thunderstorm Wind (G65)
		Three foot diameter tree uprooted. Four to five inch diameter limbs off other trees. Pacific Springs area.							
<b>Douglas County</b> 1 NW Boys Town	26	0545CST			0	0			Thunderstorm Wind (G52)
<b>Douglas County</b> 1 NW Boys Town	26	0545CST			0	0			Hail (0.75)
<b>Douglas County</b> 2 W Ralston	26	0545CST			0	0			Hail (0.88)
<b>Douglas County</b> 2.5 N Boys Town	26	0550CST			0	0			Hail (1.00)
<b>Douglas County</b> 2 N Ralston	26	0600CST			0	0			Hail (0.88)
<b>Douglas County</b> 1.5 W Boys Town	26	0600CST			0	0			Hail (1.00)
<b>Washington County</b> Ft Calhoun	26	0632CST			0	0			Hail (1.00)
<b>Saline County</b> Crete	27	1946CST			0	0			Hail (1.00)
<b>Douglas County</b> 2 S Elkhorn	27	1950CST			0	0			Hail (1.50)
<b>Jefferson County</b> Jansen	27	2015CST			0	0			Hail (1.75)
<b>Sarpy County</b> 2 SW Offutt Afb	27	2037CST			0	0			Thunderstorm Wind (G61)
<b>Jefferson County</b> Steele City	27	2045CST	0.5	50	0	0			Tornado (F0)
<b>Cass County</b> Greenwood	27	2107CST			0	0			Funnel Cloud
		2 funnel clouds							
<b>Gage County</b> 3 S Odell	27	2120CST	0.2	50	0	0			Tornado (F0)
<b>Cass County</b> Plattsmouth	27	2130CST			0	0			Thunderstorm Wind (G56)
		Trees and power lines downed.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NEBRASKA, East</u></b>									
<b>Gage County</b> 4 E Odell	27	2133CST			0	0			Hail (1.75)
<b>Pawnee County</b> Pawnee City	28	2238CST			0	0			Hail (1.00)
<b>Knox County</b> 6 S Verdel	29	0900CST			0	0			Hail (0.88)
<b>Knox County</b> Center	29	0925CST			0	0			Thunderstorm Wind (G70) Trees downed. Power outages.
<b>Knox County</b> 1 S Wausa	29	0945CST			0	0			Hail (2.00)
<b>Wayne County</b> Carroll	29	1020CST			0	0			Hail (1.75)
<b>Wayne County</b> Wayne	29	1025CST			0	0			Thunderstorm Wind (G65) Wind damage across much of Wayne county.
<b>Thurston County</b> Pender	29	1045CST			0	0			Thunderstorm Wind (G65)
<b>Burt County</b> .5 NW Lyons	29	1100CST			0	0			Funnel Cloud
<b>Burt County</b> Decatur	29	1112CST			0	0			Hail (0.75)
<b>Seward County</b> Seward	29	1430CST			0	0			Hail (1.75)
<b>Seward County</b> Seward	29	1450CST 1500CST			0	0			Hail (1.75)
<b>Seward County</b> 5 E Utica	29	1450CST	0.2	50	0	0			Tornado (F0) Brief touch down near highway 34
<b>Saline County</b> 4 N Crete	29	1520CST			0	0			Hail (2.00) Car windshields broken.
<b>Lancaster County</b> Roca	29	1530CST			0	0			Hail (1.75)
<b>Lancaster County</b> Bennet	29	1547CST			0	0			Hail (1.00)
<b>Lancaster County</b> Kramer	29	1551CST			0	0			Hail (1.75)
<b>Gage County</b> 5 E Clatonia	29	1610CST			0	0			Hail (1.00)
<b><u>NEBRASKA, Extreme Northeast</u></b>									
<b>Dixon County</b> 4 S Concord	11	1820CST			0	0			Hail (0.75)
<b>Dixon County</b> 6 E Wakefield	23	1845CST			0	0			Hail (1.00)
<b>Dakota County</b> Emerson	23	1848CST			0	0			Hail (1.75)
<b>Dakota County</b> 6 W Dakota City	23	1924CST			0	0			Hail (1.00)
<b>Dixon County</b> 7 S Concord	29	1020CST			0	0			Hail (0.75)
<b>Dakota County</b> 1 NW Jackson	29	1034CST			0	0			Thunderstorm Wind (G52)
<b>Dakota County</b> 4 SE Homer	29	1048CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## NEBRASKA, Extreme Northeast

Thunderstorm winds caused tree damage with 3 inch diameter limbs broken off.

## NEBRASKA, Extreme Southwest

NEZ079>081

**Dundy - Hitchcock - Red Willow**

06	0300CST								
	0800CST			0	0				<b>Extreme Cold</b>

Record cold early morning temperatures with lows near or slightly below freezing in most locations. Tender crops and garden suffered unknown damage. It was the coldest for so late in the season at a few locations.

**Dundy County**

1 S Benkelman to  
Benkelman

07	1730MST								
				0	0	50K			<b>Thunderstorm Wind (G70)</b>

Thunderstorm winds estimated to 80 mph rolled a steel roof from building, downed branches 6-10 inches in diameter, destroyed a porch deck, broke windows at an auto dealership, and downed a 2 foot diameter tree.

NEZ079>081

**Dundy - Hitchcock - Red Willow**

13	1600CST								
	1800CST			0	0				<b>High Wind (G61)</b>

High winds estimated to 70 mph damaged houses, trees, and blew over tents.

**Dundy County**

Parks

22	2315MST								
	2325MST			0	0				<b>Hail (1.75)</b>

**Hitchcock County**

5 W Stratton

23	0025CST								
				0	0				<b>Thunderstorm Wind (G61)</b>

70 mph thunderstorm wind gust estimated by spotter.

**Hitchcock County**

Trenton

23	0050CST								
				0	0				<b>Thunderstorm Wind (G61)</b>

Several large branches broken.

## NEBRASKA, South Central

NEZ082-082>083-  
083>084-084>085-085

**Furnas - Harlan - Franklin - Webster**

04	0300CST								
	1000CST			0	0	0	40K		<b>Extreme Cold</b>

A very unusual post-Memorial Day frost and freeze left its mark on crops across a small part of south-central Nebraska. The most concentrated area of damaged fields stretched along the Republican River from Red Cloud to Cambridge. Nearly every community along the river reported overnight low temperatures for the 4th and 5th near 32 degrees. Low lying areas near the river's edge dropped into the upper 20s under the clear sky. The result was damaged leaves on several thousand acres of corn and soybeans. Fortunately, in most cases, the growing point of the plants was not damaged enough to stop plant growth. After the frost, warmer and wet weather provided nearly ideal conditions for the crops to rebound to normal with very little, if any, yield loss expected.

**Furnas County**

Edison

08	1540CST								
				0	0	0	0		<b>Hail (0.75)</b>

**Furnas County**

7 E Beaver City

08	1550CST								
				0	0	0	0		<b>Hail (0.75)</b>

**Harlan County**

Stamford

08	1600CST								
				0	0	0	0		<b>Hail (0.75)</b>

**Gosper County**

Elwood

09	2315CST								
				0	0	5K	75K		<b>Hail (1.75)</b>

**Buffalo County**

Kearney

10	0605CST								
				0	0	0	0		<b>Hail (0.75)</b>

**Phelps County**

2 S Holdrege

10	0635CST								
				0	0	0	25K		<b>Hail (1.00)</b>

**Adams County**

4 N Hastings

10	0655CST								
				0	0	0	0		<b>Hail (0.75)</b>

**Adams County**

Kenesaw

10	0700CST								
				0	0	0	25K		<b>Hail (1.00)</b>

**Clay County**

Trumbull

10	0715CST								
				0	0	5K	75K		<b>Hail (1.75)</b>

**Clay County**

4 N Harvard

10	0743CST								
				0	0	0	25K		<b>Hail (1.00)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, South Central</b>									
<b>Fillmore County</b>									
2 W Shickley	10	0745CST			0	0	5K	75K	Hail (1.75)
Thunderstorms intensified just after sunrise and rumbled east across south-central Nebraska. Many reports of hail were received with the largest in the Trumbull area. Some minor crop damage was reported. Widespread one to three inch rainfall was measured causing some minor street flooding in Hastings.									
<b>Franklin County</b>									
6 S Franklin	13	1545CST			0	0	5K	100K	Hail (1.75)
<b>Franklin County</b>									
1 E Riverton	13	1620CST			0	0	5K	100K	Hail (1.75)
<b>Webster County</b>									
1 S Red Cloud	13	1625CST			0	0	15K	300K	Hail (2.75)
<b>Gosper County</b>									
5 S Elwood	13	1627CST			0	0	10K	200K	Hail (2.75)
<b>Gosper County</b>									
1 SW Elwood to 5 NE Elwood	13	1640CST 1655CST	7	75	0	4	500K	250K	Tornado (F1)
<b>Webster County</b>									
3 E Guide Rock	13	1643CST			0	0	5K	100K	Hail (1.75)
<b>Webster County</b>									
8 SE Red Cloud	13	1645CST			0	0	50K	300K	Hail (4.50)
<b>Clay County</b>									
6 SE Clay Center	13	1655CST			0	0	50K	100K	Thunderstorm Wind (G52)
<b>Clay County</b>									
1 NE Deweese	13	1700CST			0	0	200K	200K	Thunderstorm Wind (G70)
<b>Clay County</b>									
2 S Fairfield	13	1700CST			0	0	200K	200K	Thunderstorm Wind (G70)
<b>Dawson County</b>									
Lexington	13	1700CST			0	0	0	0	Hail (1.00)
<b>Nuckolls County</b>									
Nelson	13	1705CST			0	0	75K	200K	Hail (2.75)
<b>Nuckolls County</b>									
2 N Bostwick to 2.5 N Bostwick	13	1708CST 1709CST	0.5	20	0	0	0	50K	Tornado (F0)
<b>Nuckolls County</b>									
Superior	13	1715CST			0	0	75K	200K	Thunderstorm Wind (G70)
<b>Buffalo County</b>									
1 SE Odessa to 1 E Odessa	13	1725CST 1727CST	1	25	0	0	0	50K	Tornado (F0)
<b>Hall County</b>									
Cairo	13	1729CST			0	0	5K	100K	Thunderstorm Wind (G62)
<b>Thayer County</b>									
Deshler	13	1740CST			0	0	10K	200K	Hail (1.75)
<b>Thayer County</b>									
1 E Chester to 1 SE Chester	13	1745CST 1747CST	1	25	0	0	150K	50K	Tornado (F0)
<b>Adams County</b>									
Kenesaw	13	1752CST			0	0	0	0	Hail (1.00)
<b>Buffalo County</b>									
Ravenna	13	1838CST			0	0	0	100K	Hail (0.75)
<b>Dawson County</b>									
Cozad	13	1850CST			0	0	0	0	Hail (1.00)
<b>Sherman County</b>									
Rockville	13	1850CST			0	0	5K	300K	Hail (1.50)
<b>Buffalo County</b>									
Gibbon	13	1855CST			0	0	700K	100K	Thunderstorm Wind (G69)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, South Central</b>									
<b>Kearney County</b> 8 N Minden	13	1901CST			0	0	0	0	Hail (0.75)
<b>Adams County</b> 3 S Ayr	13	1932CST			0	0	5K	0	Thunderstorm Wind (G62)
<b>Adams County</b> Hastings	13	1950CST			0	0	0	0	Hail (0.75)
<b>Clay County</b> 2 W Clay Center	13	2020CST			0	0	125K	700K	Hail (1.75)
<b>Clay County</b> 6 SE Clay Center	13	2036CST			0	0	25K	700K	Hail (1.75)
<b>Fillmore County</b> 10 W Geneva	13	2051CST			0	0	0	0	Hail (0.75)
<b>York County</b> Mc Cool Jet	13	2052CST			0	0	0	0	Thunderstorm Wind (G52)
<b>Fillmore County</b> 3 W Geneva	13	2110CST			0	0	0	0	Hail (0.75)
<b>Hall County</b> Grand Is	13	2220CST			0	0	0	0	Hail (0.75)
<b>Merrick County</b> Central City	13	2330CST			0	0	0	0	Hail (0.75)
<p>A warm front lifting north and a strong jet stream played a key role in the eruption of severe thunderstorms in the late afternoon in south-central Nebraska. Large hail, damaging thunderstorm winds and two tornadic thunderstorms caused millions of dollars in damage.</p> <p>The first tornadic thunderstorm occurred in northern Gosper county just outside of the town of Elwood. The tornado sat down to the southwest of Elwood then travelled east. After a mile, the tornado turned and travelled due north. It hit one farmstead, heavily damaging the home and totally destroying several outbuildings. The path of the tornado when right down the middle of US highway 283. A truck driver and a family of three were travelling north of Elwood when they realized the tornado was heading toward them. They abandon their vehicles and sought cover in a ditch. The tornado passed nearly overhead but the four survived with only minor injuries. The one car was totalled and the semi-truck, loaded with ice cream, was heavily damaged. The cargo was a total loss. This same severe thunderstorm marched northeast and dropped another brief tornado just southeast of Odessa but no significant damage was reported.</p> <p>Another severe thunderstorm, which began in Smith county, Kansas, moved just north of the stateline and produced at least two confirmed touchdowns. One was reported two miles north of Bostwick but did little damage. Another tornado passed just to the southeast of Chester and damaged a farmstead. The tornado sat down about a mile east of town then travelled southeast. Damage at the farm was mainly confined to a couple of outbuildings. The people in the farm house were not injured. At least 25 center irrigation pivots were lost to the storm. Damaging baseball sized hail was noted in Nelson and near Red Cloud. Hail to the size of soft balls was reported eight miles southeast of Red Cloud.</p> <p>In Clay county, residents were nailed twice with strong winds and hail during the evening. The first occurred near 6 pm as 60 to 80 mph winds roared across the county. The winds were likely outflow from the severe thunderstorm just to the south of the area. At least two farmsteads had out building damage and tree damage was significant. About three hours later, a different severe thunderstorm dumped golf ball sized hail while producing 60+ mph winds in central Clay county. Many vehicles in Clay Center were damaged and 25 windows were shattered in the Courthouse. Corn and soybean loss totalled over two million dollars as some crops were levelled by the wind and hail.</p>									
<b>Buffalo County</b> Ravenna	17	1710CST			0	0	5K	200K	Hail (1.50)
<b>Sherman County</b> Ashton	17	1710CST			0	0	5K	300K	Hail (1.75)
<b>Buffalo County</b> Poole	17	1730CST			0	0	25K	700K	Thunderstorm Wind (G61)
<b>Sherman County</b> 4 NW Rockville	17	1733CST			0	0	5K	300K	Hail (1.75)
<b>Greeley County</b> Scotia	17	1737CST			0	0	10K	3M	Hail (1.75)
<b>Buffalo County</b> Riverdale	17	1755CST			0	0	5K	300K	Hail (1.75)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, South Central</b>									
<b>Harlan County</b> Stamford	17	1815CST			0	0	5K	400K	Hail (1.75)
<b>Howard County</b> 1 E Dannevirke	17	1833CST			0	0	0	50K	Hail (1.00)
<b>Howard County</b> 4 N St Paul	17	1841CST			0	0	0	0	Thunderstorm Wind (G60)
<b>Greeley County</b> Scotia	17	1845CST			0	0	5K	3M	Hail (1.75)
<b>Sherman County</b> Ashton	17	1900CST			0	0	0	1M	Hail (1.00)
<b>Howard County</b> Elba	17	1912CST			0	0	40K	1.5M	Hail (1.75)
<b>Buffalo County</b> Miller	17	1915CST			0	0	5K	150K	Hail (1.75)
<b>Gosper County</b> Elwood	17	1924CST			0	0	0	0	Hail (0.88)
<b>Dawson County</b> Overton	17	1930CST			0	0	0	0	Hail (0.88)
<b>Gosper County</b> 3 S Elwood	17	1940CST			0	0	0	50K	Hail (1.00)
<b>Greeley County</b> Greeley	17	1945CST			0	0	5K	2M	Hail (1.00)
<b>Gosper County</b> Johnson Res	17	1953CST			0	0	0	0	Hail (0.88)
<b>Dawson County</b> 10 NE Lexington	17	2020CST			0	0	5K	200K	Hail (1.25)
<b>Sherman County</b> Ashton	17	2100CST			0	0	0	2M	Hail (1.00)
<b>Dawson County</b> Cozad	17	2138CST			0	0	5K	250K	Hail (1.25)
Severe Thunderstorms ripped across south-central Nebraska dropping large hail, very heavy rains and producing wind gusts to 70 mph. South of Ravenna, several hog sheds on a farmstead were destroyed by high winds. Corn and soybean crops in the area were heavily damaged. The swath of destructive hail moved northeast across northwest Howard, northeast Sherman, southeast Valley and the southern half of Greeley counties. In this area, over 400,000 acres of alfalfa, corn and soybeans were damaged. Up to 70 percent damage was reported in Greeley county. Near Elba, hail and wind broke windows and damaged homes. In addition to the hail and wind, heavy rainfall in excess of 6 inches was reported near Scotia. Widespread 1 to 4 inch rains were reported elsewhere.									
<b>Sherman County</b> Loup City	23	0322CST			0	0	0	0	Thunderstorm Wind (G52)
<b>Fillmore County</b> 5 E Geneva	23	1818CST			0	0	5K	75K	Hail (1.75)
<b>Webster County</b> Guide Rock	23	1830CST			0	0	15K	125K	Hail (2.75)
<b>Adams County</b> 9 S Hastings	23	1845CST			0	0	5K	75K	Hail (1.75)
<b>Clay County</b> 1 W Edgar	23	1853CST			0	0	0	50K	Hail (1.50)
<b>Clay County</b> Glenville	23	1855CST			0	0	0	50K	Hail (1.50)
<b>Fillmore County</b> 3 W Grafton	23	1920CST			0	0	1K	0	Thunderstorm Wind (G52)
<b>York County</b> Mc Cool Jet	23	1920CST			0	0	0	0	Hail (0.75)
<b>Polk County</b> 3 NE Shelby	23	1930CST			0	0	30K	200K	Hail (2.75)
<b>York County</b> 3 N Benedict	23	1941CST			0	0	0	0	Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, South Central</b>									
<b>Polk County Stromsburg</b>	23	1947CST			0	0	30K	200K	Hail (2.75)
<b>Polk County Osceola</b>	23	1952CST			0	0	5K	50K	Hail (1.00)
									Severe Thunderstorms dumped heavy rain and large hail across a section of south-central Nebraska. Baseball sized hail was reported at Guide Rock, Stromsburg and near Shelby. Despite the hail, reports of significant damage were limited to the Polk county area where windows were broken and siding was damaged by the large hail. A trailer loaded with irrigation pipe was overturned just west of Grafton.
<b>Thayer County Gilead</b>	27	2000CST			0	0	0	40K	Hail (0.88)
<b>Polk County Stromsburg</b>	29	1409CST			0	0	100K	150K	Hail (1.50)
<b>York County Gresham</b>	29	1435CST			0	0	75K	200K	Hail (2.75)
									Severe thunderstorms in the mid afternoon dropped large hail across southern Polk and northern York counties. Near Stromsburg, several reports of car and roof damage were received. Windows were knocked out of some homes. Hail to the size of baseballs was reported in northeast York county.
<b>NEBRASKA, West</b>									
<b>Banner County 13 SW Harrisburg</b>	09	1513MST 1524MST			0	0	0	21K	Tstm Wind/Hail
									High winds and pea to quarter size hail battered crops across Banner County. The hail accumulated up to 2 inches in Banner County and one farmer said that whatever survived the beating from the hail didnt survive getting frozen. Another farmer recorded peak wind gusts up to 63 mph.
<b>Kimball County 20 W Kimball to 14.5 W Kimball</b>	09	1600MST 1604MST	0.5	10	0	0	0	0	Tornado (F0)
									A brief tornado was reported west of Kimball, but quickly dissipated.
<b>Cheyenne County 17 SE Sidney</b>	10	1643MST 1649MST			0	0	6K	0	Hail (1.75)
									A storm produced golfball size hail over southeast Cheyenne County.
<b>Morrill County 3 W Broadwater</b>	11	1505MST 1512MST			0	0	3K	0	Hail (1.00)
									A storm produced quarter size hail 3 miles west of Broadwater.
<b>Cheyenne County 30 W Sidney</b>	13	1347MST 1349MST	0.1	10	0	0	0	0	Tornado (F0)
									A brief tornado touched down 30 miles west of Sidney.
<b>Box Butte County 12 W Hemingford</b>	13	1422MST 1428MST			0	0	0	0	Hail (0.75)
<b>Box Butte County 4 SW Hemingford</b>	13	1432MST 1440MST			0	0	0	0	Hail (0.75)
<b>Cheyenne County 15 NE Sidney</b>	21	1605MST 1645MST			0	0	0	0	Urban/Sml Stream Fld
									Spotters reported rainfall amounts of 2 to 2 1/2 inches , 15 miles northeast of Sidney. Water up to a depth of three inches covered some roads.
<b>Scotts Bluff County 1.5 N Mitchell to 1.5 NNE Mitchell</b>	22	1826MST 1830MST	1	10	0	0	0	0	Tornado (F0)
									A brief tornado touched down north of Mitchell.
<b>Scotts Bluff County Morrill</b>	22	1857MST 1908MST			0	0	0	0	Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA, West</b>									
<b>Scotts Bluff County</b> Mitchell	22	1930MST			0	0	6K	0	Tstm Wind/Hail
									A storm produced strong wind gusts which broke large tree limbs in Mitchell. The storm also produced quarter size hail.
<b>Box Butte County</b> 8 SSW Alliance	22	1930MST 1933MST			0	0	5K	0	Thunderstorm Wind (G52)
									Strong thunderstorm winds up to 62 mph knocked down 2 power poles 8 miles south-southwest of Alliance. The poles were broke off at ground level and caused a brief power outage for customers in the immediate area.
<b>Morrill County</b> 6 E Bridgeport	23	1615MST 1624MST			0	0	0	0	Hail (0.75)
<b>Morrill County</b> 5 N Broadwater	23	1700MST 1704MST			0	0	6K	3K	Hail (1.75)
									A storm produced golf ball size hail 5 miles north of Broadwater.
<b>Box Butte County</b> Hemingford	23	1722MST 1733MST			0	0	0	0	Hail (0.75)
<b>Box Butte County</b> 10 NE Hemingford	23	1734MST 1739MST			0	0	0	0	Hail (0.88)
<b>Dawes County</b> Crawford	24	1456MST 1459MST			0	0	6.5K	4K	Hail (1.50)
									A storm produced walnut size hail in Crawford.
<b>Dawes County</b> 10 SW Chadron	24	1545MST 1548MST			0	0	4K	0	Hail (1.66)
									A storm produced ping pong ball size hail 10 miles southwest of Chadron.
<b>Dawes County</b> 9 S Chadron	24	1550MST 1554MST			0	0	0	2K	Hail (1.00)
									A storm produced quarter size hail 9 miles south of Chadron.
<b>NEVADA, North</b>									
<b>Elko County</b> (Eko)Harris Fld Elko	02	1230PST 1231PST			0	0			Thunderstorm Wind (G54)
									Microburst winds from a thunderstorm gusted to 60 mph. No damage was reported.
<b>Elko County</b> Ruby Vly	03	1623PST 1628PST			0	0			Funnel Cloud
									Two brief funnel clouds were reported east of Franklin Lake.
<b>Elko County</b> Wells	08	1000PST 1005PST	1	15	0	0			Tornado (F0)
									A brief weak tornado touched down southeast of Wells. No damage was reported.
<b>Lander County</b> Battle Mtn	22	1340PST 1345PST			0	0			Hail (0.75)
									A severe thunderstorm dropped dime size hail on the city of Battle Mountain.
<b>White Pine County</b> Ely	23	1155PST 1200PST	0.2	.2	0	0			Tornado (F0)
									A brief weak tornado touched down over Mosier Canyon , about 5 miles southeast of downtown Ely. No damage was reported as this occurred over open country.
<b>Lander County</b> Battle Mtn	23	1400PST 1405PST			0	0			Hail (1.00)
									A severe thunderstorm dropped golf ball size hail on the city of Battle Mountain.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEVADA, North

**Elko County**  
**Pequop**

23	1545PST 1550PST				0	0			<b>Hail (0.75)</b>
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A severe thunderstorm dropped dime size hail on Pequop Summit on Interstate 80. Hail covered roadway causing traffic accident.

**Lander County**  
**Argenta Siding**

23	1700PST 1710PST				0	1			<b>Hail (0.75)</b>
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A severe thunderstorm dropped dime size hail on Interstate 80 at the Argenta exit east of Battle Mountain. The hail accumulated to a depth of several inches causing an injury accident.

## NEVADA, South

**NVZ020>021**

<b>Las Vegas Valley - Lake Mead/Lake Mohave National Recreation Area</b>									
16	2030PST 2045PST				0	0	20K		<b>High Wind (G61)</b>

Strong northwest winds swept across extreme southern Nevada with a powerful cold front and reached speeds of 70 mph in the Lake Mead Recreation Area. Docks were damaged at Boulder Beach and Temple Bar and several sea and air rescues had to be performed to reach stranded boaters at Lake Mead. Downed trees and power outages were reported in the Las Vegas Valley.

## NEVADA, West

**Lyon County**  
**6 S Fernley**

11	1100PST 1105PST	0	0		0	0			<b>Tornado (F0)</b>
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Public report of a tornado 6 miles south of Fernley, NV. Report confirmed by Lyon County Sheriff. Tornado in open country. Path width and length were unknown. No damage reported.

**Lyon County**  
**Fernley**

11	1126PST 1131PST	0	0		0	0			<b>Tornado (F0)</b>
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A second tornado was reported by a pilot south of the Fernley airport. This tornado was also in open country. Path width and length were unknown. No damage reported.

**Churchill County**  
**Dixie Vly**

12	1214PST 1215PST				0	0			<b>Funnel Cloud</b>
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A pilot from the Fallon Naval Air Station reported a brief funnel cloud over State Highway 121 in Dixie Valley.

## NEW HAMPSHIRE, North and Central

NOT RECEIVED.

## NEW HAMPSHIRE, Southern

**Cheshire County**  
**Nelson**

03	0030EST				0	0			<b>Thunderstorm Wind (G50)</b>
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A thunderstorm just after midnight brought damaging winds to Nelson in Cheshire County. Trees, limbs, and telephone poles were reported blown down and small hail occurred. Time is very approximate.

**Hillsborough County**  
**Pelham**

14	1500EST				0	0			<b>Flood</b>
15	0700EST								

**NHZ012**

<b>Hillsborough</b>									
16	2000EST				0	0			<b>Flood</b>
18	2300EST								

The Beaver Brook in Pelham reached flood stage at 4 PM on June 14th and continued in flood through 8 AM on June 15th. The Merrimack River reached flood stage of 11 feet at Goffs Falls at 9 PM on June 16th, crested at 12.45 feet at 7 PM on June 17th, then dropped below flood stage at midnight at the end of the day June 18th.

**Hillsborough County**  
**Manchester**

19	1416EST				0	0	5K		<b>Lightning</b>
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A chimney exploded on a row house in Manchester sending bricks flying to earth, damaging a parked van and another vehicle.

## NEW JERSEY, Northeast

**Essex County**  
**Maplewood**

01	0000EST				0	0	90K		<b>Lightning</b>
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As thunderstorms moved over the area, they produced frequent lightning, wind gusts up to 40 mph, and brief downpours.

Lightning caused a circuit overload which sparked a fire in the basement at 8 Lombardi Place in Maplewood. The fire quickly

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW JERSEY, Northeast

spread to the front of the house and caused significant damage. A Maplewood patrolman rescued six people from the house.

<b>Hudson County Countywide</b>	13	0930EST			0	0			<b>Heavy Rain</b>
	14	1400EST							
<b>Union County Countywide</b>	13	0930EST			0	0			<b>Heavy Rain</b>
	14	1400EST							
<b>Bergen County Countywide</b>	13	0950EST			0	0			<b>Heavy Rain</b>
	14	1200EST							
<b>Essex County Countywide</b>	13	1000EST			0	0			<b>Heavy Rain</b>
	14	1400EST							
<b>Passaic County Countywide</b>	13	1000EST			0	0			<b>Heavy Rain</b>
	14	0900EST							

A low pressure system over the Great Lakes on Saturday, June 13th moved southeast and redeveloped just south of New York City Sunday morning, June 14th. It then moved east of the area during Sunday.

Rain began across the area at the start of midnight on Friday, June 12th and didn't end until Sunday afternoon. There were two bursts of heavy rain during this 3 day period, which saw rainfall amounts from 1 to 4 inches across the region. On Saturday, one of these heavy rain bursts, which was associated with a line of thunderstorms, caused widespread flash flooding of streets, low-lying and poor drainage areas, and basements in Bergen, Essex, and Hudson Counties.

Here are selected rainfall amounts for:

- o Passaic County - from 1.36 inches at West Milford to 3.88 inches at Wayne.
- o Bergen County - from 1.39 inches at Carlstadt to 2.71 inches at Woodridge.
- o Essex County - from 1.49 inches at Essex Fells to 2.68 inches at Newark Airport.
- o Hudson County - At Harrison, a spotter measured 2.50 inches.
- o Union County - from 1.12 inches at Chatham to 3.06 inches at Elizabeth.

<b>Hudson County Countywide</b>	13	1042EST			0	0			<b>Flash Flood</b>
<b>Bergen County Garfield</b>	13	1050EST			0	0			<b>Lightning</b>
<b>Bergen County Rutherford</b>	13	1050EST			0	0			<b>Flash Flood</b>
<b>Bergen County Leonia</b>	13	1052EST			0	0			<b>Lightning</b>
<b>Essex County West Orange</b>	13	1100EST			0	0			<b>Flash Flood</b>

Preceded by a steady light to occasionally moderate rainfall, a line of thunderstorms developed and moved east over the area. Thunderstorms produced torrential flash flooding rains and frequent lightning.

Torrential rains resulted in widespread serious flooding of streets, poor drainage and low-lying areas, and home basements. Lightning struck homes and ignited fires that damaged them.

In both Hudson and Bergen Counties, up to 3 feet of water inundated streets and damaged many cars. Flooding caused manhole covers to pop in Rutherford. In West Orange, a river of water flowed into and damaged homes on Nestro Road.

In Garfield, a house was hit by lightning that ignited a fire and caused minor structural and smoke damage. Another house was

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW JERSEY, Northeast

struck by lightning in Leonia.

<b>Bergen County Northvale</b>	17	1910EST							<b>Lightning</b>
<b>Bergen County River Vale</b>	17	1912EST							<b>Lightning</b>

As thunderstorms moved east across the area, they produced frequent lightning strikes, brief heavy downpours, and gusty winds.

Lightning struck houses and trees. In Bergen County, the following four houses were struck by lightning, which resulted in fires:

- o 5 Herman Street in Northvale.
- o Cedar Lane and Fords Ave. in River Vale.
- o 44 Crosley Place in Hillsdale.
- o 39 Moeser Place in Old Tappan.

The extent of damage is unknown. Trees were struck in Emerson and in North Arlington.

<b>Essex County Newark Arpt</b>	20	1805EST							<b>Lightning</b>
<b>Union County Scotch Plains</b>	20	1829EST							<b>Lightning</b>

As thunderstorms moved over the area, they produced frequent lightning, small hail, and heavy rain.

At Newark Airport, 2 officers were injured when lightning hit the Port Authority Car they were in. Both officers suffered hearing losses.

At Scotch Plains, lightning struck 2 houses. One house sustained fire damage.

<b>Essex County Summit to Millburn</b>	30	1840EST 1842EST							<b>Thunderstorm Wind (G61)</b>
<b>Union County Garwood</b>	30	1845EST							<b>Thunderstorm Wind (G58)</b>
<b>Essex County Bloomfield to Montclair</b>	30	1848EST 1850EST							<b>Thunderstorm Wind (G55)</b>
<b>Bergen County Woodridge</b>	30	1858EST							<b>Thunderstorm Wind (G50)</b>
<b>Union County Westfield</b>	30	1900EST							<b>Thunderstorm Wind (G55)</b>
<b>Hudson County Harrison to Bayonne</b>	30	1904EST 1915EST							<b>Thunderstorm Wind (G55)</b>
<b>Union County Hillside to Union</b>	30	1904EST 1915EST							<b>Thunderstorm Wind (G55)</b>
<b>Passaic County Wayne</b>	30	1910EST							<b>Thunderstorm Wind (G55)</b>

As severe thunderstorms moved across the area, they produced high winds.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
				Killed	Injured	Property	Crops	

## NEW JERSEY, Northeast

In Essex County, wind gusts were measured at 70 mph in Millburn and 65 mph at Summit. High winds downed trees in Bloomfield and Montclair.

In Union County, high winds downed trees in Westfield, Hillside, and Union. A tree fell on a house in Hillside. Power lines were also downed in Union.

In Bergen County, high winds downed power lines.

In Hudson County, high winds downed trees in Harrison and trees and power lines in Bayonne.

In Passaic County, high winds downed trees in Wayne.

## NEW JERSEY, South and Northwest

### **Salem County Harmersville to Woodstown**

<b>01</b>	<b>0018EST</b>		<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G55)</b>
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A squall line of severe thunderstorms produced wind damage mainly across the western half of Salem County. The greatest damage occurred in Carneys Point Township. Dozens of trailers and vehicles were damaged by downed trees within Handy's Trailer Park. Numerous trees were uprooted in Pennsville Township. Trees and wires were also knocked down in Woodstown, Lower Alloways Creek, Pilesgrove and Upper Pittsgrove Township. At least several vehicles and homes were damaged by the fallen trees.

### **Gloucester County Woodbury to Harrisonville**

<b>01</b>	<b>0018EST 0030EST</b>		<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G55)</b>
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A squall line of severe thunderstorms caused wind damage in western Gloucester County, especially in the municipalities on or near the Delaware River. The hardest hit were Deptford, National Park, West Deptford and Woolwich. Emergency personnel responded to around 85 calls of downed trees in the county. The thunderstorm winds tore the roof from a business in Westville Borough. In Woolwich Township, a home under construction was knocked over. Trees damaged a few other homes within the township. Trees also damaged homes in National Park Borough and Woodbury. Downed trees were reported as far east as South Harrison Township. About 74,000 Public Service Electric and Gas customers lost power during the height of the storm throughout their service area. Most of the outages though were in Burlington, Camden and Gloucester Counties. There were still 32,500 customers without power the evening of the first. All power was restored the morning of the second. Connecticut Energy also reported that 20,000 customers lost power in their southern New Jersey service area including Gloucester County. Several school districts had to cancel classes because of the outages on June 1st.

### **Mercer County Countywide**

<b>01</b>	<b>0025EST 0040EST</b>		<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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A squall line of severe thunderstorms produced widely scattered pockets of wind damage throughout Mercer County. Trees were uprooted and power was knocked out in Ewing, Hamilton, Lawrence and Princeton Townships.

### **Camden County Merchantville to Chesilhurst**

<b>01</b>	<b>0025EST 0035EST</b>		<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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### **Camden County Cherry Hill**

<b>01</b>	<b>0030EST</b>		<b>0</b>	<b>0</b>	<b>Hail (0.88)</b>
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A squall line of severe thunderstorms produced scattered pockets of wind damage throughout the county. Trees, tree limbs and power lines were reported knocked down. Hardest hit communities included Runnemede and Merchantville. In addition to 60 mph wind gusts, nickel size hail also fell in Cherry Hill. Public Service Electric and Gas reported 74,000 customers lost power during the storm. Most were in Burlington, Camden and Gloucester Counties. There were still 32,500 customers without power during the evening of June 1st. All power was restored by the morning of the second.

### **Burlington County Palmyra to Presidential Lakes**

<b>01</b>	<b>0030EST 0100EST</b>		<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G64)</b>
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A squall line of severe thunderstorms caused pockets of wind damage throughout the northwest half of Burlington County. Hardest hit were the riverfront townships. There was a second burst of wind damage inland in Evesham, Medford, Pemberton and Southampton Townships. Pemberton Township declared a local state of emergency as twelve roads within the township were closed and most of the town was without power. A peak wind gust of 74 mph was reported at McGuire Air Force Base. Eight

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## NEW JERSEY, South and Northwest

school districts cancelled classes because of power outages. Power outages also affected two of the county's hospitals and cancelled the morning court session in Mount Holly.

In Palmyra, numerous trees were knocked down, especially along Morgan Avenue. A porch of one home was damaged by a fallen tree. In Willingboro, a tree crushed a garage and numerous trees were knocked down, especially in the Martin's Beach area. In Burlington Township, at least one vehicle was damaged by fallen trees. The thunderstorm tore a metal roof away and knocked down wires in twenty different locations. In Springfield Township, a barn collapsed after its roof was blown off. Debris was scattered up to 3,000 feet. In Pemberton Township, twelve main roads were blocked by fallen trees. An elderly couple was trapped in their mobile home, several roofs were damaged in the Country Lakes area, the Browns Mills Fire Station was damaged and most of the downtown area was blacked out. Numerous trees were knocked down in the Hoot Owl section of Medford Township. Minor wind damage was also reported in Lumberton and Mount Laurel Townships. About 74,000 Public Service Electric and Gas customers lost power during the height of the storm throughout their service area. Most of the outages though were in Burlington, Camden and Gloucester Counties. There were still 32,500 customers without power the evening of the first. All power was restored the morning of the second.

### **Cumberland County Bridgeton**

<b>01</b>	<b>0040EST</b>	<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G55)</b>
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A squall line of severe thunderstorms produced wind damage in western parts of Cumberland County. Hardest hit was Hopewell Township with numerous trees down. Some of the downed trees damaged the roofs of several homes. Some car windows were broken also. About 1,000 homes and businesses lost power in the western part of the county including the Bridgeton area.

### **Atlantic County Hammonton**

<b>01</b>	<b>0045EST</b>	<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G50)</b>
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A line of severe thunderstorms uprooted several trees, broke some street signs and twisted flag poles in Atlantic County. Hammonton was one of the harder hit communities with several trees damaging properties. Connectiv Energy reported that 20,000 customers lost power in their southern New Jersey service area including Atlantic County.

### **Burlington County Mc Guire Afb**

<b>01</b>	<b>0048EST</b>	<b>0</b>	<b>0</b>		<b>0</b>		<b>Thunderstorm Wind (G64)</b>
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### **Burlington County Chatsworth**

<b>01</b>	<b>0104EST</b>	<b>0</b>	<b>0</b>				<b>Hail (0.75)</b>
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### **Ocean County Whiting to Seaside Park**

<b>01</b>	<b>0105EST 0120EST</b>	<b>0</b>	<b>4</b>				<b>Thunderstorm Wind (G69)</b>
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### **Ocean County Beachwood**

<b>01</b>	<b>0120EST</b>	<b>0</b>	<b>0</b>		<b>0</b>		<b>Lightning</b>
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A squall line of severe thunderstorms produced wind damage across the northern half of Ocean County. The damage was most extensive in Berkeley and Dover Townships as straight line wind gusts exceeded hurricane force gusts in three swaths across these townships. One fire fighter was injured during clean-up operations. About 15 homes were damaged by fallen trees. Four persons suffered smoke inhalation after downed wires ignited a fire in Building C of the Silver Ridge Apartments in Dover Township. Twenty-four apartments were evacuated and two units were badly damaged leaving the families homeless. A shelter was opened at the Toms River High School.

In Berkeley Township, the hardest hit area was within the Holiday City area. One home had its roof lifted and a wall of its garage torn away. Attic fans were knocked off several homes. Emergency personnel responded to 42 calls for assistance. In Dover Township, one of the hardest hit areas was along New Jersey State Route 37 in Toms River. Three homes on Michelle Drive were badly damaged by downed trees. One home had a downed tree in its swimming pool. Several business along State Route 37 had either roof damage and/or windows smashed. Wind damage also occurred along Lakehurst Road east to the Community Medical Center and the Toms River Country Club.

The squall line also uprooted trees in Manchester Township, Pine Beach, Ocean Gate and Beachwood Boroughs. Lightning apparently burned a home to the ground within Beachwood Borough. Very strong winds extended to the barrier islands. A wind gust to 63 mph was measured in Seaside Park.

### **Cape May County Countywide**

<b>01</b>	<b>0110EST</b>	<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G50)</b>
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A line of severe thunderstorms caused isolated pockets of wind damage throughout Cape May County. The wind knocked over some flag poles and trees and broke some street signs.

### **Burlington County Wrightstown**

<b>02</b>	<b>2200EST</b>	<b>0</b>	<b>0</b>				<b>Hail (1.00)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NEW JERSEY, South and Northwest**

In addition to the quarter size hail that fell within Wrightstown, marble size hail fell at McGuire Air Force Base.

<b>Middlesex County Northeast Portion</b>	<b>13</b>	<b>1020EST 1200EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
			Thunderstorms with torrential downpours caused flash flooding of small streams as well as urban and poor drainage flooding, especially in the northeast part of Middlesex County. In Metuchen, one inch of rain fell within 10 minutes. Storm totals for the 13th and 14th included 4.70 inches in Woodbridge, 3.54 inches in Iselin and 2.76 inches in New Brunswick.						
<b>Monmouth County Manalapan</b>	<b>13</b>	<b>1025EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
<b>Monmouth County Holmdel</b>	<b>13</b>	<b>1039EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Monmouth County Countywide</b>	<b>13</b>	<b>1040EST 1210EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
<b>Monmouth County Union Beach</b>	<b>13</b>	<b>1045EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Lightning</b>
			A series of thunderstorms produced some large hail, frequent lightning and damaging winds along its leading edge and then caused flash flooding in northern and western sections of the county. Trees were uprooted in Manalapan Township and golf ball size hail fell in Holmdel. Marble size hail fell in Marlboro and Middletown Townships. Lightning started a house fire in Union Beach. Seven major transmission lines were knocked out. Flash flooding pushed streams out of their banks and closed two roadways in Atlantic Highlands, Hazlet and Middletown Township. The hardest hit communities were Holmdel, Manalapan, Marlboro and Matawan Townships. Storm totals for the 13th and 14th included 4.11 inches in Matawan, 3.34 inches in Freehold and 3.06 inches in Sandy Hook. Most of the rain occurred on the 13th.						
<b>Hunterdon County Califon</b>	<b>13</b>	<b>1100EST 1300EST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
<b>Morris County Countywide</b>	<b>13</b>	<b>1200EST 1400EST</b>			<b>0</b>	<b>0</b>			<b>Urban/Sml Stream Fld</b>
<b>Warren County Countywide</b>	<b>13</b>	<b>1200EST 1400EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
			Thunderstorms with torrential downpours caused some stream flooding in Warren County as well as some poor drainage flooding. Some urban and poor drainage flooding also occurred in neighboring parts of northern Hunterdon County and in Morris County. In Washington Borough in Warren County, 3 inches of rain fell through 130 p.m. EDT on the 13th. Through midday on the 13th, 2.53 inches of rain fell in Califon (Hunterdon County), within nearly an inch within an hour through noon EDT. Storm totals for the entire event (including thunderstorms on the 12th) were 4.8 inches in Washington Borough (Warren County), 4.22 inches in White House Station (Hunterdon County), 3.99 inches in Stewartville (Warren County), 3.23 inches in Phillipsburg (Warren County), 2.39 inches in Washington Township (Morris County) and 2.30 inches in both Long Valley and Boonton (Morris County).						
<b>Morris County Countywide</b>	<b>14 17</b>	<b>0800EST 1230EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
			A third day of thunderstorms with torrential downpours caused some small stream and poor drainage flooding the morning of the 14th and led to flooding along the larger rivers in eastern Morris County from the afternoon of the 14th through midday on the 17th. In Boonton along the Rockaway River, a half dozen Overlook Road homes voluntarily evacuated. Eighty percent of the houses on the river side of the street were surrounded by about half a foot of water. The heavy rain softened the ground enough to topple a tree in Chatham. Storm totals for the 14th alone included 3.38 inches in Marcella, 3.31 inches in Oak Ridge, 3.26 inches in Chatham and 2.02 inches in Boonton. Three day storm totals within the county averaged between 4 and 5 inches. The Rockaway River below the reservoir at Boonton reached flood stage (5 feet) at 2 p.m. EDT on the 14th, crested at 6.38 feet at 4 a.m. EDT on the 15th and was back within bankfull at 530 a.m. EDT on the 16th. The Rockaway River above the reservoir at Boonton reached flood stage (5 feet) at 5 p.m. EDT on the 14th, crested at 5.33 feet at 11 p.m. EDT on the 14th and was back within bankfull at 5 a.m. EDT on the 15th. The Passaic River at Pine Brook exceeded its 19 foot flood stage from 8 p.m. EDT on the 15th through 130 p.m. EDT on the 16th. It crested at 19.21 feet at 10 a.m. EDT on the 16th.						
<b>Sussex County Andover</b>	<b>16</b>	<b>2130EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
			A severe thunderstorm knocked down several trees in Andover. One fell on and damaged a house.						
<b>Monmouth County Sea Girt</b>	<b>20 21</b>	<b>0800EST 2000EST</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Rip Currents</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW JERSEY, South and Northwest

### **Ocean County**

**Ship Bottom**      20      0800EST      0      0      0      0      **Rip Currents**  
 21      2000EST

Rip tides caused lifeguards to rescue people over the weekend in both Sea Girt and Ship Bottom. On Saturday the 20th, 20 swimmers were rescued in Sea Girt. On Sunday the 21st, in Ship Bottom, 47 people had to be rescued from a sandbar at the 20th Street Beach. An eight foot gully was apparently created by the sandbar. The persons became stranded as the tide rolled in and rip tides prevented them from swimming to land. There were about a dozen additional rescues at Ship Bottom through the weekend. The numerous northeasters of the past winter and the ensuing erosion created a larger number of offshore sandbars. Breaks in the sandbars are believed to cause rip tides. Rip tides also occur near groins and jetties.

### **NJZ018**

#### **Camden**

20      1100EST      0      30      0      0      **Excessive Heat**  
 1600EST

Thirty persons in Camden that attended the Mellon Jazz Festival at the Wiggins Waterfront Park fainted in the 90-degree-heat. The high temperature at Philadelphia International Airport reached 92 degrees. It was the first 90 degree day in the month of June.

### **Cape May County**

**Ocean City**      20      1605EST      0      0      **Hail (1.00)**

### **Middlesex County**

**Carteret**      20      1615EST      0      0      **Hail (1.75)**

In addition to golf ball size hail falling in Carteret, marble size hail fell in Port Reading.

### **Atlantic County**

**Mays Lndg**      20      1640EST      0      0      **Hail (0.75)**

### **Mercer County**

**Trenton**      20      1815EST      0      0      0      **Lightning**  
 2000EST

Two lightning strikes caused damage within Trenton. At 715 p.m. EDT lightning caused a fire at a three story industrial building. The elevator shaft caught on fire. At 9 p.m. EDT lightning struck a Mill Hill section home and knocked a pile of bricks off its front porch. The house was uninhabitable. Elsewhere in Mercer County, lightning caused a transformer fire in Hamilton Township.

### **Burlington County**

**Chesterfield**      20      1830EST      0      0      0      **Lightning**

Lightning blew the chimney off a house in Chesterfield Township.

### **Ocean County**

**New Egypt**      20      1835EST      0      0      **Hail (0.88)**

Nickel size hail was reported in Plumstead Township.

### **Burlington County**

**Browns Mills**      20      1850EST      0      0      **Thunderstorm Wind (G61)**

### **Burlington County**

**Browns Mills**      20      1855EST      0      0      **Hail (1.75)**

A severe thunderstorm downed wires and dropped golf ball size hail in Browns Mills. Emergency management personnel estimated wind gusts of around 70 mph.

### **Burlington County**

**Chatsworth**      20      1930EST      0      0      0      0      **Funnel Cloud**

### **Burlington County**

**Chatsworth**      20      1930EST      0      0      **Hail (1.00)**

Dime to quarter size hail was reported along a several mile stretch of New Jersey State Route 72 near Chatsworth. Funnel clouds were also sighted the area, but apparently did not touch down as there was no reported wind damage.

### **NJZ008>010-012>022**

**Morris - Hunterdon - Somerset - Middlesex - Western Monmouth - Eastern Monmouth - Mercer - Salem - Gloucester - Camden - Burlington - Western Ocean - Cumberland - Western Atlantic**

25      0900EST      0      20      **Excessive Heat**  
 26      1700EST

A two day hot spell brought some of the highest temperatures of the summer to New Jersey and ended abruptly with a few severe thunderstorms in the southern half of the state during the late afternoon of the 26th. There were about 20 reported heat related problems in the state. The most occurred when 15 people fainted at an outdoor ceremony in Fort Monmouth. The AAA responded to a record number of calls for no starts in central New Jersey because of heat drained batteries. The highest temperatures occurred on the 26th in most areas and included 97 degrees in New Lisbon (Burlington County), 96 degrees in Iselin (Middlesex County), 95 degrees in Morristown (Morris County), Toms River (Ocean County) and Belle Mead (Somerset County), 94 degrees at the Atlantic City International Airport, White House Station (Hunterdon County), Hightstown (Mercer County) and Millville (Cumberland County).

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW JERSEY, South and Northwest</b>									
<b>Camden County</b> Countywide	26	1355EST 1425EST			0	0			<b>Thunderstorm Wind (G50)</b>
									A severe thunderstorm downed trees and power lines throughout the county hitting Cherry Hill and Voorhees the hardest. County emergency personnel responded to over 350 calls of assistance and there were about 1,000 reports of downed trees, limbs and power lines. Two vehicles were crushed by fallen trees in Somerdale.
<b>Gloucester County</b> Woodbury	26	1405EST			0	0			<b>Thunderstorm Wind (G50)</b>
									A severe thunderstorm knocked down some trees and power lines in the northwestern part of Gloucester County. Most of the damage occurred around Woodbury. Gloucester County emergency personnel responded to a couple hundred calls for assistance.
<b>Camden County</b> Cherry Hill	26	1408EST			0	0			<b>Hail (0.75)</b>
<b>Burlington County</b> Maple Shade to Vincentown	26	1410EST 1420EST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Burlington County</b> Moorestown to Mt Holly	26	1410EST 1415EST			0	0			<b>Hail (1.00)</b>
									A severe thunderstorm battered the northwest half of Burlington County with damaging winds, frequent lightning and large hail. Wind gusts were estimated to 70 mph in Mount Holly and 60 mph in Marlton. Burlington County emergency personnel responded to about 1,400 calls of assistance. In addition to the damaging winds, lightning detection systems were recording around 2,000 cloud-to-ground strikes within an hour as the thunderstorm crossed into Burlington and Camden Counties. PSE&G reported about 45,000 homes and businesses lost power, mainly in Burlington County. Large trees were uprooted in Evesham, Lumberton, Maple Shade (30 calls alone), Medford, Moorestown and the Vincentown area of Southampton Township. Quarter size hail fell in Mount Laurel. Dime to penny size hail fell in Maple Shade, Marlton and Mount Holly.
<b>Burlington County</b> Atsion to New Gretna	26	1440EST 1500EST			0	0			<b>Thunderstorm Wind (G50)</b>
									A severe thunderstorm continued to produce wind damage across southeastern Burlington County. Burlington County emergency personnel responded to about 1,400 calls of assistance throughout the county. The hardest hit area in the southeast part of the county was in and around Atsion (Shamong Township). The damage became less as the thunderstorm neared the Atlantic and the strongest part of the storm went into Ocean County.
<b>Ocean County</b> Tuckerton to Seaside Park	26	1455EST 1515EST			0	0	0		<b>Thunderstorm Wind (G58)</b>
									A severe thunderstorm caused wind damage mainly on and around Long Beach Island. Wind gusts reached 67 mph and blew the roof off a Summit Bank in Ship Bottom. In Harvey Cedars several house windows were blown out and picnic tables overturned. On the mainland side trees were knocked down in Tuckerton and Manahawkin. One tree damaged a porch in Manahawkin. Cars were dented by wind driven shopping carts in Little Egg Township. Several boats capsized in Barnegat Bay and had their masts become stuck in the bottom of the bay. Some windsurfers on Barnegat Bay had to seek shelter on an island. A couple of boats were also sunk off of Ship Bottom and Harvey Cedars in the bay and a few others were blown onto the island. Peak wind gusts included 67 mph in Long Beach Township, 66 mph in Harvey Cedars, 62 mph in Seaside Park, 60 mph in Surf City and 59 mph in Waretown.
<b>Monmouth County</b> Colts Neck	30	1040EST			0	2	0	0	<b>Lightning</b>
									Lightning struck and critically injured two golfers while they were heading for shelter from the 17th hole of the Hominy Hill Golf Course. The two men were knocked unconscious and received burns.
<b>Sussex County</b> Countywide	30	1746EST 1805EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Warren County</b> Countywide	30	1748EST 1805EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Morris County</b> Countywide	30	1810EST 1840EST			0	0			<b>Thunderstorm Wind (G50)</b>
									A squall line of severe thunderstorms produced scattered pockets of wind damage (downed trees and wires) throughout northwest New Jersey in Morris, Sussex and Warren Counties. About 42,000 homes and businesses lost power in GPU's service area which includes all of northwest New Jersey.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NEW JERSEY, South and Northwest**

### **Hunterdon County Countywide**

<b>30</b>	<b>1815EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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A squall line of severe thunderstorms produced scattered pockets of wind damage (downed trees and wires) throughout Hunterdon County with the worst damage in western parts of the county in Alexandria, Frenchtown, Kingwood and Holland Townships and Milford Borough. New Jersey State Route 12 was closed because of downed trees along the Kingwood/Frenchtown border. Downed power lines and a subsequent gas leak led to the closure of the northbound lanes of U.S. Route 202/New Jersey State Route 31 in Raritan Township.

### **Mercer County Princeton**

<b>30</b>	<b>1830EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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### **Middlesex County Plainsboro**

<b>30</b>	<b>1830EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Although the thunderstorms dissipated, the gust front the squall line created moved through Mercer and southern Middlesex Counties and produced wind damage mainly in Plainsboro and Princeton Townships. Several trees were toppled in Princeton, one fell on a house under construction. About 7,000 homes lost power in Mercer County. In Plainsboro, several trees were also uprooted. One blocked a roadway and another damaged the gutters and windows of a house.

### **Burlington County Kinkora to Red Lion**

<b>30</b>	<b>1830EST 1910EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Although the thunderstorms dissipated over Pennsylvania, the gust front the squall line created moved through western Burlington County and produced scattered pockets of wind damage. In Medford, a 40 foot high cinderblock wall at a construction site in St. Mary of the Lakes School collapsed. The west wall of the planned gym was knocked down by the gust front. The gust front knocked over trees and power lines in Burlington, Chesterfield, Delanco, Edgewater Park, Mansfield, Medford, Mount Laurel, Springfield and Willingboro Townships. A tree crushed a vehicle in Edgewater Park.

### **Somerset County Green Knoll**

<b>30</b>	<b>1831EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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The southern edge of a squall line of severe thunderstorms knocked down several trees and power lines in Bridgewater Township.

### **Middlesex County Perth Amboy**

<b>30</b>	<b>1831EST</b>				<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>
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The southern edge of a squall line of severe thunderstorms produced wind damage (knocked down some trees and wires) in Perth Amboy.

### **Monmouth County Countywide**

<b>30</b>	<b>1900EST 1910EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
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A squall line of severe thunderstorms produced scattered pockets of downed trees and wires throughout Monmouth County and caused the most problems in the western part of the county. Two boaters were also tossed into the Navesink River and were rescued. About 16,000 of the 42,000 power outages in the GPU service area occurred in Monmouth and Ocean Counties. Freehold was hardest hit with power outages affecting a large part of the borough. In Rumson Borough, about a dozen trees were toppled and crushed two vehicles. The squall line downed numerous trees in Howell, Manalapan, Marlboro and Red Bank. A municipal tent was flipped over in Bradley Beach. Downed wires and/or trees closed roadways in Aberdeen, Middletown, Shrewsbury and Tinton Falls.

### **Ocean County South Lakewood to Mantoloking**

<b>30</b>	<b>1915EST 1920EST</b>				<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>
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A squall line of severe thunderstorms produced wind damage along the northern part of Ocean County as trees and power lines were knocked down in Dover and Lakewood Townships and Mantoloking Borough. One roadway was blocked by fallen trees in Lakewood Township and a 150-year-old tree was among the uprooted trees in Dover Township. A squall line of severe thunderstorms produced scattered pockets of downed trees and wires throughout Monmouth County and caused the most problems in the western part of the county. About 16,000 of the 42,000 power outages in the GPU service area occurred in Monmouth and Ocean Counties.

### **Burlington County Tabernacle**

<b>30</b>	<b>1915EST</b>				<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
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Thunderstorms regenerated themselves over central Burlington County and knocked down several more trees and power lines in the central part of the county.

### **NJZ009>010-012-015>019 Hunterdon - Somerset - Middlesex - Mercer - Salem - Gloucester - Camden - Burlington**

<b>30</b>	<b>2359EST</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Snow Drought</b>
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The snowfall accumulation season of 1997-98 (which ran from July 1, 1997 through June 30, 1998) was one of the least snowiest seasons on record in central and southern New Jersey. It was the second least snowiest season on record with only 0.8 inches

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

**NEW JERSEY, South and Northwest**

falling at Philadelphia International Airport and 7.2 inches falling at the Lehigh Valley International Airport.

**NEW MEXICO, Central and North**

**Rio Arriba County**

Chama	03	1800MST			0	0			Dry Microburst
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Storm chasers overnighting at the Y-Motel reported a dry microburst estimated at 80 MPH which downed several trees and caused damage to porch coverings.

**Union County**

Sedan	07	1140MST 1144MST			0	0			Hail (1.00)
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**De Baca County**

12 NW Ft Sumner	07	1531MST			0	0			Hail (1.00)
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**Quay County**

House	07	1549MST			0	0			Hail (0.88)
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**De Baca County**

Taiban	07	1558MST			0	0			Hail (1.75)
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**De Baca County**

10 NW Ft Sumner	07	1531MST			0	0			Hail (1.00)
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**Curry County**

Melrose	07	1630MST			0	0			Hail (1.00)
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**Curry County**

3 W Cannon Afb	07	1645MST 1700MST			0	0			Hail (1.75)
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**Curry County**

Melrose	07	1645MST 1702MST			0	0			Hail (3.00)
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Hail ranged from 1 inch to 3 inches in diameter during a 17 minute period at Melrose.

**Roosevelt County**

5 E Tolar	07	1700MST 1718MST			0	0			Hail (2.50)
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**Curry County**

Cannon Afb	07	1712MST			0	0	10K		Thunderstorm Wind (G58)
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**Curry County**

8 E St Vrain	07	1713MST			0	0			Hail (2.50)
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**Curry County**

St Vrain	07	1713MST	0.1	50	0	0			Tornado (F0)
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**Curry County**

2 N Clovis	07	1716MST			0	0			Hail (1.75)
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**Curry County**

1 N Clovis	07	1718MST	0.1	50	0	0			Tornado (F0)
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**Curry County**

3 SW Clovis	07	1728MST			0	0			Hail (2.75)
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**Curry County**

1 NE Clovis	07	1745MST			0	0	20K		Hail (1.00)
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A strong thunderstorm which formed over south central De Baca county moved northeast and developed into a supercell near Taiban. The storm then split with the right cell intensifying and moving eastward just north of Highway 60 and producing an extended period of large hail and several brief tornadoes mainly across southern Curry county. No injuries or significant damage were reported as the storm remained mostly over open country.

**Mckinley County**

Gallup	07	1639MST			0	0	1K		Dry Microburst
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Microburst winds damaged the roof to a trailer in Gallup.

**Colfax County**

Springer	07	1705MST			0	0			Hail (1.75)
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A storm near Springer produced about 15 minutes of marble hail with a stones to golfball size.

**Union County**

8 N Moses	07	1908MST			0	0			Hail (0.75)
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**Colfax County**

Raton	07	2005MST			0	0			Hail (1.50)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW MEXICO, Central and North

### **Colfax County 8 E Raton**

07	2030MST				0	0	2K		<b>Thunderstorm Wind</b>
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A storm at Raton produced brief large hail and then tore off a barn roof and uprooted trees along Highway 72 at the north edge of Johnson Mesa.

### **NMZ001>013- 015>021-026**

**Northwest Plateau - Northwest Mountains Including Jemez - Upper Rio Grande Valley - Sangre De Cristo Mountains - Northeast Highlands - Harding - Far Northeast Plains - Westcentral Mountains - Middle Rio Grande Valley - Sandia/Manzano Mountains - Central High Plains/Estancia Valley County - Conchas Lake/Guadalupe - Quay - Lower Rio Grande Valley - Lincoln County High Plains/Hondo Valley - Capitan/Northern Sacramento Mountains - De Baca - Chaves County Plains - Roosevelt - Curry - Guadalupe Mountains Of Chaves County**

20	1200MST				0	0			<b>Excessive Heat</b>
30	1800MST								

Much of New Mexico was grilled by record heat and nagging dryness during the last 10 days of June. Conditions had been unusually warm and dry throughout the month, but the heat intensified beginning on the 20th with daily high temperatures climbing well above 100 degrees except in mountain communities at elevations above 7500 feet. Readings in the southeast section of the state peaked at 108 to 113 degrees as these locations exceeded 10 consecutive days with daily highs above 100 degrees. New records for duration of 100 plus degree days were set from Carlsbad north to Clovis and Tucumcari. Stations in the east and along the central Rio Grande Valley broke records that had lasted 60 to 70 years. By the end of the month a number of stations in the east had observed 16 to 20 days with a daily high over 100 degrees. This period in late June set the stage for unusually harsh crop and rangeland condition, plus high fire danger that would peak across eastern New Mexico during the following month.

## NEW MEXICO, South Central and Southwest

### **NMZ030**

#### **Southwest Desert/Boothill**

13	1315MST				0	0			<b>Dust Storm</b>
	1400MST								

Dust, originating from a normally dry lake bed, significantly reduced visibility on Interstate 10 between Lordsburg and the Arizona state line. There were two traffic fatalities indirectly caused by the poor visibility in blowing dust.

### **NMZ030**

#### **Southwest Desert/Boothill**

14	1315MST				0	0			<b>Dust Storm</b>
	2000MST								

Dust, originating from normally dry lake bed, significantly reduced visibility on Interstate 10 between Lordsburg and the Arizona state line. There were two traffic fatalities indirectly caused by the poor visibility in blowing dust.

## NEW MEXICO, Southeast

### **NMZ027>029**

#### **Guadalupe Mountains Of Eddy County - Eddy County Plains - Lea**

01	0000MST				0	0			<b>Drought</b>
30	2359MST								

Drought conditions continued in Southwest Texas and Southeast New Mexico. The Midland International Airport reported 0.30 inches of precipitation for June, which is 1.25 inches below normal. The total for the April-June period was a bleak 0.32 inch versus the climate average of 4.36 inches or about 7% of normal.

Agricultural losses will be great but will not be included until the end of the drought or the end of the harvest when totals are calculated.

## NEW YORK, Central

### **Yates County**

#### **Penn Yan**

02	1705EST				0	0	10K		<b>Thunderstorm Wind</b>
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A severe thunderstorm moved across the county early in the evening and produced scattered wind damage. Trees were uprooted and a few utility poles were toppled in and near Penn Yan.

### **Seneca County**

#### **Sheldrake**

02	1730EST				0	0	35K		<b>Thunderstorm Wind</b>
----	---------	--	--	--	---	---	-----	--	--------------------------

The severe thunderstorm that produced damage a bit earlier in the evening across Yates county continued eastward into Seneca county and remained severe. Trees were uprooted and several homes sustained roof damage in Sheldrake.

### **Cayuga County**

#### **King Ferry to Niles**

02	1735EST				0	0	50K		<b>Hail (1.75)</b>
	1745EST								

The same severe thunderstorm that produced damage earlier in both Yates and Seneca counties plowed eastward across southern Cayuga county. Widespread wind damage in the form of downed trees and power lines occurred in Kings Ferry, Auburn, Moravia, and Niles. The cell also produced nickel sized hail in Moravia and nearly golf ball sized hail in Kings Ferry.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NEW YORK, Central**

### **Cortland County Homer to Cortland**

02	1802EST 1810EST				0	0	20K		<b>Hail (1.00)</b>
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A thunderstorm intensified to severe levels across western sections of the county. Just after 7 pm EDT, hail to one inch in diameter and downed trees were reported in and just north of Homer. Shortly thereafter, the storm toppled additional trees and power lines in Cortland.

### **Tompkins County Trumansburg to Ithaca**

02	1813EST 1840EST				0	0	20K		<b>Thunderstorm Wind</b>
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A cluster of severe thunderstorms developed over the northwestern corner of the county. They produced sporadic wind damage early in the evening as they moved rapidly southeastward through the county. Trees and wires were downed in the Trumansburg area, then additional trees and wires were blown down in and just north of Ithaca.

### **Cortland County Taylor**

02	1845EST				0	0	15K		<b>Hail (0.75)</b>
----	---------	--	--	--	---	---	-----	--	--------------------

A thunderstorm that produced wind damage and large hail across western sections of the county earlier in the evening reintensified to severe limits once again further east. Trees and power lines were downed in the town of Taylor and dime sized hail was reported as well.

### **Cortland County Cincinnatus**

02	1850EST	0.1	60		0	0	150K		<b>Tornado (F1)</b>
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A severe thunderstorm that had produced wind damage and hail just a short time prior in the town of Taylor became tornadic over Cincinnatus. Post-storm damage surveys indicate that the tornado touchdown was brief with snapped off trees and some house damage incurred. One home had its roof almost completely torn off with the front porch also heavily damaged from falling trees.

The swath of damage was only just over 100 yards long with evidence of tornadic winds becoming discontinuous downstream.

### **Chenango County Pitcher**

02	1853EST 1857EST	0.3	100		0	0	250K		<b>Tornado (F1)</b>
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The severe cell that had become tornadic just across the county line in eastern Cortland county earlier in the evening remained a tornadic supercell after entering Chenango county. Aerial damage surveys indicate that the tornado was near ground level for a few minutes in the town of Pitcher.

A swath of forest was heavily damaged for about a quarter of a mile. Most trees were snapped or sheared off near canopy level. A few trees were completely uprooted or twisted off the ground. Fortunately, no homes were in this vicinity. Forestry Department personnel estimate that hundreds of trees were damaged with fiscal estimates near a quarter of a million dollars.

### **Chenango County Plymouth to Norwich**

02	1905EST 1915EST				0	0	25K		<b>Thunderstorm Wind</b>
----	--------------------	--	--	--	---	---	-----	--	--------------------------

The same thunderstorm cell that dropped a tornado across western portions of the county continued to produce damage as it continued eastward. Although no tornadic damage was indicated by this time, straight line winds toppled trees and power lines from Plymouth eastward across portions of Norwich.

### **Chenango County Norwich**

02	1930EST				0	0	10K		<b>Thunderstorm Wind</b>
----	---------	--	--	--	---	---	-----	--	--------------------------

A thunderstorm briefly strengthened to severe limits just to the rear of a cell that had produced extensive damage across the county earlier in the evening. A few trees and power lines came down in the town of Norwich around 830 pm EDT.

### **Delaware County Davenport**

02	2000EST 2006EST				0	0	35K		<b>Hail (1.25)</b>
----	--------------------	--	--	--	---	---	-----	--	--------------------

Part of the same thunderstorm cluster that caused wind damage just across the county line in southern Otsego county also produced severe weather in northern Delaware county. Trees and power lines were downed in Davenport and a skywarn spotter also observed hailstones to an inch and a quarter in diameter just after 9 pm EDT.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW YORK, Central

### **Otsego County Oneonta to Milford**

<b>02</b>	<b>2000EST 2010EST</b>				<b>0</b>	<b>0</b>	<b>35K</b>		<b>Thunderstorm Wind</b>
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A thunderstorm became severe across southern sections of the county. Many trees and wires were downed in Oneonta around 9 pm EDT. The storm then continued eastward into Milford and produced additional wind damage in the form of toppled trees and utility poles. One such tree fell across a house and damaged its front porch.

### **Steuben County Jasper**

<b>02</b>	<b>2005EST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
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A thunderstorm briefly reached severe limits across southern sections of the county. Trees and power lines were blown down in the town of Jasper shortly after 9 pm EDT.

For the second time in three days, a significant severe weather event including tornadoes affected central New York. The primary focusing mechanisms were a strong mid level shortwave trough and surface cold front that approached from the west late in the day and during the evening. As these features encountered an unstable and increasingly moist environment, thunderstorms developed and quickly became severe. Strongly veering winds that increased with height contributed substantially to the development of tornadic supercells.

Two tornadoes touched down in central New York in the early evening on the 2nd. Both appeared to be associated with the same cell. The first tornado occurred in extreme eastern Cortland county in the town of Cincinnatus. After the twister's brief initial touchdown, it lifted back into the cloud base for several minutes before descending once again in western Chenango county in the town of Pitcher. Both tornadoes were rated as F1 intensity with fairly narrow damage paths of a quarter mile or less in length and 100 yards or less in width. Very fortunately, structural damage was kept to a minimum as only two houses sustained appreciable damage. Also, there were no injuries directly tied to the tornadoes as both homes were unoccupied and sparsely populated areas were affected. However, damage estimates from Forestry Department personnel still approached a half million dollars as hundreds of trees were cut down.

Elsewhere across central New York, damage was fairly widespread from a combination of intense squall line and bow echo complexes as well as isolated supercells. One such supercell cut a lengthy path of wind damage over the Finger Lakes region early in the evening from western Yates county all the way through southern Cayuga county. Hail as large as golf balls was also observed with these storms. The same thunderstorm complex that became tornadic over portions of Cortland and Chenango counties was also responsible for quite a bit of damage from straight line winds. Swaths of downed trees and power lines from downburst type winds were interspersed with tornadic damage from Homer in western Cortland county to Norwich in northern Chenango county. Across the southern tier counties including the western Catskills, severe thunderstorms were more widely separated as a general rule. Yet, there were two areas of concentrated activity. One was from Steuben county eastward through the Elmira/Corning area into Tioga county. Golf ball sized hail and wind gusts estimated at near 80 mph accompanied these storms. A bow echo complex affected an area from Oneonta in southern Otsego county into northern Delaware county with widespread wind damage just after nightfall.

By late in the evening, remaining severe thunderstorms had pushed either into the eastern Catskills or northern Pennsylvania as a cold front swept through much of central New York.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

**NEW YORK, Central**

**Schuyler County  
Hector**

13	1715EST 2000EST			0	0	<b>Flash Flood</b>
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A very slow moving thunderstorm dumped torrential rains across central and eastern sections of the county during the late afternoon and early evening hours. Several roads were closed due to high water conditions, including county route 5 and State route 414 in the town of Hector.

Thunderstorms dissipated by late in the evening and water levels receded allowing roads to reopen after 900 pm EDT.

**Cortland County  
Cortland**

25	0750EST			0	0	5K <b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## NEW YORK, Central

A short line of thunderstorms quickly intensified and became severe across western portions of the county during the mid morning hours. Large tree limbs were downed in the city of Cortland by strong winds along the leading edge of the squall line.

### **Tompkins County Dryden**

25	0800EST			0	0	10K	<b>Thunderstorm Wind</b>
----	---------	--	--	---	---	-----	--------------------------

The southern end of a line of severe thunderstorms affected eastern sections of the county. Several trees were uprooted or otherwise toppled in the town of Dryden around 900 am EDT. Power lines were also downed with a couple of streets closed off to traffic until crews were able to clear live wires.

### **Cayuga County Cascade to 4 E Cascade**

25	1515EST 1520EST			0	0	20K	<b>Thunderstorm Wind</b>
----	--------------------	--	--	---	---	-----	--------------------------

A thunderstorm intensified to severe limits across southern sections of the county along the lower end of Owasco Lake. Strong winds toppled trees and power lines in the town of Cascade around 415 pm EDT. A short time later as the cell moved across the lake it produced more wind damage to the east in Indian Grove as trees and wires were downed.

### **Tioga County 2 E Spencer**

25	1646EST			0	0		<b>Hail (1.75)</b>
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A thunderstorm cell became severe briefly over northwestern sections of the county late in the afternoon. Hailstones ranging from nickel to golf ball sized were observed by skywarn spotters in East Spencer.

### **Madison County Hamilton**

26	1830EST			0	0	30K	<b>Thunderstorm Wind</b>
----	---------	--	--	---	---	-----	--------------------------

A thunderstorm intensified to severe levels across southern sections of the county early in the evening. Strong winds knocked down several trees in the town of Hamilton. One of these trees fell onto a house and heavily damaged its back porch and rear deck.

### **Delaware County Colchester**

26	2002EST 2010EST	3.5	100	0	0	250K	<b>Tornado (F1)</b>
----	--------------------	-----	-----	---	---	------	---------------------

A thunderstorm cell became tornadic over extreme eastern sections of the county during the evening hours. Aerial storm surveys indicate that the twister first touched down just after 900 pm EDT southwest of Pepacton Reservoir and west of Hendricks Hollow in Colchester township. The tornado cut approximately a 3.5 mile by 100 yard path to the east towards the Delaware-Ulster county y line through steep terrain and heavily forested areas. Hundreds of trees were cut down in twisted and chaotic patterns along this damage path. Fortunately, this region was sparsely populated so no structural damage or personal injury resulted. Damage estimates approached a quarter of a million dollars just in replacement cost for deforestation.

The tornadic cell continued eastward thereafter into Ulster county and produced additional damage.

### **Onondaga County Skaneateles**

29	0545EST 0830EST			0	0	15K	<b>Flash Flood</b>
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A complex of early morning thunderstorms produced flash flooding in southwestern sections of the county along Skaneateles Creek. Several roads were closed for a few hours immediately adjacent to the creek. Also, some nearby homes had severe basement flooding and even some water into the first floor.

By mid morning, thunderstorms had dissipated and water levels receded. However, residual boundaries left behind by this area of thunderstorms helped spark isolated severe weather later in the afternoon across central New York.

### **Otsego County Richfield Spgs to Cherry Vly**

29	1510EST 1535EST			0	0	25K	<b>Thunderstorm Wind</b>
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A thunderstorm became severe as it accelerated across northern sections of the county late in the afternoon. Trees and wires were downed in Richfield Springs around 410 pm EDT. Almost 30 minutes later in the northeastern corner of the county, the same cell was responsible for additional downed trees in Cherry Valley.

### **Sullivan County Grahamsville to 3 SW Forrestburg**

30	0740EST 0817EST			0	0	15K	<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW YORK, Central

A thunderstorm strengthened to severe levels as it moved across southern sections of the county during the early to mid morning hours. Trees were downed in and around Grahamsville around 840 am EDT. Just after 915 am, additional trees and wires were toppled in Lumberland township.

### **Steuben County**

**Fremont to  
Campbell**

30	1330EST 1410EST				0	0	30K		<b>Hail (2.00)</b>
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A severe thunderstorm plowed through the county during the mid afternoon hours. Trees and wires were first downed in the Fremont area around 230 pm EDT. Then from just before 3 pm until about 310 pm, widespread wind damage in the form of downed trees and power lines was experienced in the Bath, Campbell, and Hornby areas. Large hail to 2 inches in diameter was also observed by the public in Campbell during this same time frame.

### **Chemung County**

**Horseheads to  
Elmira**

30	1425EST 1440EST				0	0	45K		<b>Thunderstorm Wind</b>
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The same severe storm that produced wind damage and large hail in Steuben county earlier in the afternoon remained severe as it crossed into Chemung county. Widespread reports of trees blown down and utility poles toppled were received from the Horseheads and Elmira areas between 325 and 340 pm EDT. Some minor house damage was also noted in Horseheads from falling trees.

### **Tioga County**

**2 SW Barton to  
Nichols**

30	1505EST 1515EST				0	0	15K		<b>Thunderstorm Wind</b>
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The same severe cell that produced widespread damage upstream in Steuben and Chemung counties maintained its severity as it entered Tioga county. Numerous trees and wires were downed in Waverly just after 400 pm EDT and in Nichols about 415 pm.

### **Broome County**

**Maine to  
3 N Kirkwood**

30	1540EST 1610EST				0	0	75K		<b>Thunderstorm Wind</b>
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A long lived bow echo type complex continued to plow eastward from Tioga county and produced additional damage across much of Broome county. Trees and power lines were first downed in the town of Maine around 440 pm EDT. Widespread wind damage followed downstream with numerous trees and wires toppled in the Triple Cities region (Endicott/Binghamton/Johnson City) from around 445 pm to just after 5 pm. Power was knocked out to thousands of customers in this area and several roads were blocked for a time from falling trees. As the cell progressed eastward to the Kirkwood and Conklin areas, more trees were uprooted or otherwise knocked down by the strong winds.

### **Broome County**

**Chenango Bridge**

30	1545EST 1700EST				0	0	10K		<b>Flash Flood</b>
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Severe thunderstorms also brought torrential rains to portions of the county. The Hiner Park Creek in the town of Chenango Bridge rose out of its banks late in the afternoon. Several homes immediately adjacent to the creek briefly took on water in their basements and in some cases the first floor.

As thunderstorms exited the region and rainfall subsided early in the evening, water levels receded.

### **Sullivan County**

**Cochecton to  
Jeffersonville**

30	1720EST 1740EST				0	0	15K		<b>Thunderstorm Wind</b>
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Part of the same complex of thunderstorms that produced extensive damage earlier in the afternoon from the Binghamton area westward reintensified to severe levels early in the evening across Sullivan county as several cell mergers took place. Trees and wires were downed in the Cochecton area around 620 pm EDT and in the Jeffersonville area about 640 pm.

### **Sullivan County**

**Monticello**

30	1730EST 2130EST				0	0			<b>Flash Flood</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## NEW YORK, Central

Severe thunderstorms and continually redeveloping cells across the same general areas produced extensive flash flooding in the Monticello area during the evening. A skywarn spotter just south of Monticello measured nearly 3 inches of rain in less than an hour's time and close to 5 inches for that evening period. Emergency management personnel reported severe flooding on Route 17 coming into Monticello from the west. Law enforcement officials were forced to close this portion of the highway for several hours as more than 3 feet of water covered the roadway. Other local roadways and side streets in Monticello were also blocked off due to high water conditions.

Water levels gradually receded by late evening as rainfall diminished.

A strong cold front pushed into a very warm, moist, and unstable air mass over central New York late in the afternoon on the 30th. The result was widespread severe thunderstorm development. Since ground conditions were already saturated from recent heavy rains, isolated flash flooding also took place.

Most of the severe weather came from a persistent complex of severe thunderstorms that initially developed in Steuben county during the mid afternoon hours. As this complex moved eastward, it inflicted widespread wind damage and scattered occurrences of large hail from the Elmira/Corning area eastward across Tioga county and through Broome county. Perhaps the most extensive wind damage took place in Broome county near and just west of Binghamton. Many trees were toppled in Endicott and Johnson City and power was knocked out to thousands of customers from late that afternoon into the early evening hours. Flash flooding also resulted from heavy rains across Sullivan county during the evening as thunderstorm cells converged over this area. Portions of route 17 near Monticello were closed for several hours as nearly 3 feet of water covered the roadway.

By late in the evening, most of the thunderstorms had pushed well south and east of the region.

## NEW YORK, Coastal

<b>Orange County</b>								
Bullville	02	2210EST		0	0			Hail (0.75)
<b>Suffolk County</b>								
East Hampton	02	2341EST		0	4			Lightning
<b>Suffolk County</b>								
Setauket	03	0000EST		0	0			Lightning

As thunderstorms moved east across Suffolk County, they produced frequent lightning.

Lightning struck a barn in East Hampton (at the Oakdale Farms property on Three Mile Harbor Road) and sent electricity through four volunteer firemen. All four men required hospital treatment.

Lightning also struck a brick chimney in a Setauket home, causing bricks to fall into the backyard as well as into the structure itself.

<b>Kings County</b>								
Countywide	12	2100EST		0	0			Heavy Rain
	14	1800EST						
<b>Queens County</b>								
Countywide	12	2100EST		0	0			Heavy Rain
	14	1800EST						
<b>Nassau County</b>								
Countywide	12	2130EST		0	0			Heavy Rain
	14	1800EST						
<b>Suffolk County</b>								
Countywide	12	2130EST		0	0			Heavy Rain
	14	1800EST						
<b>Richmond County</b>								
Countywide	13	0845EST		0	0			Heavy Rain
	14	1800EST						
<b>Bronx County</b>								
Countywide	13	0900EST		0	0			Heavy Rain
	14	1800EST						
<b>New York County</b>								
Countywide	13	0900EST		0	0			Heavy Rain
	14	1800EST						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NEW YORK, Coastal**

<b>Rockland County</b>										
Countywide	13	0930EST			0	0				Heavy Rain
	14	1700EST								
<b>Westchester County</b>										
Countywide	13	0930EST			0	0				Heavy Rain
	14	1730EST								

A low pressure system over the Great Lakes on Saturday, June 13th moved southeast and redeveloped just south of New York City Sunday morning, June 14th. It then moved east of the area during Sunday.

Rain began across the area at the start of midnight on Friday, June 12th and didn't end until just before midnight on Monday. There were two to three bursts of heavy rain during this 3 day period, which saw rainfall amounts from 2 to just over 7 inches across the region. On Saturday, one of these heavy rain bursts, which was associated with a line of thunderstorms, caused widespread flash flooding of streets, low-lying and poor drainage areas, and basements across the region (except for Rockland County).

Here are selected rainfall amounts for:

- o New York City - from 2.12 inches at LaGuardia Airport to 3.45 inches at Kennedy Airport. At Central Park, 2.91 inches of rain fell.
- o Nassau County - a spotter measured 4.40 inches at Syosset.
- o Suffolk County - from 2.85 inches at Bridgehampton to 7.02 inches at Medford. A spotter in Shoreham reported 7.00 inches.
- o Rockland County - from 1.24 inches at Nanuet to 3.69 inches at Tappan.
- o Westchester County - At White Plains, 3.10 inches was measured.

<b>Nassau County</b>										
South Portion	12	2230EST			0	0				Flash Flood
<b>Suffolk County</b>										
Southwest Portion	12	2249EST			0	0				Flash Flood
<b>Richmond County</b>										
Countywide	13	1045EST			0	0				Flash Flood
<b>Kings County</b>										
Countywide	13	1050EST			0	0				Flash Flood
<b>Bronx County</b>										
Countywide	13	1055EST			0	0				Flash Flood
<b>New York County</b>										
Countywide	13	1120EST			0	0				Flash Flood
<b>Nassau County</b>										
Countywide	13	1150EST			0	0				Flash Flood
<b>Nassau County</b>										
Great Neck	13	1150EST			0	0				Lightning
<b>Nassau County</b>										
Woodmere to Long Beach	13	1150EST			0	0				Lightning
<b>Westchester County</b>										
Scarsdale to Mamaroneck	13	1200EST			0	0				Flash Flood
<b>Suffolk County</b>										
Wading River	13	1315EST			0	0				Lightning
<b>Suffolk County</b>										
West Portion	13	1318EST			0	0				Flash Flood
<b>Suffolk County</b>										
East Portion	13	1452EST			0	0				Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW YORK, Coastal

Preceded by a steady light to occasionally moderate rainfall, a line of thunderstorms developed and moved east over the area. Thunderstorms produced torrential flash flooding rains and frequent lightning.

Torrential rains resulted in widespread serious flooding of streets, poor drainage and low-lying areas, home basements, and small streams. Lightning struck many homes and ignited fires that damaged them.

In Suffolk County, rivers of moving water formed rapidly on streets. In Lindenhurst, waves were actually visible on Sunrise Highway. Up to 3 feet of water also inundated streets in Babylon on Sunrise Highway. In Mastic, water rapidly flowed from Montauk highway into a residential area and flooded basements and first floors of houses. In Westchester County, small streams overflowed their banks and caused serious street flooding from Scarsdale to Mamaroneck.

In Nassau County, lightning:

- o Hit a drain pipe, igniting the vinyl siding behind the pipe at 961 Crestview Ave. in North Woodmere. Another house was struck by lightning on Hook Street in North Woodmere.
- o Struck an air conditioning unit in the roof above the front door of the extended wood home at 1725 Huntley Place in Hewlett. The resulting flames spread throughout the home and seriously damaged all 7 rooms.
- o Struck the slate roof of a residence at 98 Oxford Road in Lawrence. Lightning caused a major fire in the attic, which devastated most of the home.
- o Struck two houses in Long Beach. One stroke knocked off a chunk of stucco and another hit the peak of the roof.
- o Hit several houses and caused significant damage in the Point-Lookout-Lido area. At one house, the chimney was hit and it just exploded.
- o Hit a house in Great Neck.

In Suffolk County, lightning struck the television antenna and travelled to the attic where it ignited a fire at Zophar Mills Road in Wading River.

<b>Orange County Stewart Afb</b>	17	1540EST			0	0	<b>Thunderstorm Wind (G52)</b>		
<b>Nassau County Bellmore</b>	17	1820EST			0	0	<b>Lightning</b>		
<b>Suffolk County Northport</b>	17	1830EST			0	0	<b>Lightning</b>		

As thunderstorms moved across the region, they produced frequent lightning, brief heavy downpours, and gusty winds.

Lightning struck and damaged the Marque at the Bellmore Cinema and struck a house in Northport. The extent of the damage is unknown.

<b>Nassau County Hewlett</b>	20	1800EST			0	0	<b>Lightning</b>		
<b>Putnam County Mahopac</b>	20	1908EST			0	0	<b>Thunderstorm Wind (G50)</b>		

As a severe thunderstorm moved across the area, it produced high winds that downed tree limbs, hail up to one-half inch in diameter, and heavy downpours at Mahopac.

Another thunderstorm produced lightning that struck a house at 1725 Huntley Place in Hewlett. Lightning destroyed about 75 percent of the house.

<b>Suffolk County Melville</b>	26	1518EST			0	0	<b>Hail (0.75)</b>		
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, Coastal</b>									
Nassau County Syosset	26	1525EST			0	0			Thunderstorm Wind (G50)
Suffolk County Melville to Ronkonkoma	26	1530EST 1541EST			0	0			Flash Flood
Suffolk County Deer Park	26	1538EST			0	0			Thunderstorm Wind (G50)
Suffolk County Ronkonkoma	26	1545EST			0	0			Thunderstorm Wind (G50)
Suffolk County Deer Park	26	1615EST			0	0			Thunderstorm Wind (G50)
Suffolk County Melville	26	1615EST			0	0			Hail (0.75)
As a cluster of severe thunderstorms developed over Eastern Nassau and Western Suffolk Counties, they produced damaging winds, hail, and torrential rain.									
High winds downed trees and wires twice in Deer Park. Trees were downed on Evelyn Drive in Syosset and a large tree fell on a Dairy Barn Store in Ronkonkoma.									
Rainfall rates up to 2 1/2 inches per hour caused extensive street flooding from Melville to Ronkonkoma.									
Orange County Walden	29	0930EST			0	0	40K		Lightning
A thunderstorm produced lightning that struck a barn at 845 Plains Road in Wallkill. The strike ignited a fire that caused significant damage.									
Suffolk County Wyandanch to Deer Park	30	0700EST 0705EST			0	0			Thunderstorm Wind (G50)
Suffolk County Hauppauge	30	0710EST			0	0			Hail (0.75)
Suffolk County Lake Ronkonkoma	30	0715EST	0.3	300	0	0			Tornado (F1)
Suffolk County Selden	30	0720EST	0.1	100	0	0			Tornado (F0)
Suffolk County Coram	30	0730EST			0	0			Thunderstorm Wind (G50)
Suffolk County Mt Sinai	30	0730EST			0	0			Hail (1.00)
Orange County Goshen to Chester	30	1105EST			0	0			Thunderstorm Wind (G55)
Orange County Washingtonville	30	1736EST			0	0			Hail (1.00)
Orange County Walden to Florida	30	1758EST 1804EST			0	4			Thunderstorm Wind (G60)
Orange County Pine Bush	30	1805EST			0	0			Lightning
Orange County Montgomery	30	1809EST			0	0			Hail (1.00)
Orange County Monroe to Florida	30	1810EST 1825EST			0	0			Thunderstorm Wind (G60)
Putnam County Countywide	30	1830EST			0	0			Thunderstorm Wind (G55)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, Coastal</b>									
<b>Rockland County</b> New City	30	1831EST			0	0			Thunderstorm Wind (G50)
<b>Westchester County</b> Peekskill	30	1831EST			0	0			Thunderstorm Wind (G50)
<b>Rockland County</b> Hillcrest to Stony Pt	30	1840EST			0	0			Thunderstorm Wind (G55)
<b>Westchester County</b> Yorktown	30	1901EST			0	0			Thunderstorm Wind (G60)
<b>Richmond County</b> Great Kills	30	1902EST			0	0			Thunderstorm Wind (G50)
<b>Bronx County</b> Bronx	30	1915EST			0	0			Hail (0.75)
<b>Queens County</b> Richmond Hill	30	1920EST			0	3			Thunderstorm Wind (G55)
<b>Nassau County</b> Syosset to Oyster Bay	30	1928EST 1943EST			0	0			Thunderstorm Wind (G60)
<b>Nassau County</b> Jericho to Oyster Bay	30	1930EST			0	0			Hail (0.88)
<b>Suffolk County</b> North Babylon	30	1936EST			0	0			Thunderstorm Wind (G52)
<b>Suffolk County</b> Mt Sinai	30	1940EST	0.3	75	0	0			Tornado (F1)

On June 30th, two "waves" of severe weather occurred: the first during the morning and the second during the evening.

The first wave included an isolated severe thunderstorm that spawned two weak tornadoes, large hail, and damaging winds as it moved across Central Suffolk County.

The first tornado (F1) touched down along Lake Shore Road, south of Portion Road in Lake Ronkonkoma. It downed several large trees and power lines. Trees were blown into houses and caused structural damage. This tornado then lifted and funnel clouds were observed before another touchdown (F0) occurred on the campus of Suffolk Community College in Selden. Numerous trees were uprooted and fell on cars and wires on the campus. More tree damage occurred along Middle Country Road and Mooney Pond Road in Selden.

The first wave also included a line of thunderstorms that moved east across Orange County. Thunderstorms produced high winds that downed trees in Goshen and Chester. A funnel cloud was also observed between Goshen and Chester.

The second wave included lines of severe thunderstorms that produced high winds, large hail, and frequent lightning. This resulted in widespread damage across the region.

In Orange County, high winds downed many trees and power lines. Significant damage to trees and houses occurred in Monroe and Newburgh. High winds also blew a trailer upside down on Bark Lane, off Big Island Road in Florida. Four people were injured and required medical treatment at Arden Hill Hospital. Lightning struck a house in Pine Bush, which ignited a fire and caused structural damage.

In Rockland County, high winds downed power lines in New City and trees in Hillcrest and Stony Point. A tree fell into a hospital in Stony Point.

In Westchester County, high winds downed trees in Peekskill and Yorktown.

In Bronx County, hail damaged windows.

In Queens County, high winds downed tree limbs that struck and injured 3 girls. One girl was seriously injured and required surgery.

In Nassau County, 0.88-inch diameter hail fell in Jericho and 0.75-inch diameter hail fell in Oyster Bay. High winds downed trees



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NEW YORK, Coastal**

and power lines. In Syosset, high winds blew off a roof from a house.

In Suffolk County, an F1 tornado was confirmed in Mt. Sinai. The damage path extended from 114 Hickory Street to the corner of Marcy Drive and Westcliff Drive, then down Marcy Drive and across Chestnut Street. Several large trees were uprooted and damage to house shingles and roofs occurred along the path. Elsewhere in Suffolk County, high winds downed trees and power lines.

## **NEW YORK, East**

### **Greene County Countywide**

14	1100EST 2300EST			0	0	25K	Flood
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### **Ulster County North Portion**

14	1100EST 2330EST			0	0	45K	Flood
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### **Montgomery County East Portion**

14	1500EST 2330EST			0	0	80K	Flood
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Over the weekend of June 12 through 14, a slow moving low pressure system just off the southern New England coast produced very heavy rains across much of the Catskills and eastern Mohawk Valley. Three day precipitation totals reached 8 to 10 inches in some locations. Flooding of creeks and tributaries occurred in Ulster, Fulton, Montgomery and Greene Counties. The hardest hit area was eastern Montgomery County, where 15 roads were closed Sunday night due to flooding streams including the Auries Creek. McKinney Road, in the Town of Florida was totally washed out in several sections. In Ulster County, the Esopus Creek above the Ashokan Reservoir flooded. At Mount Tremper, the creek crested at 12.5 feet late Sunday afternoon June 14. Flood stage at Mount Tremper is 11 feet. In the Town of Kingston, the Saw Kill flooded several roads. In the Town of Woodstock, the Saw Kill also flooded a six mile section of Zena Road. In Greene County, flooding occurred in the Towns of Catskill and Greenville. In the Town of Catskill, the Kaaterskill Creek flooded several roads. In the Town of Greenville, county routes 37 and 35 were flooded by small streams. Across the western portion of the county the Schoharie Creek caused minor flooding. In Fulton County, the West Stony Creek flooded several roads in the Town of Bleeker.

### **NYZ040-047>048**

#### **Montgomery - Schoharie - Western Schenectady**

14	2200EST			0	0	10K	Flood
15	1500EST						

Over the weekend of June 12 through 14, a slow moving low pressure system just off the southern New England coast produced very heavy rains across much of the Catskills and eastern Mohawk Valley. Three day precipitation totals reached 8 to 10 inches in some locations. This produced minor flooding along the Schoharie River in Schoharie, western Schenectady and Montgomery Counties. In Schoharie County at Breakabeen, the river crested at 10.7 feet. Flood stage is 10 feet. Bielfeldt and Redling Roads were flooded in Schoharie County. In Montgomery County at Burtonsville, the river crested at 6.4 feet. Flood stage is 6 feet. Two families were evacuated for a short period of time at Lost Valley.

### **NYZ040**

#### **Montgomery**

15	0300EST			0	0	15K	Flood
17	0900EST						

A combination of runoff from the weekend storm of June 12 through 14 and construction at the Erie Canal Lock 12, caused flooding along the Mohawk River in Montgomery County between Tribes Hill and Saint Johnsville. The flooding was minor but created many difficulties at the construction site.

### **Ulster County Kingston**

16	0220EST			0	0	30K	Lightning
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In Ulster County at Kingston, lightning struck and damaged the roof, attic and second floor of a home.

### **Ulster County Marlboro**

16	0430EST			0	0	20K	Lightning
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In Ulster County at Marlborough, lightning struck and destroyed a 60 foot storage trailer which stored household items.

### **Warren County South Portion**

17	0300EST 0600EST			0	0	20K	Flash Flood
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Thunderstorms with torrential rain produced flash flooding in Glens Falls and Queensbury in southern Warren County. Three to four feet of water covered some of the roads in this area.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, East</b>									
<b>NYZ043</b>									
		<b>Washington</b>							
	17	0600EST			0	0			<b>Flood</b>
	18	0800EST							
		Heavy rain from thunderstorms, caused the Mettawee River in the Whitehall area to overflow its banks. The flooding was confined to low lying fields. At Granville the river crested at 6.3 feet. Flood stage at Granville is 6 feet.							
<b>Washington County</b>									
<b>Whitehall</b>	17	1400EST 1800EST			0	0	50K		<b>Flash Flood</b>
		Thunderstorms with torrential rain produced flash flooding at Whitehall in Washington County. A State of Emergency was declared in the village. Several roads were washed out and 15 to 20 basements were pumped out.							
<b>Herkimer County</b>									
<b>South Portion</b>	20	1835EST 2100EST			0	0	35K		<b>Flash Flood</b>
<b>Herkimer County</b>									
<b>Fairfield</b>	20	2000EST			0	0	6K		<b>Lightning</b>
		Thunderstorms with torrential rain produced flash flooding in southern Herkimer County. In the Town of Schuyler, Newport Road and State Route 5 were flooded. Roads were also flooded and washed out in the Town of Newport. At Fairfield, four cows and one calf were killed by lightning.							
<b>Hamilton County</b>									
<b>Blue Mtn Lake</b>	25	1930EST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Warren County</b>									
<b>Chestertown</b>	25	2035EST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Warren County</b>									
<b>Hague</b>	25	2105EST			0	0	1K		<b>Thunderstorm Wind</b>
<b>Washington County</b>									
<b>Granville</b>	25	2105EST			0	0			<b>Hail (0.75)</b>
<b>Warren County</b>									
<b>Brant Lake</b>	25	2110EST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Washington County</b>									
<b>Granville</b>	25	2115EST			0	0	3K		<b>Thunderstorm Wind</b>
<b>Washington County</b>									
<b>Hartford</b>	25	2120EST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Washington County</b>									
<b>Whitehall</b>	25	2120EST			0	0	18K		<b>Thunderstorm Wind</b>
<b>Washington County</b>									
<b>Whitehall</b>	25	2130EST			0	0	15K		<b>Hail (1.00)</b>
		During the evening of June 25, thunderstorms produced wind damage in Hamilton, Warren and Washington Counties. A thunderstorm in Washington County at Whitehall, downed many trees, destroyed a deck on a home and caused power outages in several homes for twenty four hours. This thunderstorm also produced quarter size hail which resulted in a total loss of an apple crop. In Washington County at Hartford, thunderstorm winds downed trees and wires.							
<b>Hamilton County</b>									
<b>Inlet</b>	26	0215EST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Hamilton County</b>									
<b>Raquette Lake</b>	26	0215EST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Herkimer County</b>									
<b>Old Forge</b>	26	0215EST			0	0	5K		<b>Thunderstorm Wind</b>
<b>Warren County</b>									
<b>Lake George</b>	26	0230EST			1	3			<b>Lightning</b>
		M26CA							
		A weak trough of low pressure touched off thunderstorms in Hamilton, Herkimer and Warren Counties. These thunderstorms produced wind damage in Hamilton and Herkimer counties which included downed trees, powerlines and minor power outages. At Lake George Islands Campground in Warren County, lightning caused three injuries and one fatality.							
<b>Fulton County</b>									
<b>Ephratah</b>	26	1810EST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Montgomery County</b>									
<b>Fonda</b>	26	1838EST			0	0	1K		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, East</b>									
<b>Montgomery County</b>									
St Johnsville	26	1850EST			0	0	2K		Thunderstorm Wind
<b>Fulton County</b>									
Gloversville	26	1855EST			0	0	2K		Thunderstorm Wind
<b>Fulton County</b>									
Oppenheim	26	2012EST			0	0	1K		Thunderstorm Wind
<b>Ulster County</b>									
2.5 S Turnwood to 7 SE Turnwood	26	2022EST 2035EST	5.7	200	0	0	150K		Tornado (F1)
<b>Schenectady County</b>									
Duanesburg	26	2100EST			0	3			<b>Lightning</b>
<p>Low pressure touched off a cluster of locally severe thunderstorms on the evening of the 26th. One thunderstorm in Ulster County spawned an F1 tornado in the vicinity of Mongaup Mountain. This tornado had a non-continuous damage path that only included massive tree damage. Other severe thunderstorms in Fulton and Montgomery Counties downed trees. Lightning from a thunderstorm injured three men at the Harley Davidson rendezvous at Duanesburg in Schenectady County. The injuries were minor.</p>									
<b>Montgomery County</b>									
Charleston	29	1605EST			0	0	6K		Hail (1.75)
<b>Schoharie County</b>									
Sloansville	29	1615EST			0	0	1K		Hail (1.00)
<b>Schoharie County</b>									
Cobleskill	29	1628EST			0	0	4K		Thunderstorm Wind
<b>Schenectady County</b>									
Duanesburg	29	1630EST			0	0	0.50K		<b>Thunderstorm Wind</b>
<p>A warm front initiated several severe thunderstorms in Montgomery, Schoharie and Schenectady Counties. The thunderstorms blew down trees at Cobleskill in Schoharie County as well as Duanesburg in Schenectady County. Golf ball size hail fell at Charleston in Montgomery County and quarter size hail fell at Sloansville in Schoharie County.</p>									
<b>Dutchess County</b>									
Eighmyville	30	0013EST			0	0	50K		<b>Lightning</b>
<b>Dutchess County</b>									
Poughkeepsie	30	0530EST			0	0	40K		<b>Lightning</b>
<p>Lightning caused damage to two residences in Dutchess County. At Milan, a nearly completed home was severely damaged. At Poughkeepsie, lightning sparked a fire which destroyed a roof, attic and second floor of a home.</p>									
<b>Ulster County</b>									
Ellenville	30	1745EST			0	0	1K		Thunderstorm Wind
<b>Ulster County</b>									
Gardiner	30	1750EST			0	0	5K		Thunderstorm Wind
<b>Ulster County</b>									
Marlboro	30	1750EST			0	0	2K		Thunderstorm Wind
<b>Ulster County</b>									
Plattekill	30	1750EST			0	0	1.5K		Thunderstorm Wind
<b>Ulster County</b>									
Ardonia	30	1755EST			0	0	2K		Thunderstorm Wind
<b>Dutchess County</b>									
Fishkill	30	1805EST			0	0	1K		Hail (1.00)
<b>Dutchess County</b>									
Fishkill	30	1810EST			0	0	1K		Thunderstorm Wind
<b>Dutchess County</b>									
Wappingers Falls	30	1810EST			0	0			Hail (0.75)
<b>Dutchess County</b>									
Stormville	30	1815EST			0	0			Hail (0.75)
<b>Dutchess County</b>									
Wappingers Falls	30	1815EST			0	0	1.5K		Thunderstorm Wind
<b>Dutchess County</b>									
Whaley Lake	30	1820EST			0	0	1.5K		Hail (0.88)
<b>Dutchess County</b>									
Poughkeepsie	30	1825EST			0	0	2K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NEW YORK, East</u></b>									
<b>Dutchess County Holmes</b>	<b>30</b>	<b>1830EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Hail (1.00)</b>
<b>Dutchess County Holmes</b>	<b>30</b>	<b>1835EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Dutchess County Poughkeepsie</b>	<b>30</b>	<b>1835EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
<b>Dutchess County South Portion</b>	<b>30</b>	<b>1900EST 2000EST</b>			<b>0</b>	<b>0</b>	<b>12K</b>		<b>Flash Flood</b>
<b>Ulster County Countywide</b>	<b>30</b>	<b>1900EST 2000EST</b>			<b>0</b>	<b>0</b>	<b>16K</b>		<b>Flash Flood</b>
<p>A cold front triggered severe thunderstorms and flash flooding across Dutchess and Ulster Counties. Severe thunderstorms downed trees and wires across several locations in both these counties. Approximately 2,000 customers were without power for several hours. A thunderstorm blew a tree down on a house at Gardiner in Ulster County. Severe thunderstorms also contained large hail. Torrential rains from the storms produced flash flooding across Ulster and Southern Dutchess Counties. In Dutchess County in the Village of Wappingers Falls several basements had to be pumped out. Flooding of roadways occurred at New Preston, Hopewell Junction and Wingdale. In Ulster County, roads were flooded in Rosendale, New Paltz, Shawangunk, Marlboro and Ellenville. At Glasco, in northern Ulster country, four residents of an apartment building were evacuated due to a flooded stream that washed out part of the foundation.</p>									
<b><u>NEW YORK, North</u></b>									
<b>St. Lawrence County Starlake</b>	<b>02</b>	<b>1955EST</b>			<b>0</b>	<b>0</b>	<b>1K</b>		<b>Thunderstorm Wind</b>
<b>St. Lawrence County Cranberry Lake</b>	<b>02</b>	<b>2005EST</b>			<b>0</b>	<b>0</b>	<b>1K</b>		<b>Thunderstorm Wind</b>
<p>A low pressure system moved east from the Great Lakes region Tuesday morning (June 2nd) into southern Canada by Tuesday night (June 2nd). The associated cold front triggered late afternoon and evening thunderstorms across northern New York. In particular, across St. Lawrence county during the evening hours, large tree branches were blown down in Star Lake and also in Cranberrylake where they fell across the road. Frequent cloud to ground lightning was reported, and a house was struck and destroyed by lightning in Waddington, New York.</p>									
<b>St. Lawrence County Edwards</b>	<b>04</b>	<b>1430EST</b>			<b>0</b>	<b>0</b>			<b>Tstm Wind/Hail</b>
<p>A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across northern New York. Specifically, in Edwards (St Lawrence county) a thunderstorm resulted in pea size hail with wind gusts up to 50 mph.</p>									
<b>Essex County Lake Placid</b>	<b>04</b>	<b>1600EST 1605EST</b>			<b>0</b>	<b>0</b>			<b>Tstm Wind/Hail</b>
<p>A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across northern New York. Specifically, in Lake Placid (Essex county) the wind gusted to 40 mph (35 knots).</p>									
<b>Franklin County Malone</b>	<b>04</b>	<b>1700EST 1730EST</b>			<b>0</b>	<b>0</b>			<b>Tstm Wind/Hail</b>
<p>A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across northern New York. Specifically, in Malone (Franklin county) a thunderstorm resulted in 1/2 inch hail covering the ground.</p>									
<b>Essex County Ticonderoga</b>	<b>17</b>	<b>1415EST 1700EST</b>			<b>0</b>	<b>0</b>	<b>25K</b>		<b>Flash Flood</b>
<p>A slowly moving broad area of low pressure over the eastern Great Lakes and New York state combined with an unstable atmosphere to result in slow moving thunderstorms across portions of the area. These thunderstorms were accompanied by torrential downpours. Specifically, in and around the New York town of Ticonderoga, roads were washed out.</p>									
<b>Essex County East Portion</b>	<b>18</b>	<b>1230EST 1400EST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Flash Flood</b>
<p>Afternoon showers and thunderstorms developed over the Adirondacks and moved across eastern portions of the county Thursday, June 18th. Torrential rainfall from these thunderstorms resulted in flash flooding of brooks, streams and small rivers. In the New York towns of Lewis and Willsboro, roads were washed out.</p>									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>NEW YORK, North</b>									
<b>Clinton County</b>									
<b>Altona</b>	18	1745EST 1900EST			0	0	50K		<b>Flash Flood</b>
			Showers and thunderstorms moved southeast across Clinton county during the late afternoon and evening of Thursday, June 18th. Torrential rain fell in and around Altona, New York with several roads washed out. A number of homes were sandbagged to prevent flooding of structures. The Great Chazy River flooded areas along its path in this area.						
<b>Essex County</b>									
<b>Elizabethtown</b>	22	1700EST 1710EST			0	0			<b>Tstm Wind/Hail</b>
			Thunderstorms moved across portions of northern New York during the late afternoon and evening of Monday, June 22nd. Specifically, in Essex county New York, near Elizabethtown, winds associated with thunderstorms gusted up to 50 mph (43 knots) with locally very heavy rainfall.						
<b>Franklin County</b>									
<b>Brushton</b>	25	1807EST			0	0	5K		<b>Thunderstorm Wind</b>
<b>Franklin County</b>									
<b>Dickinson</b>	25	1815EST			0	0	1K		<b>Thunderstorm Wind</b>
<b>Franklin County</b>									
<b>Paul Smiths</b>	25	1900EST			0	0	1K		<b>Thunderstorm Wind</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening thunderstorms with strong winds and torrential downpours Thursday, June 25th. Specifically, in Franklin county New York, numerous trees and power lines were blown down in the towns of Brushton, Dickinson and Paul Smiths.						
<b>Essex County</b>									
<b>Lake Placid</b>	25	1930EST			0	0	5K		<b>Thunderstorm Wind</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening thunderstorms with strong winds and torrential downpours Thursday, June 25th. Specifically, in Essex county New York, trees were blown down in the town of Lake Placid.						
<b>Franklin County</b>									
<b>Saranac Lake</b>	25	2000EST 2230EST			0	0	5K		<b>Flash Flood</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening thunderstorms with locally torrential downpours Thursday, June 25th. Specifically, in Franklin county New York, water flooded roads in the Saranac Lake area.						
<b>Essex County</b>									
<b>Lake Placid</b>	25	2000EST 2130EST			0	0	5K		<b>Flash Flood</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening thunderstorms with locally torrential downpours Thursday, June 25th. Specifically, in Essex county New York, water flooded roads in the Lake Placid area.						
<b>Clinton County</b>									
<b>Beekmantown</b>	25 26	2245EST 0130EST			0	0	10K		<b>Flash Flood</b>
<b>Clinton County</b>									
<b>Dannemora</b>	26	0027EST 0130EST			0	0	10K		<b>Flash Flood</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening and late night thunderstorms Thursday (June 25th) into early Friday (June 26th) with locally torrential downpours. Specifically, in Clinton county New York, a number of roads were washed out in the towns of Beekmantown and Dannemora.						
<b>Essex County</b>									
<b>Keeseville</b>	25 26	2245EST 0130EST			0	0	10K		<b>Flash Flood</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening and late night thunderstorms Thursday (June 25th) into early Friday (June 26th) with locally torrential downpours. Specifically, in Essex county New York, extensive flooding of roads in the Keeseville area resulted.						
<b>Essex County</b>									
<b>Port Douglass</b>	25 26	2325EST 0100EST			0	0	1M		<b>Flash Flood</b>
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening and late night thunderstorms Thursday (June 25th) into early Friday (June 26th) with locally torrential downpours. Specifically, in and around Port Douglas, NY roads and railroad track were washed out. During the late night hours, a train engine and 5 train cars						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NEW YORK, North

derailed with extensive damage.

### **Clinton County Countywide**

<b>27</b>	<b>0100EST 2100EST</b>				<b>0</b>	<b>0</b>	<b>7M</b>		<b>Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Extensive flooding occurred, especially in the eastern half of the county.

Many rivers flooded, especially the Saranac, Ausable, Little Ausable, Great Chazy and Salmon Rivers. A State of Emergency was declared, as numerous roads and bridges were washed out in Peru, Harkness, Keeseville, Dannemora, Altona and Saranac areas. Portions of I-87 were closed due to flooding and a sinkhole. A dam burst in the Peru area around 3 AM June 27 adding to the extreme flood conditions.

The Little Ausable River resulted in massive flooding of an apartment complex in Peru, NY requiring evacuations. Most rivers began subsiding by midday Saturday June 27th, although The Great Chazy remained in flood until 9 PM Saturday June 27th in the area around Champlain, NY.

### **Essex County Countywide**

<b>27</b>	<b>0200EST 1200EST</b>				<b>0</b>	<b>0</b>	<b>5M</b>		<b>Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Extensive flooding occurred, especially in the eastern half of the county.

Many rivers flooded, especially the, Ausable and Bouquet. A State of Emergency was declared, as numerous roads and bridges were washed out in Keeseville and Chesterfield areas. Additional damage to railroad tracks resulted in Port Douglas and Port Kent areas. A sinkhole developed in the road leading to the Lake Champlain Ferry in Port Kent, NY closing the Ferry down.

Most rivers began subsiding during the Saturday morning, June 27th.

### **Franklin County Countywide**

<b>27</b>	<b>0300EST</b>				<b>0</b>	<b>0</b>	<b>500K</b>		<b>Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Extensive flooding occurred, especially in the northern half of the county.

A State of Emergency was declared, as numerous roads and bridges were washed out especially in Malone, Westville, Whippleville and Fort Covington with bridges washed out in Fort Covington and Bangor.

### **Clinton County Mooers**

<b>29</b>	<b>1554EST</b>				<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in Mooers (Clinton county) a thunderstorm resulted in 3/4 inch hail.

### **Franklin County Malone**

<b>29</b>	<b>1830EST</b>				<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
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A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved across northern New York during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in Malone (Franklin county) a thunderstorm resulted in 1 3/4 inch hail.

### **Clinton County South Portion**

<b>30</b>	<b>1245EST 1500EST</b>				<b>0</b>	<b>0</b>	<b>20K</b>		<b>Flash Flood</b>
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### **Essex County North Portion**

<b>30</b>	<b>1245EST 1500EST</b>				<b>0</b>	<b>0</b>	<b>20K</b>		<b>Flash Flood</b>
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A storm system moved across southern Canada during Tuesday, June 30, 1998. Ahead of the associated cold front, a very moist airmass was in place across northern New York. This triggered late morning and afternoon thunderstorms with torrential rain. Local roads were washed out in extreme southern Clinton county and northern Essex county. The most extensive damage occurred in Keeseville, NY.

## NEW YORK, West

### **Chautauqua County Kiantone**

<b>02</b>	<b>1620EST</b>				<b>0</b>	<b>0</b>	<b>20K</b>		<b>Hail (0.75)</b>
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### **Erie County Buffalo**

<b>02</b>	<b>1645EST</b>				<b>0</b>	<b>0</b>	<b>50K</b>		<b>Hail (0.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, West</b>									
<b>Wyoming County</b> Varysburg	02	1723EST			0	0	15K		Hail (0.75)
<b>Niagara County</b> Newfane	02	1725EST			0	0	15K	500K	Hail (1.00)
<b>Genesee County</b> Batavia	02	1755EST			0	0	15K		Hail (0.75)
<b>Cattaraugus County</b> Ellicottville	02	1800EST			0	0	10K		Hail (1.00)
<b>Livingston County</b> Leicester	02	1800EST			0	0	20K		Thunderstorm Wind
<b>Allegany County</b> Cuba	02	1830EST			0	0	75K		Thunderstorm Wind (G52)
<b>Cattaraugus County</b> Ischua	02	1830EST			0	0	20K		Thunderstorm Wind
<b>Livingston County</b> Livonia	02	1830EST			0	0	30K		Thunderstorm Wind
<b>Ontario County</b> Clifton Spgs	02	1830EST			0	0	20K		Thunderstorm Wind
<b>Wayne County</b> Williamson	02	1900EST			0	0	10K		Hail (1.00)
<b>Jefferson County</b> Watertown	02	1910EST			0	0	15K		Thunderstorm Wind
<b>Jefferson County</b> Watertown	02	1915EST			0	0	15K		Thunderstorm Wind
<b>Lewis County</b> Harrisville	02	1945EST			0	0	10K		Hail (1.00)
<p>Severe thunderstorms swept across the entire region during the late afternoon and evening hours. The storms produced hailstones up to 1.5". Although the stones were not excessively large, what was unusual for the area was the number and areal coverage of the reported hail. It was the first time three-quarter inch hail had been observed at the Buffalo Airport since record keeping began there. The hail severely damaged the cherry crop in Niagara County. In addition to the large amount of hail, the thunderstorms produced damaging winds which downed trees and power lines and poles. Power outages were reported across the 13 county region. Falling trees blocked roads and damaged homes and property in Alden, Wellsville, Cuba and Cheektowaga. Funnel clouds were sighted, but did not touch down, in Wellsville, Allegany County and Nunda, Livingston County. The heavy rains that accompanied the thunderstorms produced localized flooding in Cheektowaga and Depew.</p>									
<b>Wyoming County</b> Orangeville Center to Castile	02	1745EST 1800EST	15	250	0	0	1M		Tornado (F2)
<p>A tornado struck Wyoming county and did substantial damage to numerous structures and completely destroyed several others. Much of the damage done to this rural area included snapped and downed trees and wires. The initial touchdown of the tornado occurred in Orangeville just east of Orangeville Center Road. As the tornado moved east a barn was leveled on Hermitage Road in Orangeville. On Liberty Street a hanger with three airplanes and a helicopter inside, was destroyed and all four craft sustained damage. Also on Liberty Street a barn and modular home were leveled. The tornado passed south of the Village of Warsaw damaging two houses, a barn and a garage on Keeney Street. Another barn was leveled on Silver Springs Road. The tornado then followed near the border of the Towns of Perry and Castile damaging several sheds and docks as it crossed Silver Lake. The tornado touched down in the Village of Perry where it caused minor damage to eight mobile homes and major damage to five others. Several larger buildings also sustained considerable damage in the Village of Perry. The final traces of the tornado occurred on Middle Reservation Road in Castile where several buildings of a fertilizer plant were leveled. The total path length was 15 miles although the tornado was not on the ground the entire time. This was a slow moving tornado and was viewed by numerous witnesses. Several eyewitnesses reported seeing multiple vortices and in addition to being confirmed by amateur video of the tornado, from the aerial survey conducted several sections of the damage path supported this. No injuries or deaths resulted from the storm--remarkable since some of the buildings which sustained substantial damage were occupied when the tornado struck.</p>									
<b>Livingston County</b> Conesus	13	1615EST 2015EST			0	0	35K	100K	Flash Flood
<b>Monroe County</b> Chili Center	13	1730EST 2200EST			0	0	30K		Flash Flood

Thunderstorms crossed the western Finger Lakes during the early evening hours dropping several inches of rain in less than an hour.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, West</b>									
The heavy rains flooded roads forcing closures throughout Livingston and Monroe counties. Farmers fields in Geneseo, Piffard and Leicester were covered with water.									
<b>Chautauqua County Arkwright</b>	16	1600EST			0	0	15K		<b>Thunderstorm Wind</b>
<b>Monroe County Rochester</b>	16	1745EST			0	0	40K		<b>Thunderstorm Wind</b>
Scattered thunderstorms crossed the area during the early evening hours. The thunderstorm winds downed trees and power lines. The heavy rains which accompanied the thunderstorms resulted in widespread poor drainage and urban flooding in the Rochester metro area.									
<b>Monroe County Webster</b>	25	0600EST			0	0	10K		<b>Thunderstorm Wind</b>
<b>Ontario County Canandaigua</b>	25	0630EST			0	0	12K		<b>Thunderstorm Wind</b>
Thunderstorms accompanied by almost continuous lightning, torrential rains, damaging winds and pea to marble sized hail swept across the area. Over 15,000 were without power when thunderstorm winds downed power lines and poles.									
<b>Wayne County Sodus</b>	25	1415EST			0	0	5K		<b>Hail (0.88)</b>
<b>Wayne County Sodus</b>	26	0115EST			0	0	10K		<b>Thunderstorm Wind</b>
<b>Lewis County Castorland</b>	26	0200EST			0	0	10K		<b>Thunderstorm Wind</b>
<b>Niagara County North Tonawanda</b>	26	0215EST			0	0	15K		<b>Thunderstorm Wind</b>
<b>Erie County Alden</b>	26	0245EST			0	0	20K		<b>Thunderstorm Wind</b>
<b>Genesee County Batavia</b>	26	0335EST 0835EST			0	0	500K		<b>Flash Flood</b>
<b>Erie County Collins</b>	26	0430EST 0930EST			0	0	100K		<b>Flash Flood</b>
<b>Erie County Collins</b>	26	0555EST			0	0	35K		<b>Thunderstorm Wind</b>
<b>Cattaraugus County Gowanda</b>	26	0600EST 1200EST			0	0	2.5M		<b>Flash Flood</b>
<b>Wyoming County Arcade</b>	26	0645EST 1300EST			0	0	4.5M		<b>Flash Flood</b>
<b>Genesee County Batavia</b>	26	0715EST			0	0	10K		<b>Hail (1.00)</b>
<b>Genesee County Byron</b>	26	0715EST 1015EST			0	0	500K		<b>Flash Flood</b>
Severe thunderstorms crossed the area during the early morning hours. The thunderstorms produced large hail and damaging winds which downed trees and power lines. The damage from thunderstorm winds paled in comparison to the damage resulting from the flash floods the thunderstorms produced. Five to six inches of rain fell in a two hundred square mile area sending small streams out of their banks causing several million dollars worth of property damage in the Villages of Arcade and Gowanda. Cattaraugus Creek rose faster than any time in memory and crested two feet over flood stage. This surge caused many boats to break loose from their moorings at the mouth of the creek at Sunset Bay and over a hundred boats were shoved out into Lake Erie and wrecked. Erie, Wyoming and Cattaraugus counties were declared state and federal disaster areas. In Arcade, 37 were rescued from treetops and rooftops by the Water Rescue Team. Over 130 homes were damaged in Arcade.									
<b>Cattaraugus County Gowanda</b>	26	1710EST			0	0	25K		<b>Thunderstorm Wind</b>
<b>Wyoming County Arcade</b>	28	1955EST 2300EST			0	0	50K		<b>Flash Flood</b>
A thunderstorm produced several inches of rain over the already hard hit area of Arcade. The flash flooding which resulted washed									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NEW YORK, West</u></b>									
									out a section of Java Lake Road.
<b>Chautauqua County</b> Frewsburg	29	1715EST			0	0	20K		<b>Thunderstorm Wind</b>
<b>Cattaraugus County</b> Salamanca	29	1745EST			0	0	25K		<b>Hail (1.75)</b> Thunderstorms which rolled across the western southern tier during the late afternoon hours produced damaging winds and golfball sized hail.
<b>Niagara County</b> Lewiston	30	0555EST			0	0	12K		<b>Thunderstorm Wind</b>
<b>Orleans County</b> Lyndonville	30	0650EST			0	0	15K		<b>Thunderstorm Wind</b> Thunderstorms moved onshore from Lake Ontario during the early morning hours producing damaging winds which downed lines, trees and limbs in both Niagara and Orleans counties.
<b>Monroe County</b> Brighton	30	1400EST 1900EST			0	0	13K		<b>Flash Flood</b> Thunderstorms throughout the day dropped several inches of rain over the same area. The heavy rains resulted in urban and poor drainage flooding in the Rochester metro area.
<b>Ontario County</b> Canandaigua	30	1430EST			0	0	12K		<b>Thunderstorm Wind</b>
<b>Ontario County</b> Phelps	30	1450EST			0	0	10K		<b>Thunderstorm Wind</b>
<b>Erie County</b> Buffalo	30	1500EST			0	0	15K		<b>Hail (1.00)</b>
<b>Erie County</b> East Aurora	30	1540EST			0	0	10K		<b>Thunderstorm Wind</b>
<b>Livingston County</b> Conesus	30	1650EST			0	0	8K		<b>Hail (0.75)</b>
<b>Livingston County</b> Hemlock	30	1710EST			0	0	8K		<b>Hail (0.75)</b> Thunderstorms during the early afternoon hours crossed the Niagara Frontier and western Finger Lakes. The thunderstorms produced large hail and damaging winds which downed trees and power lines.
<b><u>NORTH CAROLINA, Central</u></b>									
<b>Alamance County</b> Burlington	02	1842EST			0	0			<b>Hail (1.00)</b> Numerous reports of large hail and trees down were received from Alamance county when a supercell storm moved through.
<b>Orange County</b> Chapel Hill	02	1910EST			0	0			<b>Hail (0.75)</b>
<b>Chatham County</b> Siler City to Goldston	02	1915EST			0	0			<b>Hail (1.00)</b> A supercell storm moved southeast across central and eastern Chatham county. Areas near Pittsboro to Goldston received hail up to 1 inch in diameter and strong winds that uprooted trees.
<b>Chatham County</b> Pittsboro	02	1925EST			0	0			<b>Hail (1.75)</b>
<b>Lee County</b> Sanford to Broadway	02	1940EST			0	0			<b>Thunderstorm Wind (G50)</b> A supercell storm blew down many trees as it passed through the eastern half of the county.
<b>Lee County</b> Broadway	02	1943EST			0	0			<b>Hail (0.88)</b>
<b>Harnett County</b> 2 SE Spout Spgs	02	1945EST			0	0			<b>Hail (1.00)</b>
<b>Person County</b> Bethel Hill	03	1645EST			0	0			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Central</u></b>									
<b>Franklin County</b> Louisburg	03	1645EST			0	0			<b>Thunderstorm Wind (G50)</b> Trees and power lines were downed in the town of Louisburg.
<b>Vance County</b> Middleburg	03	1700EST			0	1			<b>Lightning</b> A man was struck by lightning while sitting in his car with his arm out the driver's windows. He was in the driveway of his home near Kerr Lake.
<b>Granville County</b> Oxford	03	1710EST			0	0			<b>Thunderstorm Wind (G50)</b> Several trees and power lines were downed in the city of Oxford.
<b>Granville County</b> Stovall	03	1716EST			0	0			<b>Hail (1.00)</b>
<b>Vance County</b> 5 S Henderson	03	1725EST			0	0			<b>Hail (1.25)</b>
<b>Chatham County</b> Goldston	03	1740EST			0	0			<b>Hail (0.75)</b>
<b>Nash County</b> Castalia	03	1752EST			0	0			<b>Hail (0.88)</b>
<b>Franklin County</b> 5 S Centerville	03	1752EST			0	0			<b>Hail (0.75)</b>
<b>Randolph County</b> Asheboro	03	1755EST			0	0			<b>Thunderstorm Wind (G50)</b> Several trees were uprooted and a new home under construction lost its roof.
<b>Alamance County</b> Elon College to Graham	03	1815EST 1830EST			0	0			<b>Thunderstorm Wind (G50)</b> Local law enforcement and spotters reported numerous trees blown down across areas from Elon College to Burlington and Graham. Several thousand people lost power in central Alamance county.
<b>Nash County</b> Rocky Mt Wilson Arpt	03	1830EST			0	0			<b>Hail (0.75)</b>
<b>Edgecombe County</b> Pinetops	03	1835EST			0	0			<b>Hail (1.25)</b>
<b>Orange County</b> Hillsborough	03	1845EST			0	0			<b>Hail (1.75)</b>
<b>Wilson County</b> 5 SE Elm City to Elm City	03	1849EST			0	0			<b>Hail (1.00)</b>
<b>Halifax County</b> Scotland Neck	03	2000EST			0	0			<b>Hail (1.75)</b>
<b>Warren County</b> Oakville	03	2000EST			0	0			<b>Hail (1.00)</b>
<b>Durham County</b> Durham	03	2015EST			0	0			<b>Hail (0.75)</b>
<b>Alamance County</b> Countywide	03	2025EST			0	0			<b>Thunderstorm Wind (G50)</b> There were numerous reports of trees down across Alamance county. Most reports came from trained spotters or local law enforcement in the Burlington and Mebane areas.
<b>Wake County</b> Raleigh to Zebulon	03	2027EST 2045EST			0	0			<b>Hail (1.75)</b> Hail, dime to golfball size, fell through much of central and eastern Wake county including Raleigh east to Zebulon.
<b>Orange County</b> Efland	03	2030EST			0	0			<b>Hail (1.75)</b>
<b>Wake County</b> Raleigh	03	2037EST			0	0			<b>Hail (1.00)</b> Quarter sized hail fell for 10 minutes in the center of Raleigh at Cameron Village.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Central</u></b>									
<b>Johnston County</b> Clayton	03	2055EST			0	0			Hail (1.25)
<b>Davidson County</b> Welcome	03	2055EST			0	0			Hail (0.75)
<b>Chatham County</b> Countywide	03	2100EST 2120EST			0	0			Thunderstorm Wind (G50)
There were numerous reports of trees being blown down across Chatham county including reports from Mt. Gilead Church Road, Pittsboro Road, and Manns Road.									
<b>Davidson County</b> Wallburg	03	2100EST			0	0			Hail (0.75)
<b>Randolph County</b> Ramseur	03	2110EST			0	0			Hail (1.75)
<b>Durham County</b> Durham	03	2120EST			0	0			Thunderstorm Wind (G50)
Three large trees were uprooted on Hillandale Road and Mavcon Avenue in Durham.									
<b>Wake County</b> Holly Spgs	03	2120EST			0	0			Thunderstorm Wind (G50)
Several trees were blown down in Holly Springs.									
<b>Halifax County</b> Hobgood	03	2125EST			0	0			Thunderstorm Wind (G50)
Several trees were blown down along Highway 97 near Hobgood.									
<b>Lee County</b> Sanford	03	2125EST			0	0			Thunderstorm Wind (G50)
Sanford police reported several trees were downed by strong thunderstorm wind in the town.									
<b>Harnett County</b> Olivia	03	2200EST			0	0			Thunderstorm Wind (G50)
Trees were blown down in Olivia.									
<b>Sampson County</b> Clinton	03	2245EST			0	0			Hail (0.88)
<b>Stanly County</b> Oakboro	10	0710EST			0	0			Hail (0.88)
<b>Lee County</b> 5 N Sanford	13	1440EST			0	0			Hail (0.75)
<b>Sampson County</b> Turkey	13	1530EST			0	0	15K		Thunderstorm Wind (G50)
Thunderstorm winds damaged 3 homes and blew down numerous trees around the community of Turkey.									
<b>Forsyth County</b> Winston Salem	14 15	2355EST 0000EST			0	0			Hail (0.75)
A cluster of thunderstorms produced dime size hail over southern and southeast Forsyth county.									
<b>Forsyth County</b> 5 S Winston Salem	15	0005EST			0	0			Hail (0.75)
<b>Montgomery County</b> Uwharrie	15	0005EST			0	0			Hail (0.75)
Dime size hail fell with thunderstorms over northwest Montgomery county around Badin Lake and the Uwarrie National Forest. Frequent lightning accompanied these storms.									
<b>Davidson County</b> Midway to Lexington	15	0015EST 0025EST			0	0			Hail (0.88)
<b>Guilford County</b> Greensboro	15	0025EST			0	0			Hail (0.75)
<b>Randolph County</b> Sophia	15	0030EST			0	0			Hail (0.88)
<b>Randolph County</b> Asheboro	15	0100EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH CAROLINA, Central</b>									
<b>Chatham County</b> Silk Hope	15	0100EST			0	0			Hail (0.75)
<b>Randolph County</b> Asheboro	15	0120EST			0	0			Hail (0.75)
<b>Wake County</b> Raleigh	15	1743EST			0	0			Thunderstorm Wind (G50) Strong thunderstorm winds downed several trees and produced dime size hail in north Raleigh along Millbrook and Six Forks Roads.
<b>Wake County</b> Raleigh	15	1743EST			0	0			Hail (0.75) Dime size hail fell in north Raleigh. This storm also produced very heavy rain and frequent lightning across much of northern Wake county from near the RDU Airport to Falls Lake and north Raleigh.
<b>Forsyth County</b> Winston Salem	16	1455EST			0	0			Thunderstorm Wind (G50) Several trees were blown into power lines causing power outages on the northeast side of Winston-Salem.
<b>Guilford County</b> Greensboro	16	1525EST			0	0			Thunderstorm Wind (G50) Several trees were blown over on power lines on Sandy Ridge Road in Greensboro.
<b>Person County</b> Roxboro	16	1610EST			0	0			Thunderstorm Wind (G50) Several trees were uprooted in the city of Roxboro causing power outages to hundreds of businesses and residents.
<b>Granville County</b> Berea	16	1615EST 1635EST			0	0			Thunderstorm Wind (G50) Numerous trees were downed in the Berea section of Granville county. A funnel cloud was also observed but reports indicate that the funnel cloud never reached the ground.
<b>Vance County</b> Townsville	16	1645EST			0	0			Thunderstorm Wind (G50) Thunderstorm wind knocked down several trees along Highway 39 in Townsville.
<b>Warren County</b> Warrenton	16	1715EST			0	0			Thunderstorm Wind (G50) Thunderstorm winds and hail damaged numerous trees on the east side of Warrenton. Leaves were stripped from trees due to the hail and strong wind. Debris was strewn across streets and highways throughout the area.
<b>Sampson County</b> Garland	19	1713EST			0	0			Hail (1.00)
<b>Orange County</b> Hillsborough	23	1540EST			0	0			Thunderstorm Wind (G50) A sustained downburst damaged several homes and downed many trees.
<b>Wake County</b> Wake Forest	23	1620EST			0	0			Hail (1.25)
<b>Franklin County</b> Franklinton to Louisburg	23	1700EST 1720EST			0	0			Thunderstorm Wind (G50) Trees were downed by thunderstorm winds from just west of Franklinton east to Louisburg.
<b>Halifax County</b> Roanoke Rapids	23	1820EST			0	1			Lightning A Halifax county firefighter was struck by lightning when responding to a fire.
<b>Forsyth County</b> Rural Hall to Walkertown	26	1829EST 1850EST			0	0			Thunderstorm Wind (G50) Several trees were uprooted or limbs torn off in northern Forsyth county as a thunderstorm moved east. The damage began at Rural Hall and continued to the Walkertown area.
<b>Guilford County</b> Greensboro	30	1618EST 1630EST			0	1			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Central</u></b>									
Large trees fell on several houses in Greensboro. There was one injury reported as glass was blown out of a downtown office building. Three people in a house were trapped when large trees fell onto the house. Numerous trees were downed throughout Greensboro. The hardest hit areas were Freeman Mill Road and Florida Street. Power was out for several hours for thousands of Greensboro residents especially in the northeast and southeast sides of the city.									
<b>Randolph County</b> Trinity	30	1638EST			0	0			<b>Thunderstorm Wind (G50)</b>
Numerous trees were snapped off or uprooted in Trinity.									
<b>Alamance County</b> 10 SW Graham to Graham	30	1645EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees were uprooted and snapped off on Highway 49 about 10 miles southwest of Graham.									
<b>Randolph County</b> 10 NE Asheboro	30	1655EST			0	0			<b>Thunderstorm Wind (G100)</b>
<b>Randolph County</b> Ramseur	30	1657EST			0	0			<b>Hail (0.88)</b>
<b>Orange County</b> Carrboro	30	1710EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees were downed throughout the city of Carrboro.									
<b>Chatham County</b> Siler City	30	1725EST			0	0			<b>Thunderstorm Wind (G50)</b>
Thunderstorm winds knocked down trees and power lines in Siler City and areas surrounding Siler City in northwest Chatham county.									
<b>Franklin County</b> Louisburg	30	1730EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees and power lines were downed in the Louisburg area of Franklin county.									
<b>Wake County</b> Cary	30	1730EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees and power lines were downed by thunderstorms at Jones Franklin Road and Crossroads Mall in Cary.									
<b>Stanly County</b> Stanfield to Albemarle	30	1830EST			0	0			<b>Thunderstorm Wind (G50)</b>
Thunderstorm winds uprooted several trees in the Stanfield area to Albemarle.									
<b>Moore County</b> Southern Pines to Cameron	30	1845EST 1900EST			0	0			<b>Thunderstorm Wind (G50)</b>
Moore county local law enforcement reported numerous trees were damaged and some uprooted throughout the county as thunderstorms crossed the area. The hardest hit areas seemed to be Southern Pines and Cameron.									
<b>Anson County</b> Wadesboro to Burnsville	30	1900EST 1915EST			0	0			<b>Thunderstorm Wind (G50)</b>
Several trees were blown down across Anson county from Wadesboro to Burnsville.									
<b>Anson County</b> 5 SE Peachland to 10 SE Peachland	30	1930EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees and power lines were downed across southwest Anson county along state road 1003 near Highway 109 and Highway 145.									
<b>Cumberland County</b> Falcon to Eastover	30	2000EST			0	0			<b>Thunderstorm Wind (G50)</b>
Trees and power lines were downed in Cumberland county form 5 to 10 miles northeast of Fayetteville.									
<b>Hoke County</b> Antioch	30	2000EST			0	0			<b>Thunderstorm Wind (G50)</b>
The community of Antioch reported wind damage as several trees were uprooted by thunderstorm winds.									
<b>Sampson County</b> Clinton	30	2005EST			0	0			<b>Thunderstorm Wind (G50)</b>
Several trained spotters reported that trees were downed by thunderstorms in the county seat of Clinton.									
<b><u>NORTH CAROLINA, Central Coastal</u></b>									
<b>Pamlico County</b> Bayboro	02	1525EST			0	0			<b>Hail (1.50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Central Coastal</u></b>									
<b>Beaufort County</b> 5 SW Aurora	02	1545EST			0	0			Hail (1.75)
<b>Carteret County</b> 1 S South River to 2 E Davis	02	1615EST 1645EST	17	50	0	0	1K		Tornado (F0)
An isolated thunderstorm dropped southeast through Pamlico and eastern Carteret counties producing large hail and a weak tornado which was on the ground for over 17 miles. Damage was limited to a few sheds and a boat. At times witnesses reported dual funnels.									
<b>Lenoir County</b> Falling Creek	03	1603EST			0	0			Hail (1.50)
<b>Craven County</b> Cove City	03	1635EST			0	0			Hail (0.75)
<b>Lenoir County</b> La Grange	03	1800EST			0	0			Hail (1.75)
<b>Greene County</b> Jason	03	1803EST			0	0			Hail (0.75)
<b>Lenoir County</b> 2 W Kinston	03	1810EST			0	0	400K		Hail (2.00)
<b>Jones County</b> Hargetts	03	1835EST			0	0			Thunderstorm Wind (G50)
<b>Pitt County</b> Winterville	03	1838EST			0	0	100K		Hail (3.00)
<b>Beaufort County</b> Chocowinity	03	1840EST			0	0			Hail (1.00)
<b>Pitt County</b> Farmville	03	1845EST			0	0			Hail (1.75)
<b>Craven County</b> Clark	03	1850EST			0	0			Hail (0.75)
<b>Pitt County</b> 6 W Greenville	03	1852EST			0	0			Hail (1.00)
<b>Pitt County</b> 5 N Fountain	03	1856EST			0	0			Hail (1.75)
<b>Pitt County</b> Ayden	03	1906EST			0	0			Hail (2.00)
<b>Beaufort County</b> Aurora	03	2025EST			0	0			Hail (2.75)
<b>Pamlico County</b> Vandemere	03	2025EST			0	0	100K		Hail (2.75)
<b>Martin County</b> Oak City	03	2035EST			0	0	1M	2M	Hail (2.75)
<b>Martin County</b> Williamston	03	2045EST			0	0			Hail (1.75)
<b>Martin County</b> Jamesville	03	2055EST			0	0			Hail (1.25)
<b>Martin County</b> Williamston	03	2055EST			0	0			Hail (2.75)
<b>Beaufort County</b> Pinetown	03	2110EST			0	0			Hail (1.75)
<b>Hyde County</b> Ocracoke	03	2110EST			0	0	50K		Hail (1.75)
<b>Pitt County</b> Winterville	03	2110EST			0	0			Hail (2.00)
<b>Hyde County</b> Engelhard	03	2147EST			0	0			Thunderstorm Wind (G50)

A line of thunderstorms moved across eastern areas of the state producing widespread large hail. Martin county was especially hard hit where much of the tobacco crop was damaged. In Kinston, car dealers reported over a half million dollars worth of damage to

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH CAROLINA, Central Coastal</b>									
vehicles. On Ocracoke Island, the hail was the largest seen in many generations.									
<b>Tyrrell County</b>									
Kilkenny	12	1640EST			0	0			Hail (1.75)
<b>Hyde County</b>									
Fairfield	12	1800EST			0	0			Hail (1.75)
<b>Hyde County</b>									
Swanquarter	12	1845EST			0	0			Thunderstorm Wind (G70)
An isolated thunderstorm moved across Tyrrell and Hyde counties producing large hail and a wind gust in Swan Quarter which downed numerous trees and power lines.									
<b>Duplin County</b>									
Warsaw	13	1431EST			0	0			Hail (0.75)
<b>Duplin County</b>									
Warsaw	13	1431EST			0	0			Thunderstorm Wind (G61)
<b>Duplin County</b>									
Beulaville	13	1500EST			0	0			Thunderstorm Wind (G60)
Wind gusts between 60 and 70 mph were reported across Duplin county with power lines and trees down.									
<b>Greene County</b>									
Snow Hill	13	1645EST			0	0			Hail (1.00)
<b>Washington County</b>									
Mackeys	13	1657EST			0	0			Thunderstorm Wind (G50)
<b>Pitt County</b>									
Winterville	13	1710EST			0	0			Hail (0.75)
<b>Pitt County</b>									
Shelmerdine	13	1715EST			0	0			Thunderstorm Wind (G51)
<b>Washington County</b>									
Creswell	13	1715EST			0	0			Hail (2.75)
<b>Tyrrell County</b>									
Columbia	13	1731EST			0	0			Hail (0.75)
<b>Martin County</b>									
Darden	13	1750EST			0	0			Hail (0.75)
<b>Washington County</b>									
Roper	13	1755EST			0	0			Hail (1.75)
<b>Beaufort County</b>									
Chocowinity	13	1815EST			0	0	25K		Thunderstorm Wind (G51)
<b>Hyde County</b>									
Swanquarter	13	1840EST			0	0			Thunderstorm Wind (G61)
<b>Tyrrell County</b>									
Gum Neck	13	1850EST			0	0			Hail (0.75)
<b>Onslow County</b>									
Hubert	13	1930EST			0	0			Thunderstorm Wind (G50)
<b>Carteret County</b>									
Cape Carteret	13	1938EST			0	0	15K		Thunderstorm Wind
<b>Carteret County</b>									
Beaufort	13	1958EST			0	0			Thunderstorm Wind (G52)
<b>Carteret County</b>									
Harkers Is	13	2005EST			0	0			Thunderstorm Wind (G61)
<b>Carteret County</b>									
Otway	13	2015EST			0	0			Thunderstorm Wind (G51)
A squall line swept across eastern areas of the state producing wind gusts between 60 and 70 mph knocking down trees and power lines. A tree fell onto a trailer in Chocowinity and into a house at Cape Carteret. Baseball size hail broke windshields and headlights in Creswell.									
<b>Tyrrell County</b>									
5 W Gum Neck	15	1515EST			0	0			Hail (2.00)
<b>Washington County</b>									
Pleasant Grove	15	1645EST			0	0	30K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NORTH CAROLINA, Central Coastal

**Tyrrell County  
Columbia**

15	1740EST				0	0	15K		<b>Thunderstorm Wind (G50)</b>
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A violent thunderstorm swept across Washington and Tyrrell counties blowing down a large tree onto 2 houses in Pleasant Grove and causing roof damage in Columbia and River Neck. A 60 mph wind was reported by a spotter.

**Beaufort County  
5 SW Belhaven**

19	1305EST				0	0			<b>Hail (1.00)</b>
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**Beaufort County  
Belhaven**

19	1330EST				0	0			<b>Hail (1.00)</b>
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**Hyde County  
Ocracoke**

19	1430EST				0	0			<b>Thunderstorm Wind (G62)</b>
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**Lenoir County  
Deep Run**

19	1500EST				0	0			<b>Hail (0.75)</b>
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**Duplin County  
Beulaville**

19	1535EST				0	0			<b>Hail (1.25)</b>
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Isolated storms produced hail and a wind gust to 71 mph at the Ocracoke ferry dock.

**Jones County  
Wise Fork to  
5 SW Kinston**

23	1930EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Lenoir County  
Sandy Bottom**

23	1930EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Onslow County  
Richlands**

23	1930EST				0	0			<b>Hail (1.00)</b>
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**Onslow County  
Richlands**

23	1930EST				0	0			<b>Thunderstorm Wind (G61)</b>
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**Onslow County  
Holly Ridge**

23	1950EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Jones County  
Pollocksville**

23	2000EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Onslow County  
Jacksonville**

23	2000EST				0	0			<b>Hail (1.75)</b>
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**Craven County  
Clark**

23	2015EST				0	0			<b>Hail (0.75)</b>
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**Craven County  
Clark**

23	2015EST				0	0	10K		<b>Thunderstorm Wind</b>
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**Onslow County  
Camp Lejeune**

23	2015EST				0	0			<b>Thunderstorm Wind (G51)</b>
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**Onslow County  
Camp Lejeune**

23	2040EST				0	0			<b>Hail (1.75)</b>
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**Carteret County  
1 W Newport**

23	2050EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Onslow County  
North Topsail Beach**

23	2050EST				0	0			<b>Thunderstorm Wind (G50)</b>
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Severe storms downed trees and powerlines across the region with 60 to 70 mph gusts. A trailer and shed were damaged in Clark.

**Duplin County  
Kenansville**

29	1808EST				0	0			<b>Thunderstorm Wind (G50)</b>
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Large tree limb blown down onto power lines.

**Duplin County  
Rose Hill**

30	2030EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Duplin County  
Wallace**

30	2030EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Duplin County  
Faison**

30	2035EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Duplin County  
Warsaw**

30	2035EST				0	0			<b>Thunderstorm Wind (G50)</b>
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**Onslow County  
Jacksonville**

30	2111EST				0	0			<b>Thunderstorm Wind (G50)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Central Coastal</u></b>									
Craven County 3 NW Havelock	30	2140EST			0	0			Thunderstorm Wind (G51)
Carteret County Cedar Is	30	2200EST			0	0			Thunderstorm Wind (G67)
Hyde County Ocracoke	30	2240EST			0	0			Thunderstorm Wind (G63)
A line of severe thunderstorms raced across the region downing trees and powerlines. Widespread tree damage was reported in Duplin county. The Cedar Island ferry terminal reported a gust to 77 mph and Ocracoke village saw a gust to 73 mph.									
<b><u>NORTH CAROLINA, Extreme Southwest</u></b>									
Cherokee County 2 NW Murphy	04	1015EST			0	0		10K	Thunderstorm Wind
Trees down in Hanging Dog and Ed Graves road areas near Hiwassee Lake just northwest of Murphy.									
<b><u>NORTH CAROLINA, North Coastal</u></b>									
Bertie County Kelford	03	1953EST			0	0			Hail (1.75)
Currituck County Moyock	03	2045EST			0	0	5K		Thunderstorm Wind
Several pine trees were snapped off at the top and down across Highway 168. Remains of a shed covering tractors with wood and tin were scattered across a field. Also, one side of a small cinder block building was blown down.									
Northampton County 1 W Jackson	13	1438EST			0	0			Hail (1.75)
Northampton County 1 E Jackson	13	1455EST			0	0	5K		Thunderstorm Wind
Trees uprooted or snapped off. Damage to a tobacco barn. Power lines down.									
Northampton County Conway	13	1500EST			0	0	3K		Thunderstorm Wind
Numerous trees down.									
Hertford County Murfreesboro	13	1505EST			0	0	2K		Thunderstorm Wind
Few trees and a power line down on Route 258.									
Hertford County Harrellsville	13	1510EST			0	0	2K		Thunderstorm Wind
Tree tops blown off on both sides of Route 45.									
Hertford County Winton	13	1520EST			0	0	5K		Thunderstorm Wind (G52)
Several trees and power lines down. Some parts of roofs blown off and roads blocked by debris.									
Gates County 2 N Gatesville	13	1525EST			0	0	3K		Thunderstorm Wind
Several trees down near intersection of Route 158 and Route 37.									
Chowan County Gliden	13	1550EST			0	0			Hail (0.75)
Perquimans County Winfall	13	1600EST			0	0	2K		Thunderstorm Wind
Power lines down.									
Bertie County 3 NE Windsor	13	1630EST			0	0	2K	3K	Hail (1.75)
Hail broke windows and caused significant crop damage near intersection of Highway 17 and Highway 1001.									
Bertie County 3 NE Windsor	13	1630EST			0	0	3K		Thunderstorm Wind
Numerous oak trees down near intersection of Highway 17 and Highway 1001.									
Bertie County Merry Hill	13	1745EST			0	0	2K		Thunderstorm Wind
Several trees down.									
Bertie County Kelford	15	1612EST			0	0			Hail (2.00)
Bertie County Windsor	15	1656EST			0	0			Hail (1.25)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, North Coastal</u></b>									
<b>Chowan County</b>									
Edenton	15	1725EST			0	0	2K		Thunderstorm Wind
		Several trees down.							
<b>Northampton County</b>									
Seaboard to Severn	16	1732EST			0	0	2K		Thunderstorm Wind
		Few trees down.							
<b>Camden County</b>									
Old Trap	23	1325EST			0	0			Hail (0.88)
<b><u>NORTH CAROLINA, Northwest and North Central</u></b>									
<b>Rockingham County</b>									
Eden	02	1800EST			0	0			Hail (0.75)
<b>Rockingham County</b>									
Eden	02	1810EST			0	0			Hail (0.88)
<b>Rockingham County</b>									
Eden	02	1810EST			0	0	5K		Thunderstorm Wind
<b>Rockingham County</b>									
Reidsville	02	1820EST			0	0			Hail (0.88)
<b>Rockingham County</b>									
Eden	02	1825EST 1910EST			0	0			Flash Flood
		Thunderstorms early in the evening on the 2nd in Rockingham County produced up to nickel size hail, damaging winds, and flash flooding.							
		Thunderstorm winds in Eden downed a large tree, several small trees and tree limbs, and power lines.							
		Heavy rain from thunderstorms flooded Meadow Road in Eden.							
<b>Watauga County</b>									
Boone	02	1840EST			0	0	350K		Hail (4.00)
		Thunderstorms during the evening of the 2nd produced up to softball size hail in the town of Boone damaging owned vehicles and 200 cars at a dealership.							
<b>Rockingham County</b>									
Eden	03	1730EST			0	0			Hail (0.88)
<b>Rockingham County</b>									
3 W Wentworth	03	1730EST			0	0	15K		Hail (1.50)
<b>Rockingham County</b>									
Reidsville	03	1740EST			0	0	15K		Hail (2.00)
<b>Rockingham County</b>									
Reidsville	03	1744EST			0	0			Hail (1.00)
<b>Rockingham County</b>									
Reidsville	03	1748EST			0	0	60K		Hail (2.25)
<b>Rockingham County</b>									
2 W Reidsville	03	1750EST			0	0			Hail (2.75)
<b>Rockingham County</b>									
6 SE Reidsville	03	1750EST			0	0			Hail (1.25)
<b>Rockingham County</b>									
Reidsville	03	1750EST			0	0	0		Thunderstorm Wind
<b>Rockingham County</b>									
1 N Reidsville	03	1751EST			0	0			Hail (2.50)
<b>Caswell County</b>									
Camp Spgs	03	1758EST			0	0			Hail (1.00)
<b>Rockingham County</b>									
2 NW Reidsville	03	1800EST			0	0			Hail (1.50)
<b>Caswell County</b>									
Camp Spgs	03	1810EST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **NORTH CAROLINA, Northwest and North Central**

<b>Caswell County Anderson</b>	<b>03</b>	<b>1813EST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.00)</b>
<b>Watauga County 5.5 W Zionville to 3.5 W Zionville</b>	<b>03</b>	<b>1917EST 1920EST</b>	<b>2</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>20K</b>		<b>Tornado (F0)</b>
<b>Watauga County 3.5 W Zionville to 1 S Todd</b>	<b>03</b>	<b>1920EST 1937EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
<b>Ashe County Lansing</b>	<b>03</b>	<b>1925EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Ashe County Glendale Spgs</b>	<b>03</b>	<b>1935EST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b>
<b>Watauga County Boone</b>	<b>03</b>	<b>1935EST</b>			<b>0</b>	<b>0</b>			<b>Hail (3.00)</b>
<b>Watauga County Meat Camp</b>	<b>03</b>	<b>1935EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
<b>Rockingham County Ayersville</b>	<b>03</b>	<b>1940EST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind</b>
<b>Watauga County Meat Camp</b>	<b>03</b>	<b>1940EST</b>			<b>0</b>	<b>0</b>			<b>Hail (3.00)</b>
<b>Surry County Mt Airy</b>	<b>03</b>	<b>1950EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Surry County Mt Airy</b>	<b>03</b>	<b>1950EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
<b>Watauga County Boone</b>	<b>03</b>	<b>1950EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Wilkes County Countywide</b>	<b>03</b>	<b>2010EST 2030EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
<b>Wilkes County 8 S Wilkesboro</b>	<b>03</b>	<b>2015EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Wilkes County Moravian Falls</b>	<b>03</b>	<b>2025EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Wilkes County Moravian Falls</b>	<b>03</b>	<b>2025EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>

Thunderstorms during the late afternoon and evening on the 3rd produced hail up to 3.00 inches in diameter, damaging wind, and a tornado.

Thunderstorm winds toppled trees around Ayersville, blocking several roads, large trees and power lines in Glendale Springs, large trees in Meat Camp, trees in Mt Airy blocking some roads, trees in Reidsville, and trees and tree limbs causing power outages from 3.5 miles west of Zionville to 1 mile south of Todd.

Numerous trees were toppled throughout Wilkes County, knocking down some power lines with 3300 people losing power.

A tornado from five and a half miles west to three and a half miles west Zionville in the western part of Watauga County destroyed a few barns and toppled trees and tree limbs causing power outages.

<b>Watauga County Boone</b>	<b>04</b>	<b>1410EST 1705EST</b>			<b>0</b>	<b>0</b>	<b>600K</b>		<b>Flash Flood</b>
Thunderstorms during the afternoon of the 4th produced flash flooding in the town of Boone. Several main streets were closed within the town and water flooded most buildings. Bridges within Boone were impassable. Some residents were evacuated.									
<b>Ashe County West Jefferson</b>	<b>10</b>	<b>0335EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.50)</b>
<b>Wilkes County 10 N Wilkesboro</b>	<b>10</b>	<b>0400EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NORTH CAROLINA, Northwest and North Central

<b>Alleghany County</b> Ennice	10	0510EST			0	0			Hail (0.75)
<b>Alleghany County</b> Ennice	10	0510EST			0	0	0		Thunderstorm Wind (G50)
<b>Wilkes County</b> 3 SE Ferguson	10	0618EST			0	0	1K		Thunderstorm Wind

Thunderstorms on the morning of the 10th produced hail up to 1.5 inches in diameter and damaging winds.

Thunderstorm winds toppled several 12 to 14 inch diameter trees about 3 miles southeast of Ferguson. Some roofing on chicken coops was also peeled back.

<b>Alleghany County</b> Roaring Gap	11	1336EST			0	0			Hail (0.88)
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Thunderstorms produced hail up to .88 inches in diameter in Roaring Gap during the early afternoon on the 11th.

<b>Rockingham County</b> Eden	15	1425EST			0	0	0		Thunderstorm Wind (G51)
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<b>Rockingham County</b> Eden	15	1430EST			0	0			Hail (1.00)
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<b>Rockingham County</b> Eden	15	1430EST			0	0			Hail (1.25)
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<b>Caswell County</b> 8 NW Yanceyville	15	1450EST	0.1	30	0	0	2K		Tornado (F0)
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<b>Caswell County</b> Bethel	15	1455EST			0	0			Hail (1.75)
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<b>Caswell County</b> Bethel	15	1455EST			0	0	0		Thunderstorm Wind
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Thunderstorms during the afternoon of the 15th spawned a tornado, produced damaging winds, and hail up to 1.75 inches in diameter.

A tornado briefly touched down 8 miles northwest of Yanceyville, picking up an automobile, turning it 180 degrees and carrying it 10 feet in the air on U.S. route 29.

Thunderstorm winds toppled trees and tore off tree limbs in Bethel.

<b>Wilkes County</b> Roaring River	16	1335EST			0	0	0		Thunderstorm Wind
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<b>Surry County</b> Low Gap	16	1336EST			0	0			Hail (1.75)
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<b>Rockingham County</b> Eden	16	1430EST 1545EST			0	0			Hail (1.25)
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<b>Surry County</b> Pilot Mtn	16	1430EST			0	0			Hail (0.88)
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<b>Surry County</b> Pilot Mtn	16	1430EST			0	0	0		Thunderstorm Wind
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Thunderstorms on the afternoon of the 16th produced hail to 1.75 inches in diameter and damaging winds.

Thunderstorm winds uprooted trees and brought down tree limbs in Pilot Mountain and broke off large tree limbs in Roaring River.

## NORTH CAROLINA, South Coastal

<b>Pender County</b> 10 NE Rocky Pt to 12 NE Rocky Pt	03 05	1500EST 1200EST			0	0			Wild/Forest Fire
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Lightning sparked a forest fire just east of Shaw Highway, N of 210 that burned 695 acres on the western edge of Holly Shelter Game Land.

<b>Bladen County</b> Clarkton	04	1658EST 1705EST			0	0			Hail (0.88)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, South Coastal</u></b>									
<b>Columbus County</b> Lake Waccamaw	04	1730EST 1740EST			0	0	1K		Thunderstorm Wind (G70)
									Thunderstorm gust downed 12 inch diameter tree in State Park.
<b>Robeson County</b> Parkton	13	1410EST 1415EST			0	0	10K		Thunderstorm Wind (G65)
									Several Trees were downed and a barn was badly damaged.
<b>Bladen County</b> White Lake	13	1500EST 1505EST			0	0	10K		Thunderstorm Wind (G65)
									Thunderstorm gusts at Crystal Beach blew a sign down and broke car windows.
<b>Bladen County</b> 5 NE Kelly to 2 S Kelly	13	1515EST 1517EST	0.3	25	0	0			Tornado (F1)
									A tornado crossed NC210 just north of Colly Creek, 1 mile South of the Rowan Community. No structures were effected.
<b>Pender County</b> 5 SE Atkinson	13	1521EST 1523EST	0.1	20	0	0			Tornado (F0)
									Tornado touchdown reported sighted from Moore's Creek Nat'l Battlefield. No damage cited.
<b>Bladen County</b> Kelly	13	1525EST 1530EST	2	25	0	0	25K		Tornado (F1)
									Two unoccupied trailers were destroyed and another lost its roof on Lightwood Knot Rd. A tree was downed on White Oak Rd. Power was knocked out.
<b>Bladen County</b> 4 SE Kelly	13	1530EST			0	0	1K		Lightning
									Lightning struck Rosa Green Baptist Church, on NC11.
<b>New Hanover County</b> Wilmington Arpt to 1 E Myrtle Grove	13	1547EST 1655EST			0	0			Hail (2.00)
									Thunderstorms developed as an east-moving atmospheric wave collided with a sea breeze front. Winds were reported as high as 63 MPH at Wrightsville Beach, and hail reports across the county peninsula ranged from .75 inch to 2 inches.
<b>Columbus County</b> Riegelwood	13	1550EST 1555EST			0	0			Hail (1.00)
<b>Brunswick County</b> Leland	13	1602EST 1604EST	0.1	10	0	0			Tornado (F0)
									Brief touchdown at Magnolia Greens golf course. No damage.
<b>Brunswick County</b> Leland	13	1610EST 1615EST			0	0			Hail (0.75)
									Along with hail, a wind gust of 60 mph was reported from a thunderstorm.
<b>Robeson County</b> Fairmont to 5 S Barnesville	15	1910EST 1920EST			0	0	40K		Thunderstorm Wind (G70)
									Thunderstorm downburst winds downed trees and power lines, cutting power to 850 homes. Homes and businesses had damage.
<b>Columbus County</b> Evergreen to Hallsboro	15	1935EST 2000EST			0	0	30K	5K	Thunderstorm Wind (G75)
									Thunderstorms tracked across the county, snapping trees, downing power lines, and damaging roofs.
<b>New Hanover County</b> Wilmington	17	0210EST 0215EST			0	0	8K		Thunderstorm Wind (G60)
									Thunderstorm gust measured 64 MPH at Wilmington airport. Storm downed a tree onto a house in Forest Hills subdivision.
<b>Bladen County</b> Clarkton	19	1720EST 1745EST			0	0	20K		Thunderstorm Wind (G60)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, South Coastal</u></b>									
		Winds near 70 mph, along with 3/4 inch hail occurred at the intersection of hwys 41/210. Trees were downed onto power lines in Clarkton.							
<b>Brunswick County</b> Supply to Leland	19	1755EST 1815EST			0	0	30K		<b>Thunderstorm Wind (G65)</b>
		Thunderstorm gusts downed a tree onto a house in Supply and tore roofing off a houses at Long Beach and Leland.							
<b>New Hanover County</b> Wilmington	19	1820EST 1825EST	2	20	0	0	150K		<b>Tornado (F1)</b>
		Tornado touched down near Railroad Museum and tracked a spotty path to 23rd St., near Smith Creek.. Trees, homes and businesses were damaged.							
<b>New Hanover County</b> 2 N Wilmington to 8 E Wilmington	19	1830EST 1855EST			0	0	20K		<b>Thunderstorm Wind (G70)</b>
		Trees were down and power out from North Chase to Landfall.							
<b>Pender County</b> Scotts Hill to Surf City	19	1845EST 1855EST			0	0			<b>Thunderstorm Wind (G60)</b>
		Downed trees knocked out power at Scotts Hill, and the bridge tender at Surf City reported a 60 mph sustained wind.							
<b>Bladen County</b> Bladenboro	28	1715EST 1720EST			0	0			<b>Hail (0.75)</b>
<b>Columbus County</b> 6 N Whiteville to Whiteville	28	1742EST 1753EST			0	0			<b>Hail (1.50)</b>
		The largest hail report was at intersection of US 701 and NC131, north of Whiteville. Elsewhere, it was mostly 3/4 inch or less.							
<b>Robeson County</b> 1 W Rennert to 1 W St Pauls	29	1640EST 1645EST			0	0			<b>Thunderstorm Wind (G60)</b>
		About 1600 homes lost power as thunderstorm winds downed trees and power lines in Northern Robeson County. Police also reported two trees downed along Interstate 95, and another on Shaw Mill Road.							
<b>Robeson County</b> Maxton to Lumberton	30	1955EST 2009EST			0	0	5K		<b>Thunderstorm Wind (G65)</b>
		Trees were downed by thunderstorm gusts.							
<b>Bladen County</b> Tobemory to Dublin	30	2012EST 2032EST			0	0	20K		<b>Thunderstorm Wind (G65)</b>
		Trees were downed on power lines.							
<b><u>NORTH CAROLINA, Southwest</u></b>									
<b>Jackson County</b> Countywide	02	0600EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Macon County</b> Highlands	02	0700EST			0	0			<b>Lightning</b>
		A cluster of thunderstorms moved southeast across the southwestern mountains of North Carolina early on the 3rd. One thunderstorm became severe as it crossed Jackson county and blew many trees down across the county. Scattered power outages occurred as well, although mainly in the Caney Fork community. A new water treatment plant in Highlands was put out of commission for 2 days by a severely damaging lightning strike.							
<b>Yancey County</b> 5 E Burnsville	03	0500EST			0	0			<b>Hail (1.00)</b>
		An isolated severe thunderstorm produced quarter size hail shortly before sunrise.							
<b>Davie County</b> 3 N Mocksville	03	1545EST			0	0			<b>Thunderstorm Wind (G57)</b>
<b>Iredell County</b> Union Grove	03	1545EST			0	0			<b>Thunderstorm Wind (G52)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH CAROLINA, Southwest</b>									
<b>Catawba County</b> 7 WSW Newton to 10 WSW Newton	03	1618EST 1630EST			0	0			Hail (4.50)
<b>Catawba County</b> 7 WSW Newton to 10 WSW Newton	03	1618EST 1630EST			0	0			Thunderstorm Wind (G50)
<b>Lincoln County</b> 5 N Boger City	03	1634EST			0	0			Hail (1.75)
<b>Lincoln County</b> Denver	03	1640EST			0	0			Hail (1.75)
<b>Lincoln County</b> Lovesville	03	1640EST			0	0			Hail (1.00)
<b>Mecklenburg County</b> Cornelius	03	1650EST			0	0			Hail (1.75)
<b>Iredell County</b> 15 NW Statesville	03	2033EST			0	0			Hail (0.75)
<b>Alexander County</b> 10 NE Taylorsville	03	2036EST			0	0			Hail (1.00)
<b>Rowan County</b> Spencer	03	2038EST			0	0			Hail (1.75)
A slow-moving cold front pushing south through North Carolina acted as a focusing mechanism for strong to severe thunderstorms in a moderately unstable airmass. Most of the wind damage was confined to downed trees and/or branches. However, hail was reported most often on this evening with unusually large hail, the size of softballs, pulverising an area in southern Catawba county. The hail stripped bark off trees and damaged sheet metal.									
<b>Macon County</b> Cullasaja	04	1600EST			0	0	50K		Lightning
Lightning ignited a fire that destroyed a house and its contents.									
<b>Alexander County</b> Millersville	10	0600EST			0	0			Lightning
<b>Catawba County</b> Claremont	10	0600EST			0	0			Hail (1.00)
<b>Iredell County</b> 10 W Statesville	10	0605EST			0	0			Thunderstorm Wind (G50)
<b>Caldwell County</b> 2 NE Kings Creek	10	0618EST			0	0			Thunderstorm Wind (G50)
<b>Iredell County</b> Mooresville	10	0625EST			0	0			Hail (1.00)
<b>Alexander County</b> 2 W Taylorsville	10	0630EST			0	0			Thunderstorm Wind (G60)
<b>Alexander County</b> Taylorsville	10	0635EST			0	0			Hail (1.75)
<b>Alexander County</b> 2 W Taylorsville	10	0635EST			0	0			Lightning
<b>Iredell County</b> 10 SW Statesville	10	0700EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> Weddington	10	0812EST			0	0			Hail (0.75)
<b>Gaston County</b> Mt Holly to Belmont	10	0830EST 0930EST			0	0			Flash Flood
<b>Union County</b> Monroe	10	0833EST			0	0			Hail (1.75)
<b>Union County</b> Monroe	10	0833EST			0	0			Thunderstorm Wind (G60)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH CAROLINA, Southwest</b>									
<b>Gaston County</b>									
Mt Holly to Belmont	10	0852EST 0906EST			0	0			Hail (0.75)
<b>Gaston County</b>									
Mt Holly to Belmont	10	0852EST			0	0			Thunderstorm Wind (G50)
<b>Mecklenburg County</b>									
Charlotte	10	0855EST 0955EST			0	0			Flash Flood
<b>Mecklenburg County</b>									
Charlotte	10	0855EST			0	0	200K		Lightning
<b>Mecklenburg County</b>									
2 S Clt Douglas Arpt	10	0855EST			0	0			Thunderstorm Wind (G50)
<b>Gaston County</b>									
Mt Holly to Belmont	10	0907EST 0912EST			0	0			Hail (0.75)
<b>Gaston County</b>									
Mt Holly	10	0910EST			0	0			Hail (0.75)
<b>Union County</b>									
Wingate	10	1100EST			0	0	16K		Lightning
<b>Macon County</b>									
Highlands	10	1400EST			0	0			Lightning
<p>A warm front pushing north through western North Carolina helped initiate heavy rain and severe thunderstorms during the morning of the 10th. Many reports of trees down and large hail were received from the western piedmont. A car was blown off the road near Kings Creek. Chicken houses were damaged near Taylorsville allowing ten thousand chickens to run free. Numerous trees were uprooted in Monroe and wind blown golf ball size hail broke windows and damaged cars. Heavy rain in a short period of time resulted in some urban flooding from the Belmont and Mount Holly areas, to the south side of Charlotte. Numerous roads were flooded and several motorists required rescue in different parts of the city. Lightning severely damaged a church in Millersville, but no damage estimate was available. Several homes were struck by lightning in the Charlotte area, causing extensive damage. In Wingate, one house was severely damaged and two others minorly damaged by lightning. Lastly, a lightning strike in Highlands ignited a fire that burned a large house and its contents, including a Corvette. No damage estimates were given.</p>									
<b>Caldwell County</b>									
Granite Falls to Grandin	11	1415EST			0	0			Hail (0.75)
<b>Catawba County</b>									
Newton	11	1435EST			0	0			Hail (0.75)
<b>Burke County</b>									
Hildebran	11	1505EST			0	0			Hail (1.75)
<b>Burke County</b>									
Hildebran	11	1505EST			0	0			Thunderstorm Wind (G50)
<b>Catawba County</b>									
5 W Conover	11	1524EST			0	0			Hail (1.75)
<b>Catawba County</b>									
5 W Conover	11	1524EST			0	0			Thunderstorm Wind (G60)
<p>A cluster of severe thunderstorms rolled out of the northern foothills and into the northwest piedmont, downing numerous trees and power lines, and almost blowing an ambulance off Interstate 40 in eastern Burke county. Hail ranging in size from dimes to golf balls was also reported.</p>									
<b>Mecklenburg County</b>									
Charlotte	16	0355EST			0	0			Thunderstorm Wind (G50)
<p>A severe thunderstorm downed a tree and numerous large limbs on the south side of Charlotte, causing widespread power outages.</p>									
<b>McDowell County</b>									
10 N Marion	16	1250EST			0	0			Thunderstorm Wind (G50)
<b>Caldwell County</b>									
Collettsville	16	1300EST			0	0			Hail (2.00)
<b>Caldwell County</b>									
Collettsville	16	1300EST			0	0			Thunderstorm Wind (G50)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Southwest</u></b>									
<b>McDowell County</b> 3 S Marion	16	1315EST			0	0			Thunderstorm Wind (G50)
<b>Caldwell County</b> Kings Creek to Oak Hill	16	1320EST			0	0			Hail (2.00)
<b>Caldwell County</b> Kings Creek to Oak Hill	16	1320EST			0	0			Thunderstorm Wind (G55)
<b>Alexander County</b> Ellendale	16	1336EST			0	0			Hail (1.75)
<b>Alexander County</b> Hiddenite	16	1355EST			0	0			Hail (1.25)
<b>Davie County</b> 5 NE Mocksville	16	1435EST			0	0			Hail (1.00)
<b>Davie County</b> 5 NE Mocksville	16	1435EST			0	0			Thunderstorm Wind (G52)
<b>Catawba County</b> Hickory	16	1700EST			0	0			Hail (0.75)
<b>Catawba County</b> Hickory	16	1700EST			0	0			Thunderstorm Wind (G50)
<b>Catawba County</b> 5 NE Newton	16	1715EST			0	0			Hail (0.75)
Thunderstorms developed in east Tennessee and moved east across the mountains of North Carolina during the early and middle afternoon. One storm evolved into a strong supercell as it moved across northern McDowell county and into Caldwell county. Numerous trees and power lines were downed from Highway 221 North to the eastern side of Caldwell county. Hail up to 2 inches in diameter combined with the severe winds to damage roofs and break windows in the Collettsville, Kings Creek and Oak Hill areas. There were also numerous reports of a funnel cloud. As this particular supercell moved east into Alexander county it produced dime to golf ball size hail and blew some shingles off a church in Ellendale. Large hail continued across northern Catawba county and a spotter measured 60 mph winds northeast of Mocksville, in Davie county. Other thunderstorms developed behind the initial super cell and tracked in a similar path later in the afternoon and early evening. One storm became severe and produced large hail and some downed power lines in the northern part of Caldwell county. About 500 people were without power near Kiser Island.									
<b>Jackson County</b> Sylva	19	1045EST			0	0			Thunderstorm Wind (G50)
<b>Transylvania County</b> 10 W Brevard	19	1120EST			0	0			Thunderstorm Wind (G50)
A line of thunderstorms strengthened and bowed out across Jackson and Transylvania counties. Severe straightline winds downed trees in Sylva, and trees and power lines were downed on Hwy 215 near Balsam Grove.									
<b>Jackson County</b> South Portion	21	1100EST 1300EST			0	0			Flash Flood
<b>Macon County</b> Aquone	21	1241EST			0	0			Thunderstorm Wind (G50)
<b>Macon County</b> Franklin	21	1245EST			0	0			Thunderstorm Wind (G50)
<b>Jackson County</b> Cashiers	21	1315EST			0	0			Thunderstorm Wind (G50)
A few storms became severe as they moved east across the southern mountains during the early afternoon. A tree fell on a car and others were blocking a road in Macon county. In addition to downed trees in Cashiers, excessive rain in a short period of time caused flash flooding across the southern part of Jackson county that resulted in a bridge on Hwy 281 being washed out.									
<b>Rutherford County</b> Forest City to Ellenboro	22	1730EST			0	0			Thunderstorm Wind (G65)
<b>Madison County</b> 10 N Mars Hill	22	2040EST			0	0			Thunderstorm Wind (G50)
<b>Buncombe County</b> 2 S Swannanoa	22	2100EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH CAROLINA, Southwest</u></b>									
<b>Buncombe County</b> 2 S Swannanoa	22	2100EST			0	0			Thunderstorm Wind (G55)
<b>McDowell County</b> Pleasant Gardens to Marion	22	2105EST 2119EST			0	0			Thunderstorm Wind (G50)
<b>Yancey County</b> 10 NW Burnsville to 10 SW Burnsville	22	2110EST			0	0			Thunderstorm Wind (G50)
<b>Haywood County</b> Maggie Vly	22	2115EST			0	0			Thunderstorm Wind (G50)
<b>Henderson County</b> Etowah to Mountain Home	22	2120EST 2130EST			0	0			Thunderstorm Wind (G50)
<b>McDowell County</b> East Marion	22	2120EST 2130EST			0	0			Thunderstorm Wind (G50)
<b>Caldwell County</b> Lenoir	22	2130EST			0	0			Thunderstorm Wind (G50)
<b>Catawba County</b> Hickory	22	2130EST			0	0	10K		Thunderstorm Wind (G50)
<b>Rutherford County</b> Ellenboro	22	2210EST			0	0			Thunderstorm Wind (G50)
<b>Mecklenburg County</b> South Portion	22	2315EST			0	0			Thunderstorm Wind (G50)
Multi-cell thunderstorms moved across the mountains and into the foothills during the evening hours. Some of the storms became severe and produced mainly wind damage. Winds were estimated as high as 75 mph in Rutherford county early in the evening, resulting in downed trees damaging several homes and a barn destroyed. A National Weather Service co-operative observer measured a 63 mph wind gust on Flat Top Mountain. A tree fell on a house in west Asheville as well as in Hickory. Elsewhere, scattered trees and some power lines were downed.									
<b>Union County</b> Weddington	24	1740EST			0	0			Hail (0.88)
<b>Union County</b> Mineral Spg	24	1755EST			0	0			Hail (0.75)
<b>Henderson County</b> 5 ESE Hendersonville	24	1819EST			0	0			Hail (1.75)
<b>Henderson County</b> Hendersonville	24	1825EST			0	0			Thunderstorm Wind (G50)
<b>Transylvania County</b> 7 NE Brevard	24	1830EST			0	0			Thunderstorm Wind (G50)
<b>Transylvania County</b> 5 SW Brevard	24	1915EST			0	0			Thunderstorm Wind (G50)
<b>Rowan County</b> 13 WNW Salisbury	24	1930EST			0	0			Thunderstorm Wind (G50)
Multi-cell thunderstorms again developed in the early evening and moved south across the southern mountains and piedmont. A few became severe and produced large hail up to golf ball size, as well as damaging winds. Wind damage was confined to downed trees and power lines. The hardest hit area was northeast of Brevard where roads were blocked.									
<b>Mecklenburg County</b> Charlotte	26	1600EST			0	0			Hail (1.00)
<b>Mecklenburg County</b> Charlotte	26	1600EST			0	0			Thunderstorm Wind (G50)
Trees were downed by a severe thunderstorm in the South Park area and quarter size hail fell near the intersection of Interstate 77 and Interstate 85.									
<b>Cleveland County</b> 5 E Shelby	29	1545EST			0	0			Thunderstorm Wind (G50)
<b>NCZ071</b>									
	29	1600EST			2	0			Heat
		M71PH, F80PH							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NORTH CAROLINA, Southwest

<b>Iredell County</b> Mooresville	29	1700EST			0	0			Thunderstorm Wind (G50)
<b>Mecklenburg County</b> Charlotte	29	1710EST			0	0			Thunderstorm Wind (G50)
<b>Mecklenburg County</b> 5 SE Charlotte	29	1740EST			0	0			Thunderstorm Wind (G50)
<p>A string of several days in the upper 90s to near 100 degrees resulted in the death of an elderly couple when their home's air conditioning failed. The date and time of death was estimated. Severe thunderstorms brought damaging winds to the southern piedmont in the late afternoon and early evening. Numerous trees and power lines were downed across the north and east side of Charlotte, some damaging homes. Power was out for a couple of days in that area. Elsewhere, scattered trees and power lines were blown down with about 7500 people left without power in Mooresville.</p>									
<b>Madison County</b> Hot Spgs	30	1515EST			0	0			Hail (1.00)
<b>Madison County</b> Hot Spgs	30	1515EST			0	0			Thunderstorm Wind (G50)
<b>Madison County</b> Marshall	30	1530EST			0	0			Thunderstorm Wind (G50)
<b>Iredell County</b> Mooresville	30	1700EST			0	0			Thunderstorm Wind (G50)
<b>Mecklenburg County</b> Matthews to Mint Hill	30	1820EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> 6 NW Bakers to 5 NW Bakers	30	1825EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> Marshville to New Salem	30	1855EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> 8 SSE Monroe	30	1940EST			0	0			Thunderstorm Wind (G50)

One severe thunderstorm in the mountains produced quarter size hail and damaging winds that downed trees and power lines. Other severe thunderstorms developed in the southern piedmont for the second day in a row. Numerous trees and power lines were blown down, some falling on or near Interstate 77 near Mooresville, some along Hwy 205 in Union county, and one on a house in Unionville. Eleven thousand people were left without power in the southeastern part of Mecklenburg county.

## NORTH DAKOTA, Central and West

<b>NDZ004</b> <b>Bottineau</b> 03 0800CST					0	0	75K		Extreme Cold
<p>Beekeepers lost honey production when an early June cold snap destroyed 75% of the alfalfa crop. Low temperatures reached the mid 20s while normal lows are in the mid 40s.</p>									
<b>Dickey County</b> 7 ESE Ellendale	10	1410CST			0	0			Hail (0.75)
<b>Logan County</b> 15 NE Napoleon	10	1415CST	0.2	33	0	0			Tornado (F0)
<p>Tornado remained in rural areas and caused no damage. Ground was white with pea size hail after storm lifted.</p>									
<b>Dickey County</b> 13 N Ellendale	10	1530CST			0	0			Hail (1.75)
<b>Dickey County</b> 4 SE Fullerton	10	1600CST			0	0	2K		Hail (1.50)
<p>Damage to vehicle.</p>									
<b>Stutsman County</b> 9 SE Cleveland	10	1600CST			0	0			Hail (1.75)
<p>Severe damage reported but no estimates or details given.</p>									
<b>Dickey County</b> 7 ESE Ellendale	10	1930CST			0	0			Hail (0.75)
<b>Stark County</b> Belfield	13	1425CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH DAKOTA, Central and West</u></b>									
<b>Morton County</b> 2 NW New Salem	18	1300MST			0	0			<b>Funnel Cloud</b> Several funnels were reported at the same time in the area with none touching the ground or causing damage.
<b>Burleigh County</b> 13 NE Bismarck to 15 NE Bismarck	18	1410CST 1415CST	0.2	33	0	0	0	0	<b>Tornado (F0)</b> The visible funnel came out of a high based thunderstorm which lead to numerous reports of this tornado. Most of received reports on location were in error. Used video and a rancher report to pin down actual location. Numerous funnels were reported in North Dakota this day. The 911 center was overcome by the number of phone calls received about why the outdoor sirens were sounding. The sirens were sounded because the original report of the tornado was just east of Bismarck (this was the location of the observer, not the tornado).
<b>Mclean County</b> 2 N Washburn	18	1700CST			0	0			<b>Funnel Cloud</b> County 911 lines were jammed after the warning sirens in Washburn were turned on.
<b>Sioux County</b> 3 N Ft Yates to 8 W Selfridge	18	1825MST 2200MST			0	0	3K		<b>Flash Flood</b> Secondary roads washed out 8 miles west of Selfridge. Water overtopped roads at many locations.
<b>Adams County</b> Hettinger	22	1900MST			0	0	10K		<b>Lightning</b> The Hillcrest Care Center received damage to ovens, paging system, air conditioner control, burglar alarm, and television set.
<b>Golden Valley County</b> 10 S Beach	23	1500MST			0	0			<b>Heavy Rain</b> Report of 5 inches of rain in 2.5 hours caused basement and low land flooding.
<b>Williams County</b> Bonetraill	23	1759CST			0	0			<b>Hail (0.75)</b>
<b>Mcintosh County</b> 5 NW Ashley to 5 NNW Ashley	24	1810CST 1830CST	0.2	33	0	0			<b>Tornado (F0)</b> Nearly stationary, numerous reports from all directions.
<b>Logan County</b> Gackle	24	1845CST			0	1	20K		<b>Hail (3.00)</b> One person was hit on the head while trying to get horses into the barn. Other damage occurred to neon signs, skylights, cars and windows.
<b>Mcintosh County</b> 5 SE Ashley	24	1952CST			0	0			<b>Hail (1.75)</b>
<b>Mcintosh County</b> 6 E Ashley	24	2015CST			0	0			<b>Hail (1.75)</b>
<b>Mcintosh County</b> 16 ESE Ashley	24	2105CST			0	0			<b>Hail (1.25)</b> Locations is also 12 west of Forbes (Dickey county), person reported ground white with hail.
<b>Billings County</b> Medora	25 26	2353MST 0003MST			0	0			<b>Hail (0.75)</b> Deputy reported ground was white with hail.
<b>Mcintosh County</b> Zeeland	26	1240CST			0	0	1.5M		<b>Tstm Wind/Hail</b> Hail covered the ground with total crop loss. Wind damage to trees, wind speed unknown.
<b>Dickey County</b> 3 NW Fullerton	26	1355CST	0.2	33	0	0			<b>Tornado (F0)</b> Brief touchdown, no damage. Reported by road crew.
<b>Dickey County</b> 6 N Oakes	26	1420CST			0	0	500K	1M	<b>Hail (1.50)</b> Report from insurance adjuster.
<b>Mountrail County</b> New Town	26	1500CST			0	0			<b>Funnel Cloud</b> Numerous funnels were reported around the area but none touched down. A thunderstorm downdraft did break small branches and blew around garbage cans in New Town.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## NORTH DAKOTA, Central and West

### **La Moure County**

**11 W Verona to  
8 NNW Verona**      26      1540CST  
1610CST

Hailed 30 minutes, total crop loss near intersection of Highway 1 and Highway 27. Hail size and exact time of hail estimated.

### **Burke County**

**1 NE Portal**      26      1630CST      0.1      20      0      0      **Tornado (F0)**

### **La Moure County**

**5 N Edgeley to  
5 W Edgeley**      26      1800CST      0      0      130K      **Flood**

Some parts of the county received 6 inches of rain. The hardest hit areas were northeast of LaMoure and west and north of Edgeley. County officials were seeking their seventh presidential disaster declaration in six years (mostly due to water problems).

### **NDZ033**

#### **Stark**

**27      1550MST      0      0      High Wind (G55)**

Wind gusts of 30 to 50 mph persisted from late morning until evening with a peak gust of 63 mph (55 knots) recorded at the Dickinson Airport (by ASOS) at 3:50 PM MST. Deep low pressure in southern Saskatchewan was responsible for high winds across eastern Montana and western North Dakota.

## NORTH DAKOTA, East

### **Ransom County**

**9 SE Lisbon**      10      1730CST      0      0      **Hail (1.00)**

### **Ransom County**

**Lisbon**      10      1805CST      0      0      **Hail (0.75)**

### **Sargent County**

**Crete**      10      1815CST      0      0      **Hail (1.00)**

### **Barnes County**

**4 NE Valley City**      10      1820CST      0      0      **Hail (1.00)**

### **Sargent County**

**Gwinner**      10      1825CST      0      0      **Hail (0.75)**

### **Sargent County**

**Cogswell**      10      1830CST      0.2      25      0      0      **Tornado (F0)**

### **Barnes County**

**3 S Eckelson**      10      1850CST      0      0      **Hail (0.75)**

### **Barnes County**

**Sanborn**      10      1900CST      0      0      **Hail (0.75)**

### **Richland County**

**10 NW Wyndmere**      10      1900CST      0      0      **Hail (1.00)**

### **Sargent County**

**3 E Gwinner**      10      1900CST      0      0      **Hail (1.75)**

### **Cass County**

**Page**      10      1910CST      0      0      **Hail (0.75)**

### **Barnes County**

**Valley City**      10      1925CST      0      0      **Hail (0.75)**

### **Trail County**

**3 E Galesburg**      10      1935CST      0      0      **Hail (0.75)**

### **Barnes County**

**3 E Oriska**      10      1955CST      0.2      25      0      0      **Tornado (F0)**

### **Cass County**

**2 NW Mapleton**      10      2055CST      0      0      **Hail (0.75)**

### **Ramsey County**

**Penn**      13      1645CST      0      0      **Hail (0.75)**

### **Barnes County**

**Valley City**      14      1500CST  
1800CST      0      0      250K      **Flash Flood**

Over 4 inches of rain fell in less than two hours, causing major problems for the hilly terrain of Valley City. A thunderstorm remained nearly stationary, restricting problems just to the area immediately around the city. A few streets were submerged in water waist deep, covering vehicles and filling basements. Many streets were blocked off and some areas sustained sewer backup. Residents were asked to refrain from using water, to help the sewer system catch up.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH DAKOTA, East</b>									
<b>Cass County</b> 10 S Fargo	18	0118CST			0	0			Hail (0.75)
<b>Cass County</b> 10 S Fargo	18	0145CST			0	0			Hail (0.75)
<b>Cass County</b> Fargo	18	1612CST 2010CST			0	0	250K		Flash Flood
3 to 5 inches of rain fell in less than 3 hours across portions of Fargo. The Fargo airport reported 3.03 inches of rain. The western edge of the city was hit the hardest. The interchange between Interstates 29 and 94 was closed due to high water. Several garages in the basement levels of apartment buildings flooded. Major underpasses around the city also had to be closed.									
<b>Cass County</b> West Fargo	18	1612CST 2010CST			0	0	250K		Flash Flood
3 to 5 inches of rain fell in less than three hours, resulting in rapid flooding problems across West Fargo. Several parking lots and low areas filled with water, covering some cars. Water also covered a few streets and filled several basements with 3 1/2 feet of water. Power went out for most of West Fargo, causing sewer and sump pump failure.									
<b>Cass County</b> Grandin	18	1740CST			0	0			Funnel Cloud
<b>Trails County</b> Hillsboro	18	1740CST			0	0			Funnel Cloud
<b>Cass County</b> Gardner	18	1741CST			0	0			Funnel Cloud
<b>Trails County</b> 2 S Kelso	18	1808CST	0.2	25	0	0			Tornado (F0)
<b>Grand Forks County</b> Emerado	18	1830CST 2000CST			0	0	100K		Flash Flood
1 to 3 inches of rain fell in less than two hours, causing flooding problems around Emerado. Many fields were flooded.									
<b>Grand Forks County</b> Grand Forks	18	1830CST 2000CST			0	0	150K		Flash Flood
1 to 3 inches of rain fell in less than two hours, quickly flooding low-lying areas around Grand Forks. Water was reported to be up to the bumpers of cars on some streets. Several streets and underpasses were closed due to high water. On the western edge of Grand Forks on US Highway 2, water flowed over the highway for about an hour.									
<b>Sargent County</b> 8 NW Havana	18	1850CST			0	0			Funnel Cloud
<b>Ransom County</b> 12 S Lisbon	18	1852CST			0	0			Funnel Cloud
<b>Richland County</b> Hankinson	18	1855CST			0	0			Funnel Cloud
<b>Ramsey County</b> Starkweather	19	1300CST 1700CST			0	0	50K		Urban/Sml Stream Fld
Heavy rain caused basement flooding in Starkweather.									
<b>NDZ052</b>	<b>Sargent</b> 24 29	0000CST 2359CST			0	0	250K		Flood
8 inches of rain in a week brought numerous flooding problems to the cities of Forman and Cogswell. Many homes had to be sandbagged to protect them from the overland flooding. One trailer park in Forman was evacuated, as water 3 to 5 feet deep poured in. This caused 17 residents to be evacuated. Cogswell residents were without drinking water, as a lift station flooded. Water covered the main street of Cogswell 16 inches deep. Highway 11 from Forman to Lidgerwood was closed due to high water. The National Guard was called in to assist local officials. Several basements were in danger of collapse from the groundwater pressure.									
<b>Cavalier County</b> 3 W Osabrock	24	1523CST			0	0			Hail (1.00)
<b>Pembina County</b> Mountain	24	1619CST			0	0			Hail (0.75)
<b>Sargent County</b> 1 S Brampton	24	2148CST			0	0			Hail (1.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>NORTH DAKOTA, East</u></b>									
Sargent County Cogswell	24	2235CST			0	0			Hail (1.00)
Sargent County Cogswell	24	2319CST			0	0			Hail (1.00)
Sargent County Forman	24	2338CST			0	0			Hail (0.75)
Sargent County Forman	24	2340CST			0	0			Hail (1.00)
Ransom County 2 SW Englevale	26	1555CST			0	0	2K		Thunderstorm Wind
Strong winds blew 55 gallon drums around a damaged house.									
Ransom County Elliott	26	1600CST			0	0	0.20K		Thunderstorm Wind
Trees were downed in the strong wind.									
Ransom County 2 SW Englevale	26	1600CST			0	0	0.20K		Thunderstorm Wind
Several 10 inch tree limbs were broken in the strong wind.									
Ransom County Lisbon	26	1600CST			0	0	10K		Thunderstorm Wind
Numerous trees were uprooted, power lines were downed, the roof blew off the armory, and the roof blew off the Ransom county highway department shop. A building at the fairgrounds was also damaged. Lisbon was without power from 5 to 9 pm.									
Ransom County McLeod	26	1700CST			0	0			Thunderstorm Wind (G60)
Trees were blown down in the wind.									
Richland County 10 NW Walcott	26	1740CST			0	0	10K		Thunderstorm Wind
A barn roof was blown off and trees were downed in the strong wind.									
Cass County 5 S Fargo	26	1746CST			0	0			Funnel Cloud
Grand Forks County 4 W Grand Forks	27	1915CST	0.2	25	0	0			Tornado (F0)
Grand Forks County Grand Forks	27	1930CST			0	0	0.20K		Thunderstorm Wind
A tree was blown down in the wind.									
<b><u>OHIO, East</u></b>									
Columbiana County North Georgetown	02	1525EST			0	0			Hail (1.00)
Columbiana County Salem	02	1535EST			0	0			Hail (0.88)
Columbiana County Salem	02	1542EST			0	0			Hail (1.13)
Columbiana County Salem	02	1550EST			0	0			Flash Flood
Street flooding reported in downtown Salem.									
Columbiana County Fredericktown	02	1617EST			0	0			Hail (1.00)
Columbiana County Columbiana	02	1755EST			0	0			Hail (3.00)
Columbiana County Leetonia	02	1755EST			0	0			Hail (3.00)
Jefferson County Toronto	02	1900EST			0	0			Hail (1.00)
Tuscarawas County New Philadelphia	12	2030EST			0	0	20K		Thunderstorm Wind
Thunderstorm winds downed numerous trees and power lines across the town of New Philadelphia.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Carroll County</b> Augusta	12	2040EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew several large tree limbs down.
<b>Columbiana County</b> Salem	12	2042EST			0	0			Thunderstorm Wind (G55)
<b>Coshocton County</b> 3 W Coshocton	12	2045EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down.
<b>Columbiana County</b> Fredericktown	12	2110EST			0	0			Hail (1.00)
<b>Jefferson County</b> Wintersville	12	2145EST			0	0	15K		Thunderstorm Wind
									Thunderstorm winds blew numerous large trees down across the Winterville and surrounding areas.
<b>Belmont County</b> St Clairsville	13	1315EST			0	0			Hail (0.88)
<b>Belmont County</b> Martins Ferry	13	1330EST			0	0			Hail (0.88)
<b>Muskingum County</b> 2 SE Duncan Falls	15	1900EST 2200EST			0	0			Flash Flood
									Cuttler Lake Road flooded from thunderstorm rains.
<b>Muskingum County</b> Gaysport	15	1900EST 2200EST			0	0			Flash Flood
									Buttermilk Road flooded from thunderstorm rains. Streams out of banks were flooding SR 376.
<b>Noble County</b> Belle Vly	15	1915EST 2200EST			0	0			Flash Flood
									Several roads flooded from thunderstorm rains in the Belle Valley area.
<b>Noble County</b> 5 E Caldwell	15	1915EST 2200EST			0	0			Flash Flood
									SR 147 flooded from thunderstorm rains.
<b>Muskingum County</b> Zanesville	16	1340EST			0	0	20K		Thunderstorm Wind
									Numerous trees blown down throughout the city of Zanesville from thunderstorm winds.
<b>Guernsey County</b> Cambridge	16	1400EST			0	0			Hail (0.75)
<b>Noble County</b> Caldwell	16	1401EST			0	0			Hail (0.75)
<b>Guernsey County</b> Byesville	16	1405EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down onto a house.
<b>Guernsey County</b> Cambridge	16	1407EST			0	0	20K		Thunderstorm Wind
									Trees blown down throughout the city from thunderstorm winds.
<b>Noble County</b> Caldwell	16	1410EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Belmont County</b> Bridgeport	16	1430EST			0	0	20K		Thunderstorm Wind
									Thunderstorm winds blew a large tree onto a parked pickup truck, crushing it.
<b>Belmont County</b> 3 W Crabapple	16	1430EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew down several large tree limbs.
<b>Noble County</b> Caldwell	16	1430EST			0	0	20K		Thunderstorm Wind
									Four trees blown down by thunderstorm winds. One tree fell onto a house and caused damage to the siding.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Monroe County Woodsfield</b>	16	1435EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Monroe County Woodsfield</b>	16	1440EST			0	0			Hail (0.75)
<b>Belmont County Shadyside</b>	16	1445EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down three large trees.
<b>Belmont County St Clairsville</b>	16	1450EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Belmont County Bellaire</b>	16	1500EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Harrison County 7 W Cadiz</b>	16	1500EST			0	0			Hail (0.75)
<b>Jefferson County Countywide</b>	16	1500EST 1530EST			0	0	50K		Thunderstorm Wind
									EOC reported numerous trees down from thunderstorm winds across the county. Trees fell onto two vehicles, but there were no injuries.
<b>Jefferson County Dillonvale</b>	16	1515EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down onto a house.
<b>Tuscarawas County West Chester</b>	16	1521EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down.
<b>Columbiana County Lisbon</b>	16	1555EST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds blew a tree down across Echodale Road.
<b>Columbiana County Glenmoor</b>	16	1636EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down onto Route 7.
<b>Belmont County St Clairsville</b>	16	1700EST 1800EST			0	0	20K		Flash Flood
									Thunderstorm rains produced minor flooding, with several houses reporting four to five veet of water in their basements.
<b>Guernsey County Winterset</b>	19	0445EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees down onto US Route 22.
<b>Belmont County Colerain</b>	19	0532EST 0730EST			0	0	30K		Flash Flood
									Thunderstorm rains caused flooding on SR 5, closing it. CR 4 was closed for a half-hour due to localized flooding. Several basements in the Colerain area were flooded.
<b>Jefferson County Emerson</b>	19	0538EST 0730EST			0	0			Flash Flood
									Thunderstorm rains flooded CR 5.
<b>Belmont County Bridgeport</b>	19	0545EST 0745EST			0	0			Flash Flood
									US Route 40 closed due to localized flooding in the Bridgeport area.
<b>Muskingum County Frayszeburg to Frazier</b>	22	1755EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees in the northwest part of the county.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OHIO, East

### Muskingum County 1 N Zanesville

22	1825EST 1840EST	0	0	10K	<b>Thunderstorm Wind</b>
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Thunderstorm winds blew down four power poles and power lines just north of Zanesville. Several trees were also reported down across the eastern part of the county.

### Monroe County Woodsfield

26	1217EST	0	0		<b>Hail (1.00)</b>
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Severe thunderstorms bringing damaging winds and torrential rains affected much of east-central Ohio, western Pennsylvania and northern West Virginia during the period of June 26-30. These storms caused eight deaths and several injuries, along with millions of dollars of damage across the region. High pressure anchored over the Tennessee Valley contributed to the northward transport of a tropical airmass into eastern Ohio by the afternoon of June 26th. Explosive thunderstorm development on the afternoon of June 26th over northeast Ohio and western Pennsylvania formed a Mesoscale Convective System (MCS) by late afternoon. As this MCS propagated slowly to the southeast during the evening, it left behind a northwest-to-southeast oriented outflow boundary. This boundary remained nearly stationary for over 36 hours and served to focus waves of thunderstorms from the evening of June 26th through the early morning hours of June 28th across eastern Ohio. As a result, flash flooding from these continuous waves of thunderstorms was widespread across east central Ohio. Travel across this area was nearly impossible, as many roads were under water. On June 29th and 30th, severe thunderstorms moving rapidly through the area from the northwest brought damaging straight-line winds of up to 85 MPH across the region. The accompanying heavy rainfall with these storms only worsened the flooding across east-central Ohio.

Five counties in southeastern Ohio experienced widespread flooding from June 26-30: Tuscarawas, Muskingum, Guernsey, Noble and Monroe. These counties, along with 16 other Ohio counties, have been included in a Presidential Disaster Declaration. WSR-88D Radar estimated between 7-9 inches storm total rainfall amounts during this period. The only flooding at a river forecast point occurred on the Wills Creek at Cambridge, Ohio in Guernsey County. The river crested at 26.92 feet, 12 feet above flood stage and almost 2.5 feet above the record flood stage of 24.51 feet previously set in 1980. In addition to the torrential rains, many of these thunderstorms produced damaging winds as they passed over the region, downing numerous trees and depositing hail up to 1.75 inches in diameter. Four tornadoes were also confirmed during this period.

Muskingum and Noble Counties in Ohio were the hardest hit. Noble County had six deaths which all occurred on June 28th. Four people drowned around 2AM in the Duck Creek in the town of Caldwell. A 90-year-old male and an 89-year-old female were killed when part of their home was washed away. A 71-year-old male and a 31-year-old male were killed as their cars flooded. Around the same time in Belle Valley, a 37-year-old male was killed when he attempted to swim in flood waters of the West Fork of the Duck Creek after being stranded on the roof of a building. There was one tornado-related death in Noble County as a 54-year-old woman was killed in the town of Summerfield at 8:05 PM on June 27th when a F2 tornado demolished her mobile home.

In addition, there were two deaths in Belmont County on June 28th. A 41-year-old female was killed when she tried to drive through a flooded portion of Steep Run Creek near Barton at around 8:30 PM, and a 16-year-old boy was struck and killed by lightning.

There were numerous injuries, including the husband of the woman who was killed by the tornado in Summerfield. Flood waters forced an estimated 9000 people from their homes across east central Ohio, with 2000 evacuations alone in the Guernsey County city of Cambridge due to this flooding. Preliminary damage assessments by the USDA estimate that Guernsey and Muskingum Counties each had more than \$14 million in crop loss alone. Property damage from the flood waters will also total in the millions.

### Harrison County New Athens

26	1645EST	0	0		<b>Hail (1.00)</b>
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### Jefferson County Countywide

26	1815EST	0	0	20K	<b>Thunderstorm Wind</b>
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Thunderstorm winds blew down numerous trees and power lines across Jefferson County.

### Tuscarawas County Gnadenhutten

26	1838EST	0	0		<b>Hail (1.00)</b>
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### Belmont County St Clairsville

26	1850EST	0	0		<b>Hail (0.75)</b>
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### Belmont County 3 NW Shadyside

26	1900EST	0	0		<b>Hail (1.00)</b>
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### Belmont County Shadyside

26	1915EST	0	0	5K	<b>Thunderstorm Wind</b>
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Thunderstorm winds blew down several trees and power lines.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Belmont County Powhatan Pt</b>	26	1920EST			0	0	5K		<b>Thunderstorm Wind</b>
									Thunderstorm winds blew several large trees down.
<b>Belmont County Shadyside</b>	26	1920EST 2200EST			0	0	100K		<b>Flash Flood</b>
									Thunderstorm rains produced flooding of two to three feet of water on Central Avenue. Several businesses received damage from the water. Wegee Creek rose out of its banks.
<b>Belmont County St Clairsville</b>	26	1920EST 2200EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced minor flooding along SR 147.
<b>Belmont County Shadyside</b>	26	1920EST 2200EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced flooding of two to three feet of water on Central Avenue. Wegee Creek out of banks.
<b>Belmont County St Clairsville</b>	26	1920EST 2200EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced flooding along SR 147.
<b>Belmont County Alledonia</b>	27	1000EST 1200EST			0	0			<b>Flash Flood</b>
									Catina Creek rose out of its banks and flooded surrounding roads.
<b>Belmont County Lafferty</b>	27	1000EST 1200EST			0	0			<b>Flash Flood</b>
									Several roads across the Lafferty area were flooded from thunderstorm rains.
<b>Belmont County Powhatan Pt</b>	27 28	2200EST 0300EST			0	0			<b>Flash Flood</b>
									Two feet of water from thunderstorm rains covered a portion of SR 148.
<b>Belmont County Countywide</b>	28	0130EST 0700EST			0	0			<b>Flash Flood</b>
									Wegee and Pipe Creeks out of their banks in Shadyside; other streams and creeks of their banks across the county. Several roads across the county are closed due to water on roads.
<b>Belmont County Countywide</b>	28 30	1941EST 2359EST			1	0	5M	5M	<b>Flood</b>
									F41VE Additional thunderstorm rains on the 28th produced flash flooding across the entire county, forcing the closure of several county and state roads across the area. Some of the harder hit areas included Powhatan Point, Shadyside, Barton, and the Colerain area where several evacuations and rescues were necessary starting on the evening of the 28th. One death occurred in the Barton area around 830 PM on the 28th when a 41-year-old woman's vehicle was swept from County Road 4 and into the Steep Run Creek.
<b>Tuscarawas County Newcomerstown</b>	26	1930EST 2200EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced street flooding in Newcomerstown.
<b>Tuscarawas County South Portion</b>	26 27	2130EST 0300EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced widespread flash flooding, with water reported on numerous roads across the southern part of the county.
<b>Tuscarawas County Gnadenhutten</b>	27	0900EST 1200EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced flooding on US Route 36.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Tuscarawas County</b>									
1 NE Newcomerstown	27	1030EST 1200EST			0	0			Flash Flood
			Thunderstorm rains produced flooding on SR 258.						
<b>Tuscarawas County</b>									
Countywide	27 28	1920EST 0300EST			0	0			Flash Flood
			Creeks reported out of banks countywide.						
<b>Tuscarawas County</b>									
Countywide	28 30	1800EST 2359EST			0	0	20M		Flood
			Thunderstorm continued to move across Tuscarawas County during the day of the 28th. By that evening, major flash flooding problems were reported countywide. The city of Uhrichsville was especially hard hit, with 300 families forced to evacuated. The west side of town was reported to be mostly under water by the early morning hours of the 30th. Flooding problems continued across the county past the end of the month, as several roads in low-lying and flood control areas remained closed well into July.						
<b>Coshocton County</b>									
Conesville	26	1930EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew several large tree limbs down.						
<b>Monroe County</b>									
8 E Beallsville	26	1945EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew several large tree limbs down.						
<b>Muskingum County</b>									
Frayszeburg	26	1945EST			0	0	30K		Thunderstorm Wind
			Thunderstorm winds blew the roof off of a house. Several large trees across the area were also blown down/uprooted.						
<b>Guernsey County</b>									
Derwent	26	2000EST			0	0	20K		Thunderstorm Wind
			Thunderstorm winds blew several large trees and power lines down. One tree fell onto a house trailer.						
<b>Guernsey County</b>									
1 W Antrim	26	2000EST 2200EST			0	0			Flash Flood
			Thunderstorm rains forced Brushy Fork Creek out of its banks, with flooding reported on US Route 22.						
<b>Guernsey County</b>									
Cambridge	26	2000EST 2200EST			0	0			Flash Flood
			Runoff from thunderstorm rains covered Peters Creek Road with water.						
<b>Guernsey County</b>									
Birmingham	26 27	2130EST 0300EST			0	0			Flash Flood
			Widespread flash flooding reported in town of Birmingham, with residents using boats in streets.						
<b>Guernsey County</b>									
Countywide	27 30	1015EST 2359EST			0	0	5M	14M	Flood
			Thunderstorms continued to move across Guernsey county on the 27th, bringing widespread flooding to the entire county. The town of Byesville was especially hard hit, as two cars were swept off the road in on the evening of the 27th, but both drivers were rescued. Thunderstorms continued on the 28th, forcing the closure of many roads across the county. Major flooding was reported in the town of Cambridge, as 9.71 inches of rain were recorded by the Cambridge cooperative observer from June 26th through 29th. Wills Creek at Cambridge crested at 26.92 feet at 6 PM EDT on June 29th, 14 feet above flood stage and nearly 2.5 feet above the previous flood of record. This flooding forced the evacuation of 2000 people in Cambridge alone. Of the estimated total damage across the county, around \$14 million was in agricultural damage alone.						
<b>Belmont County</b>									
Crabapple	26	2003EST			0	0			Hail (0.75)
<b>Noble County</b>									
Countywide	26	2015EST 2030EST			0	0	15K		Thunderstorm Wind
			Thunderstorm winds blew numerous trees down across county.						
<b>Monroe County</b>									
Woodsfield	26	2025EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds blew numerous large trees down across the town.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Monroe County</b> Graysville	26	2035EST			0	0	30K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees; some fell onto parked cars.
<b>Noble County</b> Countywide	26	2100EST 2300EST			0	0			Flash Flood
									Ohio DOT reported several roads covered with water from thunderstorm rains.
<b>Monroe County</b> Calais	26 27	2130EST 0300EST			0	0			Flash Flood
									Thunderstorm rains produced flooding from Wills Creek onto SR 379 in Calais. Other roads in town were flooded as well.
<b>Monroe County</b> Countywide	27 30	2010EST 2359EST			0	0	5M	10M	Flood
									Another series of thunderstorms passed over the county on the evening of the 27th, triggering extensive flash flooding across the entire county. Subsequent thunderstorms over the next several days continued the flooding through the end of the month. Numerous roads across the county were closed due to flooding. The towns of Woodfield and Cameron were especially hard hit. In Cameron, flood waters from Sunfish Creek prompted several evacuations. Extensive street flooding was reported in Woodfield.
<b>Muskingum County</b> Frayszeburg	27	0410EST 1300EST			0	0			Flash Flood
									Several thunderstorms passed over this county and produced major flash flooding. Many sections of town were reported to be inundated by water. State Routes 146, 16 and 60 were all closed by high water. Several families were evacuated from the area.
<b>Muskingum County</b> Dresden	27	0530EST 1100EST			0	0			Flash Flood
									Thunderstorm rains produced major flash flooding in Dresden. The Sheriff reported many roads across the northern part of the county were flooded.
<b>Muskingum County</b> Countywide	27 30	1830EST 2359EST			0	0	10M	14M	Flood
									Another in a series of thunderstorms passing over the county on the evening of the 27th produced widespread flash flooding. Several towns in the county, including Fraszeytsburg, Dresden, Chandlersville and Gaysport reported extensive damage. Some portions of towns, especially Fraszeytsburg and Chandlersville, were under water. Many roads across the county were closed due to the high water, with some remaining closed well into July. Numerous evacuations were required across the county. A preliminary estimate of crop damage alone from the flooding was \$14 million dollars.
<b>Coshocton County</b> Countywide	27	0435EST 1100EST			0	0			Flash Flood
									Thunderstorm rains forced closure of several roads across the county. A few mudslides were also reported.
<b>Coshocton County</b> Countywide	27 30	2000EST 2359EST			0	0	5M	10M	Flood
									Several waves of thunderstorms moving across the county created major flooding problems. Evacuations were required near West Lafayette, where Evans Creek came out of its banks. Numerous roads across the county were flooded. The main damage in the county came in the form of crop damage, where around 3000 acres, mostly soybeans and corn, were under water. Roughly 75 out of the 900 total farms in the county were affected by the flood water.
<b>Monroe County</b> Countywide	27	0900EST 0930EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees across the county.
<b>Monroe County</b> Cameron	27	0920EST			0	0	3K		Thunderstorm Wind
									Thunderstorm winds downed three trees.
<b>Tuscarawas County</b> Countywide	27	1730EST 1800EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees throughout the county.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Columbiana County</b>									
Lisbon	27	1740EST			0	0	3K		Thunderstorm Wind
									Thunderstorm winds blew down three large trees.
<b>Coshocton County</b>									
Roscoe	27	1750EST			0	0			Hail (0.88)
<b>Harrison County</b>									
Deersville	27	1750EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees and power lines.
<b>Tuscarawas County</b>									
Uhrichsville	27	1750EST			0	0	150K		Thunderstorm Wind
									A microburst occurred over the town, downing numerous trees and power lines. Several buildings also were damaged. One house suffered extensive damage when a large tree fell onto the roof. Another house received minor damage when a tree fell onto it. One business in town had the roof blown off and one brick wall collapsed.
<b>Harrison County</b>									
Tippecanoe	27	1809EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Harrison County</b>									
Cadiz	27	1815EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees and power lines.
<b>Muskingum County</b>									
Nashport	27	1820EST			0	0			Thunderstorm Wind (G52)
									Public report of an estimated 60 MPH wind gust.
<b>Guernsey County</b>									
Senecaville	27	1830EST			0	0			Hail (1.00)
<b>Muskingum County</b>									
Dresden	27	1830EST			0	0	5K		Thunderstorm Wind (G61)
									Thunderstorm winds estimated at 70 MPH downed several trees and power lines.
<b>Belmont County</b>									
Lamira	27	1835EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Muskingum County</b>									
Philo	27	1845EST			0	0	40K		Thunderstorm Wind
									Thunderstorm winds blew down a garage, snapped telephone poles, and downed many trees.
<b>Noble County</b>									
1 E Batesville	27	1847EST			0	0			Hail (1.75)
<b>Guernsey County</b>									
Senecaville	27	1850EST			0	0			Hail (1.00)
<b>Harrison County</b>									
Tippecanoe	27	2030EST			0	0			Flash Flood
	28	0300EST							Creek flooding reported on SR 800.
<b>Muskingum County</b>									
4 NW Otsego to 4 SW Otsego	27	1745EST 1750EST	2.5	150	0	2	250K		Tornado (F1)
									An F1 tornado touched down along Big Run Road. It travelled to the southeast crossing Ferncliff Road and moved across Edgemoor Road before dissipating. Many trees along the path were toppled or snapped. A mobile home was picked up and pushed westward. It was then rolled over and destroyed. Two people inside the trailer at the time were injured. A double-wide modular home lost its entire roof and was essentially totalled. A two-story frame home was severely damaged, with parts of the roof and walls blown off. As the tornado dissipated, eyewitnesses reported seeing debris in the form of boards, limbs, siding, etc. suddenly start raining from the sky.
<b>Muskingum County</b>									
2 SE Zanesville to 4 SE Zanesville	27	1830EST 1835EST	2	100	0	0	20K		Tornado (F1)
									A weak F1 tornado with winds estimated at 80 MPH left a path of toppled and snapped trees as it touched down near the radio station WHIZ just southeast of Zanesville and moved to the southeast. The only property damage was to an old wood garage that was completely destroyed.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Guernsey County</b> 1.5 NW Walhonding to 2 SW Walhonding	27	1845EST 1850EST	3.5	100	0	0	50K		<b>Tornado (F0)</b>
									An F0 tornado with winds estimated at 70 MPH touched down around SR 313 in the Soggy Run area and moved southeast across the town of Walhonding. Many trees were toppled/snapped along with several telephone poles and power lines. The tornado also produced minor damage to roofs and tore away some siding in the town of Walhonding.
<b>Noble County</b> 3 W Summerfield to 2.7 W Summerfield	27	1905EST 1910EST	0.3	200	1	1	75K		<b>Tornado (F2)</b>
									An F2 tornado with estimated 150 MPH winds demolished a mobile home, killing a 45-year-old woman. Numerous trees along the relatively short path were sheared/downed. F45MH
<b>Harrison County</b> Tippecanoe	27	2030EST 2200EST			0	0			<b>Flash Flood</b>
									Minor flooding reported on SR 800.
<b>Harrison County</b> Harrisville	28	0220EST 0300EST			0	0			<b>Flash Flood</b>
									A small portion of SR 250 was closed due to flash flooding.
<b>Harrison County</b> Countywide	28 30	1815EST 2359EST			0	0	100K	5M	<b>Flash Flood</b>
									Another round of torrential rains over already saturated ground created flash flooding across the county on the evening of the 28th , continuing through the 30th. Most of the problems in the county were confined to water covering roadways, with the western portion of the county near Freeport and Tippecanoe having the most problems. Several buildings received damage from the flood waters, most of them mobile homes. The county also sustained significant agricultural losses from standing flood water in fields.
<b>Noble County</b> Countywide	27 30	2040EST 2359EST			5	0	10M	10M	<b>Flash Flood</b>
									Another round of thunderstorms starting on the evening of the 27th created widespread flash flooding throughout Noble County. These floods caused five deaths during the evening of the 27th and early morning hours of the 28th. In Caldwell, a 90-year-old man and 89-year-old woman were killed as flash flooding from the nearby Duck Creek washed part of their home away. Numerous roadways across the county were closed. However, two fatalities occurred as people tried to drive through water on the roads. Two more deaths occurred in Caldwell as a 71-year-old and 31-year-old man were killed when they tried to drive their cars through high water. In Belle Valley, a 37-year-old man was killed when he attempted to swim in the flood waters of the West Fork of the Duck Creek after being stranded on the roof of a building. Several rescues by boat were required across the county. The hardest hit areas were the Mount Ephriam, Fredericksdale, Belle Valley, and Caldwell area. In addition to flooded private homes, many businesses in towns across the county suffered extensive damage, losing most of their inventory and equipment. M90PH, F89PH, M71VE, M31VE, M37IW
<b>Guernsey County</b> Countywide	28	1730EST 1800EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed numerous trees and power lines throughout the county.
<b>Muskingum County</b> Bloomfield	28	1730EST			0	0	10K		<b>Thunderstorm Wind</b>
									A house was damaged by thunderstorm winds.
<b>Muskingum County</b> Countywide	28	1730EST 1800EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed numerous trees and power lines across the county. Some roads were closed due to downed trees.
<b>Tuscarawas County</b> Countywide	28	1750EST 1810EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed numerous trees throughout the county.
<b>Harrison County</b> Bowerston	28	1815EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed numerous trees.
<b>Belmont County</b> Florence	28	1830EST			0	0	5K		<b>Thunderstorm Wind</b>
									Several trees were downed by thunderstorm winds.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, East</b>									
<b>Noble County</b> Batesville	28	1834EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Guernsey County</b> 5 N Cambridge	28	1835EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Guernsey County</b> Salesville	28	1840EST			0	0			Hail (0.88)
<b>Monroe County</b> Countywide	28	1840EST 1900EST			0	0	10K		Thunderstorm Wind
									Numerous trees down countywide.
<b>Belmont County</b> Somerton	28	1850EST			1	0			Lightning
									A 16-year-old boy was killed while setting up a tent. M16CA
<b>Monroe County</b> Countywide	28	2030EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees across the county.
<b>Coshocton County</b> West Lafayette	28	1855EST			0	0			Hail (0.75)
<b>Coshocton County</b> West Lafayette	28	1855EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Noble County</b> 5 W Batesville	28	1855EST			0	0	10K		Thunderstorm Wind
									Numerous trees were downed by thunderstorm winds.
<b>Tuscarawas County</b> Newcomerstown	28	1913EST			0	0	5K		Thunderstorm Wind (G70)
									Thunderstorm winds estimated at 80 MPH downed several trees.
<b>Guernsey County</b> Cambridge	28	1930EST			0	0	5K		Thunderstorm Wind (G70)
									Thunderstorm winds estimated at 80 MPH downed several trees.
<b>Noble County</b> Countywide	28	2000EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees across the county.
<b>Tuscarawas County</b> Dover	28	2020EST			0	0			Hail (0.75)
<b>Jefferson County</b> Mingo Jet	28 29	2005EST 0000EST			0	0			Flash Flood
									Thunderstorm rains forced Georges Run Creek out of its banks, causing several evacuations.
<b>Jefferson County</b> Countywide	29 30	2130EST 2359EST			0	0	5M		Flash Flood
									Several waves of thunderstorms continued to pass over Jefferson County, with major flooding reported across the region. Numerous homes across the county were damaged, with 50-60 homes in the Glen Robbins area receiving severe damage as the Little Short Creek flooded. It was estimated that around 40 vehicles were destroyed from the flash flood waters.
<b>Tuscarawas County</b> 4 NE Dover	29	1040EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed a large tree.
<b>Tuscarawas County</b> New Philadelphia	29	1945EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed a large tree.
<b>Tuscarawas County</b> 2 W Sugar Creek to 2 E Sugar Creek	29	1945EST 1950EST	4	75	0	0	5K		Tornado (F0)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>OHIO, East</u></b>									
A weak F0 tornado with estimated 60 MPH winds passed through the Sugar Creek area. The tornado was witnessed by several people, including the Fire Chief. Limbs were ripped from tree tops, with several trees downed.									
<b>Jefferson County</b> Dillonvale	29	2130EST			0	0	1K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed several large tree limbs.
<b>Carroll County</b> Countywide	29	2145EST			0	0	50K		<b>Flash Flood</b>
	30	0600EST							Basement flooding reported at several locations across the county.
<b>Columbiana County</b> Salem	30	1255EST			0	0			<b>Hail (0.75)</b>
<b>Carroll County</b> 1 S Minerva	30	1256EST			0	0	10K		<b>Thunderstorm Wind (G52)</b>
									Thunderstorm winds gusting to an estimated 60 MPH downed a few trees and caused minor damage in the Minerva area.
<b>Columbiana County</b> New Garden	30	1311EST			0	0			<b>Hail (1.00)</b>
<b>Columbiana County</b> Summitville	30	1313EST			0	0	5K		<b>Thunderstorm Wind (G52)</b>
									Thunderstorm winds gusting to an estimated 60 MPH downed several trees.
<b>Columbiana County</b> Columbiana to Columbia	30	1324EST			0	0	2K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed a large tree.
<b>Columbiana County</b> Lisbon	30	1325EST			0	0			<b>Flash Flood</b>
									Thunderstorm rains produced minor flooding on US Route 30.
<b>Jefferson County</b> Stratton	30	1330EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds produced minor damage to a building.
<b>Columbiana County</b> East Liverpool	30	1332EST			0	0	25K		<b>Flash Flood</b>
									Thunderstorm rains produced flash flooding in town, with over three feet of water dammed up at some intersections.
<b>Columbiana County</b> East Liverpool	30	1332EST			0	0	50K		<b>Thunderstorm Wind</b>
									Thunderstorm winds caused mostly minor damage to several homes from downed trees and power lines. The roof was partially torn from the Nickles Bakery.
<b>Jefferson County</b> Steubenville	30	1444EST			0	0	10K		<b>Thunderstorm Wind</b>
									Thunderstorm winds downed numerous trees across the area.
<b><u>OHIO, North</u></b>									
<b>Summit County</b> Akron	02	1430EST			0	0			<b>Hail (1.75)</b>
									Large hail also fell in Springfield Township (0.75"), Copley (0.75"), and on the southern outskirts of Akron (1.00").
<b>Medina County</b> Medina	02	1431EST			0	0			<b>Hail (0.75)</b>
<b>Cuyahoga County</b> Cleveland	02	1440EST			0	0			<b>Hail (0.88)</b>
									Large hail (0.75") also fell in Euclid and Parma.
<b>Stark County</b> Canton	02	1440EST			0	0			<b>Hail (1.00)</b>
									Large hail also fell at Louisville (0.75") and North Canton (1.00"),
<b>Ashtabula County</b> Andover	02	1445EST			0	0			<b>Hail (1.00)</b>
<b>Lake County</b> Willoughby Hills	02	1455EST			0	0			<b>Hail (0.75)</b>
<b>Geauga County</b> Chardon	02	1458EST			0	0			<b>Hail (0.88)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
Large hail also fell at Chesterland (0.75").									
<b>Stark County</b> Marlboro	02	1500EST			0	0	5K		Lightning
									Lightning struck the fire station causing fire balls to shoot out of the outlets.
<b>Summit County</b> Akron	02	1505EST			0	0	3K		Thunderstorm Wind (G70)
									Thunderstorm winds, estimated at up to 80 miles per hour, downed trees.
<b>Trumbull County</b> Farmington	02	1508EST			0	0			Hail (1.00)
<b>Portage County</b> Suffield	02	1520EST			0	0			Hail (1.75)
<b>Mahoning County</b> Sebring	02	1528EST			0	0			Hail (1.75)
<b>Stark County</b> Louisville	02	1537EST			0	0			Hail (0.88)
<b>Trumbull County</b> Girard	02	1700EST			0	0			Hail (1.00)
									Large hail fell in Liberty Township. Large hail (0.75") also fell at Howland, Warren and Lordstown.
<b>Trumbull County</b> Leavittsburg	02	1705EST			0	0			Hail (0.75)
<b>Mahoning County</b> Poland	02	1724EST			0	0			Hail (1.75)
									Large hail fell in Poland Township. Large hail (1.00") also fell at Youngstown.
<b>Hancock County</b> Findlay	09	2350EST			0	0	2K		Thunderstorm Wind
									Trees were downed.
<b>Wyandot County</b> Carey	10	0030EST			0	0	2K		Thunderstorm Wind
									Trees were downed.
<b>Richland County</b> Ontario	10	0146EST			0	0			Hail (1.75)
<b>Ashland County</b> Loudonville	10	0930EST 1100EST			0	0	5K		Flood
									Heavy thunderstorm rains caused flooding of some basements.
<b>Cuyahoga County</b> Solon	12	0106EST			0	0	25K		Lightning
									Lightning struck a tree which fell on a house, causing considerable damage.
<b>Lucas County</b> Waterville	12	1650EST			0	0			Hail (0.75)
<b>Wood County</b> Countywide	12	1652EST			0	0			Hail (0.75)
									There were numerous reports of large hail.
<b>Wood County</b> Countywide	12	1652EST			0	0	50K		Thunderstorm Wind
									Trees and large limbs were downed, especially in the areas of Bowling Green, Rudolph and North Baltimore. At least one car was damaged by falling limbs.
<b>Ottawa County</b> Elmore	12	1720EST			0	0			Hail (0.75)
<b>Ottawa County</b> Elmore	12	1720EST			0	0	2K		Thunderstorm Wind
									Trees were downed.
<b>Sandusky County</b> Hessville	12	1743EST			0	0			Hail (0.75)
									Large hail (0.75") also fell at Clyde.
<b>Seneca County</b> Tiffin	12	1800EST			0	0	4K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
Several trees were downed, at least one on a car.									
<b>Hancock County</b>									
Findlay	12	1800EST			0	0	5K		Thunderstorm Wind
Trees and power lines were downed at Findlay and McComb.									
<b>Erie County</b>									
Countywide	12	1800EST			0	0			Hail (0.75)
There were numerous reports of large hail, mainly in the western portion of the county.									
<b>Hancock County</b>									
Countywide	12	1815EST 1935EST			0	0			Flood
Heavy thunderstorm rain caused flooding of roads.									
<b>Wood County</b>									
Jerry City	12	1835EST			0	0	5K		Thunderstorm Wind
Numerous trees were downed.									
<b>Lorain County</b>									
Countywide	12	1840EST			0	0	50K		Thunderstorm Wind
Numerous trees, large limbs and power lines were downed, especially in the areas of Elyria and North Ridgeville. Cars were damaged and several roadways were blocked.									
<b>Wyandot County</b>									
Countywide	12	1845EST			0	0	2K		Thunderstorm Wind
Many large limbs were downed.									
<b>Huron County</b>									
Plymouth	12	1855EST			0	0			Thunderstorm Wind (G52)
Winds were estimated at 60 miles per hour.									
<b>Cuyahoga County</b>									
Countywide	12	1903EST			0	0	10K		Thunderstorm Wind (G50)
Numerous trees and power lines were downed. A 58 mile per hour wind gust was measured at Cleveland Hopkins International Airport..									
<b>Crawford County</b>									
Sulphur Spgs	12	1910EST			0	0	2K		Thunderstorm Wind
Trees were downed in the vicinity of State Route 98 and Locust Grove Rd.									
<b>Lake County</b>									
Painesville	12	1915EST 2015EST			0	0			Flood
Heavy thunderstorm rain caused flooding of roadways.									
<b>Richland County</b>									
Mansfield	12	1920EST			0	0	3K		Thunderstorm Wind
Large limbs and power lines were downed.									
<b>Richland County</b>									
Mansfield	12	1930EST			0	0			Hail (1.00)
<b>Summit County</b>									
Countywide	12	1936EST			0	0	10K		Thunderstorm Wind (G86)
Trees, large limbs and power lines were downed, especially in the areas of Twinsburg, Stow and Springfield Township. Wind gusts were estimated at 60 miles per hour in Twinsburg and 100 miles per hour in Springfield Township.									
<b>Medina County</b>									
Medina	12	1941EST			0	0	5K		Thunderstorm Wind
Trees and power lines were also downed at Seville and Hinckley.									
<b>Wayne County</b>									
Wooster	12	2000EST			0	0	2K		Thunderstorm Wind
Trees were downed.									
<b>Portage County</b>									
Windham	12	2000EST			0	0	1K		Thunderstorm Wind
Large limbs were downed on roads.									
<b>Geauga County</b>									
Welshfield	12	2005EST			0	0	10K		Thunderstorm Wind (G56)
A wind gust was measured at 65 miles per hour. A tree fell on a barn in Bainbridge.									
<b>Summit County</b>									
Portage Lakes	12	2012EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Knox County</b> Countywide	12	2013EST			0	0	3K		Thunderstorm Wind
			Several trees were downed.						
<b>Stark County</b> Uniontown	12	2020EST			0	0			Hail (0.75)
<b>Ashland County</b> Hayesville	12	2022EST			0	0	4K		Thunderstorm Wind
			Trees, limbs and power lines were downed.						
<b>Ashtabula County</b> Andover	12	2040EST			0	0	5K		Thunderstorm Wind
			Trees were also downed in Rome and Orwell Township.						
<b>Holmes County</b> Countywide	12	2055EST			0	0	5K		Thunderstorm Wind
			Trees were downed.						
<b>Mahoning County</b> Boardman	12	2056EST			0	0			Hail (0.75)
<b>Medina County</b> Sharon Center	13	1005EST			0	0	3K		Thunderstorm Wind
			Trees and power lines were downed in Sharon Township.						
<b>Cuyahoga County</b> Garfield Hgts	13	1017EST			0	0			Thunderstorm Wind (G55)
			Winds were measured gusting to 63 miles per hour.						
<b>Portage County</b> Ravenna	13	1100EST			0	0	3K		Thunderstorm Wind
			Trees were downed at Ravenna and Mantua.						
<b>Trumbull County</b> Newton Falls	13	1145EST			0	0			Hail (0.75)
<b>Mahoning County</b> Austintown	13	1155EST			0	0			Hail (0.75)
<b>Holmes County</b> Southwest Portion	15 16	2100EST 0100EST			0	0	200K		Flood
			Heavy thunderstorm rain of three to four inches in four hours caused flooding of basements, roads, small streams and low lying areas. Several roads and bridges were damaged by the high water and trees that had washed onto the roadways. Black Creek was out of its banks, flooding streets and yards in the town of Glenmont where six to eight homes were evacuated. Mudslides were reported in Richland Township just west of Glenmont.						
<b>Lake County</b> Concord	16	1330EST			0	0	20K		Thunderstorm Wind
			A 50 foot tall tree was downed on a house, in Concord Township, damaging the attic and porch.						
<b>Ashtabula County</b> Ashtabula	16	1350EST			0	0			Hail (1.00)
<b>Knox County</b> Countywide	16	1355EST			0	0	4K		Thunderstorm Wind
			Trees and power lines were downed, especially around Mt. Vernon.						
<b>Richland County</b> Mansfield	16	1515EST 1615EST			0	0			Flood
			Heavy thunderstorm rain caused flooding of streets, some of which had to be closed.						
<b>Holmes County</b> Holmesville	16	1521EST 1715EST			0	0			Flood
			Heavy thunderstorm rain caused flooding of roads.						
<b>Stark County</b> Countywide	16	1551EST			0	0	2K		Thunderstorm Wind
			Numerous trees and power lines were downed. A ham radio operator's transmission tower was downed in Waynesburg.						
<b>Stark County</b> Waynesburg	16	1635EST 1900EST			0	0			Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
Heavy thunderstorm rain caused flooding of roads. Some were covered by four and one half feet of water.									
<b>Hancock County</b> Findlay	19	0200EST			0	0	10K		Thunderstorm Wind
									Part of the roof of a large building was blown off. One tree was uprooted and other trees and telephone poles were damaged.
<b>Wood County</b> Rising Sun	19	0215EST			0	0	5K		Thunderstorm Wind
									A tree was downed on a house. Limbs and power lines were also downed.
<b>Marion County</b> Marion	19	0215EST			0	0			Hail (0.75)
									Large hail fell 5 miles west of the city of Marion.
<b>Marion County</b> Marion	19	0245EST			0	0			Hail (0.75)
<b>Knox County</b> Mt Vernon	19	0420EST			0	0	20K		Thunderstorm Wind
									Many trees were downed, some blocking roads. Large limbs and power lines were also downed and the press box at the Mt. Vernon high school was toppled.
<b>Lucas County</b> Maumee	24	1850EST			0	0			Hail (0.75)
									A boater reported large hail as he came ashore on Maumee Bay.
<b>Ottawa County</b> Countywide	24	1938EST			0	0	3M	1M	Thunderstorm Wind (G80)
									Most of the damage in Ottawa County was caused by straight line winds. A gust of 92 miles per hour was measured in Erie Township. Sustained winds of 70 miles per hour were measured at Port Clinton. Many trees and power lines were downed, blocking several roads. Mobile homes were flipped over, some with people inside them in Oak Harbor, and roofs were blown off of barns.
<b>Ottawa County</b> Port Clinton	24	1945EST 2000EST	3.5	100	0	13	20M	5M	Tornado (F2)
									A tornado touched down approximately 10 miles west of Port Clinton and just west of the Davis Bessie power plant. Winds were between 113 and 157 miles per hour. Considerable damage occurred, with some barns completely destroyed and an apartment complex heavily damaged. Sixty three homes were destroyed, 63 sustained major damage, 238 had minor damage, semi trucks and mobile homes were overturned and trees and utility poles were downed. Loss of power lines outside Davis Bessie triggered a shutdown and a second stage alert; power was out for several days in places. A state of emergency was declared and all roads were closed in the county. Many buildings were destroyed and trees were downed at Camp Perry. A tree containing an eagle's nest with 2 eaglets was blown down. One of the eaglets survived.
<b>Lucas County</b> Reno Beach	24	2000EST			0	0	100K		Thunderstorm Wind
									Thunderstorm winds downed trees in Jerusalem Township. Numerous trees were downed, many boats overturned and campers evacuated at Reno Beach and Maumee Bay State Park.
<b>Sandusky County</b> Countywide	24	2015EST			0	0	2M	1M	Thunderstorm Wind
									Large trees, branches and power lines were downed, some on houses and vehicles. A silo was blown onto a house in Vickery, four semi trucks were blown over at Clyde and three barn roofs were blown off in Townsend Township. Straight line winds downed trees and took the roof off of a house in Fremont.
<b>Erie County</b> Crystal Rock	24	2023EST			0	0			Hail (0.75)
									Large hail (0.75") also fell at Castalia.
<b>Huron County</b> Countywide	24	2100EST			0	0	5K		Thunderstorm Wind
									Many trees were downed.
<b>Ashland County</b> Ashland	24	2124EST			0	0	3K		Thunderstorm Wind
									Several trees were downed and shingles were blown from a roof just northwest of the city of Ashland.
<b>Richland County</b> Shiloh	24	2125EST			0	0			Hail (0.75)
<b>Richland County</b> Shiloh	24	2125EST			0	0	2K		Thunderstorm Wind
									Trees were downed.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Hancock County</b>									
Mt Cory	26	0315EST			0	0	20K		Thunderstorm Wind
At a gas station in Bluffton, about four miles south of Mt. Cory, very strong thunderstorm winds ripped off the gas station canopy and pulled gas pumps out of the ground. Debris was scattered to the east and west of the site.									
<b>Erie County</b>									
Milan	26	0750EST			0	0	10K		Lightning
Lightning struck the town hall clock tower, destroying the tower and the clock and cracking the town bell.									
<b>Wayne County</b>									
Apple Creek	26	1611EST			0	0			Hail (0.88)
Large hail (0.75") also fell 4 miles southwest of Wooster.									
<b>Morrow County</b>									
Mt Gilead	26	1805EST			0	0	40K		Thunderstorm Wind
A barn was blown down on Route 61 north of Mt. Gilead.									
<b>Knox County</b>									
Fredericktown	26	1900EST			0	0	4K		Thunderstorm Wind
Many trees were downed.									
<b>Knox County</b>									
Countywide	27	0024EST			0	0	5K		Thunderstorm Wind
Trees and power lines were downed, especially in the Mt. Vernon area.									
<b>Morrow County</b>									
Chesterville	27	0030EST			0	0			Hail (1.75)
<b>Knox County</b>									
Countywide	27	0140EST 0340EST			0	0	50K		Flood
Heavy thunderstorm rains produced flooding of streams, streets, and basements.									
<b>Knox County</b>									
Fredericktown	27	0143EST			0	0			Hail (1.75)
<b>Knox County</b>									
Mt Vernon	27	0206EST			0	0			Hail (0.75)
<b>Knox County</b>									
Fredericktown	27	0215EST			0	0	5K		Thunderstorm Wind
Part of the roof of a house was blown off.									
<b>Morrow County</b>									
Countywide	27	0240EST 0340EST			0	0	50K		Flood
Heavy thunderstorm rains flooded streams, roads, low lying areas, and basements.									
<b>Richland County</b>									
Countywide	27 28	0340EST 1755EST			0	0	1M	500K	Flood
Heavy thunderstorm rain and rapidly rising streams triggered flooding along Route 13 near Bellville on Saturday. Water depths were reported at least three feet deep in some spots. One man was rescued from his car. Saturated soil and high stream level s responded quickly to another round of rain on Sunday and caused flooding along secondary roads, flooding of basements and damage to crops. Several roads and bridges washed away and roads remained closed for several days in some areas. The county was declared a state and federal disaster area.									
<b>Knox County</b>									
Countywide	27	0341EST 1550EST			0	0	3M	1M	Flood
Continuing heavy thunderstorm rains brought major flooding, which continued in many areas through the day. Approximately one hundred people were evacuated from their homes. A number of people were trapped by the rising flood waters in vehicles and buildings and had to be rescued. At least nine bridges were washed out; roads were washed away. Many buildings and crops wer e damaged and several buildings were destroyed.									
<b>Morrow County</b>									
Countywide	27	0341EST 1550EST			0	0	1.5M	250K	Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
Heavy rain and rapidly rising streams forced the closing of several roads throughout the county by 0430 AM Saturday. Major flooding continued until almost midnight on Sunday. Several people were trapped by the rising flood water and had to be rescued. More than 140 people were evacuated. Homes, other buildings and crops were damaged or destroyed.									
<b>Wayne County</b>									
<b>Wooster</b>	27	0735EST			0	0			Flood
			Flooding occurred on some streets.						
<b>Huron County</b>									
<b>North Fairfield</b>	27	1500EST			0	0			Hail (1.00)
			Large hail (0.75") also fell at Willard.						
<b>Lucas County</b>									
<b>Toledo</b>	27	1513EST			0	0			Hail (0.88)
			Large hail (0.75") also fell at Sylvania.						
<b>Wood County</b>									
<b>Millbury</b>	27	1526EST			0	0			Hail (1.75)
			Large hail also fell at Rossford (1.00") and Wallbridge (1.50").						
<b>Sandusky County</b>									
<b>Woodville</b>	27	1548EST			0	0			Hail (0.75)
<b>Sandusky County</b>									
<b>Countywide</b>	27	1550EST			0	0	10K		Thunderstorm Wind
			Trees and power lines were downed, especially in the Fremont area.						
<b>Morrow County</b>									
<b>Countywide</b>	27	1551EST			0	0	1.5M	225K	Flood
	28	1819EST							
			Another round of torrential thunderstorm rains brought new flooding and exacerbated existing flooding. Numerous roads were closed or remained closed. 140 people had to be evacuated from rising water. A woman had to be rescued clinging from a tree branch after she escaped from her truck just before it was swept under a bridge. In some areas, flooding persisted for several days and total rainfall since early morning was 8 to 10 inches in some areas. The county was declared a state and federal disaster area.						
<b>Knox County</b>									
<b>Countywide</b>	27	1551EST			0	0	3M	500K	Flood
	28	1834EST							
			Another round of thunderstorms with torrential rains produced additional flooding and contributed to ongoing flooding. Many roads were closed or remained closed. Forty families had to be evacuated from their homes. Before the thunderstorms moved away 10 inches or more of rainfall had occurred since early morning. Flood waters persisted in some areas for several days. The county was declared a state and federal disaster area.						
<b>Knox County</b>									
<b>Fredericktown</b>	27	1552EST			0	0			Hail (1.75)
<b>Ottawa County</b>									
<b>Elmore</b>	27	1555EST			0	0			Hail (1.00)
<b>Ashland County</b>									
<b>Ashland</b>	27	1609EST			0	0			Hail (1.75)
			Large hail (0.75") also fell at Hayesville.						
<b>Wood County</b>									
<b>Bowling Green</b>	27	1615EST			0	0			Hail (0.75)
<b>Ashland County</b>									
<b>Ashland</b>	27	1625EST			0	0	4K		Thunderstorm Wind
			Many trees were downed south of Ashland.						
<b>Cuyahoga County</b>									
<b>Walton Hills</b>	27	1630EST			0	0			Hail (0.75)
<b>Wood County</b>									
<b>Countywide</b>	27	1630EST			0	0	5K		Thunderstorm Wind
			Trees and power lines were downed.						
<b>Lorain County</b>									
<b>Grafton</b>	27	1643EST			0	0	1K		Thunderstorm Wind
			Trees were downed.						
<b>Holmes County</b>									
<b>Lakeville</b>	27	1645EST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
Large hail (0.75") also fell at Nashville.									
<b>Wayne County Wooster</b>	27	1700EST			0	0	3K		Thunderstorm Wind
Trees were downed in the southern part of the county.									
<b>Hancock County Countywide</b>	27	1700EST			0	0	3K		Thunderstorm Wind
Trees were downed.									
<b>Seneca County Countywide</b>	27	1700EST			0	0	50K		Thunderstorm Wind
Many trees and power lines were downed. At Clinton Lake Campground east of Tiffin, large limbs were downed and 20 campers and several tents were damaged.									
<b>Wyandot County Countywide</b>	27	1710EST			0	0	50K		Thunderstorm Wind
Numerous trees were downed, roofs were damaged and in Crestline, a TV antenna was downed.									
<b>Wyandot County Upper Sandusky</b>	27	1710EST			0	0			Hail (1.00)
<b>Cuyahoga County North Royalton</b>	27	1710EST			0	0			Hail (1.75)
Large hail (1.75") also fell at Brecksville.									
<b>Crawford County Countywide</b>	27	1710EST			0	0	5K		Thunderstorm Wind
Trees and power lines were downed.									
<b>Wyandot County Carey</b>	27	1720EST			0	0	2M		Lightning
A lightning strike ignited a fire that completely destroyed two apartment buildings.									
<b>Marion County Countywide</b>	27	1737EST			0	0	75K		Thunderstorm Wind
Numerous trees and power lines were downed. Trees fell on two houses in the city of Marion.									
<b>Richland County Countywide</b>	27	1740EST			0	0	2K		Thunderstorm Wind
Trees were downed.									
<b>Wyandot County Countywide</b>	27	1740EST			0	0	2K		Thunderstorm Wind
Trees were downed.									
<b>Stark County Alliance</b>	27	1800EST			0	0	25K		Lightning
Two houses were struck and damaged by lightning.									
<b>Knox County Gambier</b>	27	1800EST			0	0			Hail (0.75)
<b>Ashland County Ashland</b>	27	1800EST			0	0			Hail (1.00)
<b>Stark County Countywide</b>	27	1810EST			0	0	5K		Thunderstorm Wind
Trees and power lines were downed, especially in Marlboro Township.									
<b>Knox County Danville</b>	27	1815EST	0.5	70	0	0	10K		Tornado (F0)
A tornado touched down south of Danville and remained on the ground for a short time. Numerous trees were downed.									
<b>Stark County Alliance</b>	27	1820EST			0	0	20K		Flood
Heavy thunderstorm rains of 3 inches in little over an hour caused flooding of roads. A few cars were flooded and a number of basements were flooded.									
<b>Stark County Alliance</b>	27	1836EST			0	0	2K		Thunderstorm Wind
Trees were downed.									
<b>Marion County Marion</b>	27	1851EST			0	0			Hail (0.75)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Marion County Countywide</b>	27	1900EST			0	0	5K		Thunderstorm Wind
			Trees and power lines were downed.						
<b>Morrow County Shauck</b>	27	2014EST			0	0			Hail (1.00)
<b>Crawford County Countywide</b>	27	2030EST			0	0	3K		Thunderstorm Wind
			Trees were downed.						
<b>Richland County Countywide</b>	27	2030EST			0	0	3K		Thunderstorm Wind
			Trees were downed.						
<b>Ashland County Loudonville</b>	27	2040EST			0	0			Hail (1.75)
<b>Morrow County Mt Gilead</b>	27	2050EST			0	0	50K		Thunderstorm Wind
			A barn was blown over just northwest of Mt. Gilead.						
<b>Knox County Howard</b>	27	2055EST			0	0			Hail (1.75)
<b>Morrow County Mt Gilead</b>	27	2252EST			0	0			Hail (0.75)
			Large hail fell in the vicinity of Mt. Gilead.						
<b>Seneca County Tiffin</b>	28	1600EST			0	0	20K		Thunderstorm Wind (G62)
			A wind gust was estimated at 71 miles per hour. The roof was blown off of a barn and large limbs were downed.						
<b>Sandusky County Countywide</b>	28	1615EST			0	0	200K		Thunderstorm Wind
			Numerous trees and power lines were downed, especially in the area of Bellevue. Some trees were downed on structures and automobiles.						
<b>Medina County Chippewa On The Lake</b>	28	1622EST			0	0			Hail (1.00)
			Large hail also fell in Gilford Township (1.00") and Wadsworth (0.75").						
<b>Erie County Castalia</b>	28	1636EST			0	0			Hail (1.00)
<b>Huron County Strongs Ridge</b>	28	1640EST			0	0	2K		Thunderstorm Wind
			Trees were downed east of Bellevue near Strongs Ridge.						
<b>Wayne County Rittman</b>	28	1650EST			0	0	10K		Thunderstorm Wind
			Many large limbs were downed on a house near Rittman.						
<b>Erie County South Portion</b>	28	1705EST 1840EST			0	0	5K		Flood
			Heavy thunderstorm rains produced flooding of small streams and streets. Some flooding was reported on the Ohio Turnpike.						
<b>Seneca County Bloomville</b>	28	1712EST			0	0			Hail (0.75)
<b>Seneca County Countywide</b>	28	1715EST			0	0	30K		Thunderstorm Wind
			Many trees and large limbs were downed and, near Bloomville, the roof was blown off of a barn.						
<b>Stark County Pigeon Run</b>	28	1716EST			0	0			Hail (1.50)
			Large hail fell in Tuscarawas Township and in the towns of Brewster (0.75") and Navarre (0.75").						
<b>Sandusky County Clyde</b>	28	1730EST			0	0	1K		Thunderstorm Wind
			Many large limbs were downed.						
<b>Wyandot County Countywide</b>	28	1733EST			0	0	7K		Thunderstorm Wind
			Many trees and power lines were downed, especially in Sycamore.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Lorain County</b> Elyria	28	1735EST			0	0	2K		Thunderstorm Wind
									Trees were downed.
<b>Ashland County</b> Paradise Hill	28	1736EST			0	0			Hail (0.75)
<b>Richland County</b> Mansfield	28	1745EST			0	0	30K		Thunderstorm Wind
									Many trees were downed in and near Mansfield and the roof was torn off of a building at Mansfield Reformatory.
<b>Crawford County</b> Countywide	28	1746EST			0	0	100K		Thunderstorm Wind
									Many trees were downed, some across roads, on buildings and cars.
<b>Richland County</b> Countywide	28	1756EST 1955EST			0	0	150K		Flood
									More thunderstorms with torrential rains caused new flooding in addition to ongoing flooding from heavy rains on the 27th. Many basements and roads were flooded, especially near Bellville. Flooding persisted in some areas for several more days.
<b>Ashland County</b> Countywide	28	1800EST			0	0	75K		Thunderstorm Wind (G69)
									Many trees and power lines were downed, with some trees downed on houses. Winds were estimated as gusting to 80 miles per hour. At Pleasant Valley Campground in Loudonville, trees were downed and campers were evacuated.
<b>Seneca County</b> Countywide	28	1800EST 1900EST			0	0	10K		Flood
									Heavy thunderstorm rains produced considerable street flooding.
<b>Crawford County</b> Countywide	28	1800EST 1940EST			0	0	50K		Flood
									Heavy thunderstorm rains produced flooding of roads and streams and basements.
<b>Ashland County</b> Loudonville	28	1815EST			0	0	5K		Thunderstorm Wind
									Trees and some power lines were downed, possibly by downburst winds.
<b>Morrow County</b> Countywide	28	1820EST			0	0	5K		Thunderstorm Wind
									Trees and power lines were downed.
<b>Morrow County</b> Countywide	28	1820EST 2225EST			0	0	100K		Flood
									More heavy thunderstorm rains enhanced existing flooding and created new flooding. Ten head of cattle reportedly drowned and additional roads and bridges were damaged or washed in addition to damage from flooding on the 27th. Flooding persisted for several days in many areas.
<b>Cuyahoga County</b> Cleveland	28	1827EST			0	0			Waterspout
									The Cleveland Coast Guard reported several huge waterspouts over Lake Erie a few miles offshore. They did not come ashore and no damage was reported.
<b>Crawford County</b> Countywide	28	1830EST			0	0	2K		Thunderstorm Wind
									Several trees were downed, especially in the southeastern part of the county.
<b>Holmes County</b> Countywide	28	1830EST			0	0	3K		Thunderstorm Wind
									Several trees were downed, especially in the western part of the county.
<b>Wyandot County</b> Countywide	28	1830EST 2015EST			0	0	30K		Flood
									Heavy thunderstorm rains caused flooding of small streams and low lying areas. A number of roads had high water on them and several roads had to be closed due to flood waters.
<b>Knox County</b> Countywide	28	1835EST 2225EST			0	0	150K		Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OHIO, North

More thunderstorms with heavy rain added to flooding problems from the heavy rains on the 27th. Roads that were opened had to be closed due to the additional rains and new flooding; many roads countywide were closed. Flooding of homes and buildings continued in some towns and flooding persisted in some areas for several more days.

### **Crawford County Countywide**

28	1855EST 2030EST				0	0	100K	50K	Flood
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Heavy rain caused significant flooding along secondary roads, basements and fields.

### **Knox County Countywide**

28	1900EST				0	0	5K		Thunderstorm Wind
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Many trees and power lines were downed.

### **Marion County Countywide**

28	1900EST				0	0	4K		Thunderstorm Wind
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Many trees were downed.

### **Trumbull County Cortland**

28	1903EST				0	0			Hail (0.88)
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Large hail (0.88") was also reported near Mosquito Lake.

### **Wyandot County Upper Sandusky**

28	1905EST				0	0	3K		Thunderstorm Wind
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Trees were downed.

### **Wood County Countywide**

29	0300EST				0	0	30K		Thunderstorm Wind
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Strong thunderstorm winds downed many trees and, just south of Bowling Green, took the roof off of a barn.

### **Ashland County Mc Kay**

29	0330EST				0	0			Hail (0.75)
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### **Wayne County Kidron**

29	0405EST				0	0	50K	50K	Hail (1.75)
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Large hail fell two miles east of Kidron. Large hail (1.00") also fell at Dalton, causing damage to cars, roofs and crops.

### **Wayne County Dalton**

29	0405EST				0	0	5K		Thunderstorm Wind
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Several trees were uprooted.

### **Seneca County Bettsville**

29	0410EST				0	0			Thunderstorm Wind (G52)
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A wind gust of 60 miles per hour was reported.

### **Stark County Canton**

29	0425EST				0	0			Hail (1.00)
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Large hail (0.75") was also reported at Navarre.

### **Huron County Monroeville**

29	0458EST				0	0	3K		Thunderstorm Wind
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Power lines were downed.

### **Wayne County Wooster**

29	1000EST				0	0	5K		Thunderstorm Wind
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Trees and power lines were downed.

### **Crawford County Bucyrus**

29	1300EST				0	0	30K		Thunderstorm Wind
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The roof was blown off of a house.

### **Ashland County Hayesville**

29	1823EST 2010EST				0	0	40K		Flood
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Flooding occurred from heavy thunderstorm rains on top of already saturated soil. Roads were closed from flood waters. Telephone poles being readied to replace storm damage poles from previous days floated away down County Road 1802.

### **Wayne County Shreve**

29	1900EST				0	0	3K		Thunderstorm Wind
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Several trees were downed in the southern part of the county.

### **Holmes County Countywide**

29	1920EST				0	0	5K		Thunderstorm Wind
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Numerous trees were downed. Winds were estimated at 80 to 100 miles per hour in the eastern part of the county.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Holmes County Countywide</b>	<b>29</b>	<b>1930EST</b>			<b>0</b>	<b>0</b>	<b>100K</b>	<b>50K</b>	<b>Flood</b>
	<b>30</b>	<b>0530EST</b>							
	Flooding occurred from thunderstorm rains on top of saturated soil from two previous days of heavy rains. Roads were flooded and closed and some crops were flooded. Basements and a few buildings were flooded.								
<b>Holmes County Countywide</b>	<b>29</b>	<b>1955EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		<b>2147EST</b>							
	Many roads were flooded and streams were out of their banks.								
<b>OHZ009 Erie</b>	<b>30</b>	<b>0500EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		<b>1421EST</b>							
	The Huron River at Milan exceeded its flood stage of 14 feet and crested at 16.7 feet on 06/30/98 at 1115 EST . Some flooding occurred in the lagoon communities from Milan to near Huron, with some cottages and homes completely surrounded by water.								
<b>Wood County Pemberville</b>	<b>30</b>	<b>1000EST</b>			<b>0</b>	<b>0</b>	<b>75K</b>		<b>Thunderstorm Wind</b>
	Many trees were downed, the roof of a mobile home was blown away and the roof of a barn was blown off. In Perrysburg, a house trailer was blown over.								
<b>Wood County Pemberville</b>	<b>30</b>	<b>1000EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
	Large hail (0.75") also fell at Luckey.								
<b>Hancock County Countywide</b>	<b>30</b>	<b>1000EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
	Numerous trees and power lines were downed.								
<b>Sandusky County Fremont</b>	<b>30</b>	<b>1032EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Lorain County Brighton</b>	<b>30</b>	<b>1129EST</b>			<b>0</b>	<b>0</b>	<b>4K</b>		<b>Thunderstorm Wind</b>
	Trees were also downed in Wellington.								
<b>Erie County Countywide</b>	<b>30</b>	<b>1130EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
		<b>1530EST</b>							
	Heavy rain caused flooding of roads.								
<b>Erie County Countywide</b>	<b>30</b>	<b>1130EST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Flood</b>
		<b>1300EST</b>							
	Heavy thunderstorm rains produced flooding of several roads.								
<b>Medina County Brunswick</b>	<b>30</b>	<b>1140EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Summit County Barberton</b>	<b>30</b>	<b>1219EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
	Large hail (0.88") also fell at Coventry								
<b>Summit County Barberton</b>	<b>30</b>	<b>1219EST</b>			<b>0</b>	<b>0</b>	<b>500K</b>		<b>Thunderstorm Wind (G73)</b>
	Many trees, power lines and utility poles were downed in the southern part of the county. A wind gust of 74 miles per hour was reported in Barberton and an 84 mile per hour gust was reported at Akron Canton Airport. Roofs of buildings at the airport were damaged as well the nose gear of an airplane. At Portage Lakes, boats were ripped from their moorings and turned upside down.								
<b>Stark County Canton</b>	<b>30</b>	<b>1230EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
	Large hail (0.75") also fell at Canal Fulton.								
<b>Stark County Countywide</b>	<b>30</b>	<b>1230EST</b>			<b>0</b>	<b>0</b>	<b>1M</b>		<b>Thunderstorm Wind (G61)</b>
	Many trees and power lines were downed. A 70 mile per hour wind gust was reported in Jackson Township. Many houses, and some greenhouses and other structures were damaged by falling trees and the high winds. Two houses under construction in Paris Township were flattened.								
<b>Wayne County Orrville</b>	<b>30</b>	<b>1240EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
	Several trees were downed.								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, North</b>									
<b>Stark County</b>									
Canton	30	1240EST			0	0	70K		Lightning
									Lightning struck a house, and the ensuing fire destroyed it.
<b>Erie County</b>									
Sandusky	30	1310EST			0	0			Waterspout
									A water spout on Lake Erie moved onshore and became a tornado. It came ashore without causing any damage on the lake.
<b>Erie County</b>									
Sandusky	30	1315EST	0.1	15	0	0			Tornado (F0)
									A tornado briefly touched down without doing any damage.
<b>Erie County</b>									
Huron	30	1320EST			0	0			Waterspout
									Numerous water spouts were reported on Lake Erie around Huron and Catawba Island. They did not come ashore and no damage was reported.
<b>Erie County</b>									
Sandusky	30	1330EST			0	0			Thunderstorm Wind (G55)
									An estimated wind gust of 63 miles per hour was reported.
<b>Lorain County</b>									
Oberlin	30	1351EST			0	0			Hail (1.75)
									Large hail also fell at North Ridgeville (0.75"), Elyria (0.75") and Amherst (0.88").
<b>Ottawa County</b>									
Oak Harbor	30	1355EST			0	0	0.50K		Thunderstorm Wind
									A tree and a telephone pole were downed.
<b>Lorain County</b>									
Amherst	30	1402EST			0	0			Thunderstorm Wind (G52)
									A wind gust was estimated at 60 miles per hour.
<b>Medina County</b>									
Wadsworth	30	1410EST			0	0	5K	20K	Thunderstorm Wind (G52)
									Numerous trees were downed in Wadsworth and Seville. An estimated sixty mile per hour wind gust was reported along the Medina/Wayne county line. A grain field was flattened in the Wadsworth area.
<b>Medina County</b>									
Lodi	30	1436EST			0	0			Hail (0.75)
<b>Wayne County</b>									
Dalton	30	1500EST			0	0	3K		Thunderstorm Wind
									Trees were downed or uprooted.
<b>Summit County</b>									
Barberton	30	1520EST			0	0	3K		Thunderstorm Wind
									Several trees were downed in the southern part of the county
<b>Stark County</b>									
Mapleton	30	1530EST			0	0	0.50K		Thunderstorm Wind
									A couple of trees were downed in Mapleton and Minerva.
<b>Huron County</b>									
Countywide	30	1530EST 1730EST			0	0	50K		Flood
									Heavy thunderstorm rain caused flooding of several roads and a few basements.
<b>Lorain County</b>									
Countywide	30	1530EST 1735EST			0	0			Flood
									Several roads were flooded.
<b>Erie County</b>									
Countywide	30	1530EST 1730EST			0	0	10K		Flood
<b>Huron County</b>									
Countywide	30	1530EST 1730EST			0	0	15K		Flood
									Heavy thunderstorm rains, on top of nearly saturated soil, caused flooding of some roads and basements.
<b>Lorain County</b>									
Countywide	30	1530EST 1730EST			0	0	15K		Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Northwest</b>									
<b>Van Wert County Scott</b>	12	1713EST			0	0			<b>Thunderstorm Wind (G70)</b>
<b>Paulding County Antwerp</b>	12	1715EST			0	0	10K		<b>Thunderstorm Wind</b>
									MANY TREES BLOWN DOWN INCLUDING ONE 2 FEET IN DIAMETER
<b>Paulding County Paulding</b>	12	1715EST			0	0			<b>Hail (1.00)</b>
									ONE INCH HAIL FELL THROUGHOUT COUNTY
<b>Putnam County Ottoville</b>	12	1745EST			0	0	100K		<b>Thunderstorm Wind (G52)</b>
									60 MPH WIND GUSTS REPORTED ACROSS COUNTY. NUMEROUS LARGE TREES AND LIMBS WERE BLOWN DOWN WITH DAMAGE TO VEHICLES AND HOUSES.
<b>OHZ015 Paulding</b>	12	1925EST			0	0			<b>Flood</b>
									SEVERAL COUNTY ROADS WERE UNDER WATER.

Synoptic and mesoscale conditions for June 12, 1998...

Strong upper shortwave was progged to dig sharply across the lower great lakes during the day in response to 120 meter height rises across the central plains. Increasing upper divergence associated with a 110 knot 250 mb jet and impressive upper forcing in advance of mid level cold pool led to rapid destabilization across Indiana by afternoon. With Capes increasing to 3000 J/kg and Lifted Indices to -10, the atmosphere was primed for severe weather. A weak surface cold front moving across the area in the afternoon provided the needed low level convergence for convection to develop. Shear values were mainly unidirectional with impressive mid level flow of 50 knots. Severe storms rapidly developed along the sfc boundary around 300 pm EST. Only one tornado was reported but many of the storms produced large hail up to the size of grapefruits and 60 to 80 mph wind gusts. Crop damage was widespread with some fields completely destroyed. Many homes suffered damage to varying degree due to downed tree limbs and uprooted trees.

<b>Williams County Bryan</b>	19	0050EST			0	0	0		<b>Thunderstorm Wind</b>
									TREES DOWN ACROSS COUNTY.
<b>Paulding County Latty to Paulding</b>	19	0100EST			0	0	100K		<b>Thunderstorm Wind</b>
									WIDESPREAD WIND DAMAGE ACROSS THE COUNTY. 18 POWER POLES WERE BLOWN DOWN IN ONE STRETCH ALONG CR 107.
<b>Fulton County Fayette</b>	19	0125EST			0	0			<b>Hail (0.75)</b>
<b>Fulton County Wauseon</b>	19	0125EST			0	0	0		<b>Thunderstorm Wind</b>
									TREES DOWN ACROSS THE COUNTY.
<b>Putnam County Columbus Grove</b>	19	0140EST			0	0			<b>Thunderstorm Wind (G53)</b>

Synoptic and mesoscale conditions for June 18/19, 1998...

A large upper level ridge was in place across the central plains states the morning of the 18th with an upper level trough axis anchored across the eastern Great Lakes region. An unseasonably strong shortwave trough was forecast to crest the upper ridge axis and dive southeast across the midwest during the afternoon and night of the 18th. At the sfc, a warm front was lifting northward with low pressure developing across eastern South Dakota. This surface low was forecast to track into central Wisconsin by evening as a 60 knot low level jet developed in response to a coupled 250 mb jet streak structure. A mid level capping inversion inhibited convection during the day but with the approach of the mid level trough and cold pool, steep mid level lapse rates developed with 700 to 500 mb delta T of 20 degrees Celsius. Rich boundary layer moisture began to pool along the warm front in the afternoon with surface dewpoints climbing into the lower 80s across central and eastern Iowa where severe convection first initiated. Dry air punching in behind this system and favorable storm relative shear provided a balanced cool pool/ambient shear interaction which maintained this long lived severe convective system.

A large squall line known as a derecheo developed across central Iowa during the afternoon of the 18th and rapidly propagated eastward along and south of the warm front. Wind damage... large hail and very heavy rains were common from Iowa east into Ohio where the squall line weakened during the morning hours of the 19th. Damage across Indiana, Michigan and Ohio was

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OHIO, Northwest

primarily due to strong straight line winds from 60 to 80 mph which downed many trees and power lines.

<b>Van Wert County</b> 2.5 SW Convoy	26	1800EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Henry County</b> Mc Clure	27	1605EST			0	0			<b>Hail (1.00)</b>
<b>Putnam County</b> Columbus Grove	27	1753EST			0	0			<b>Hail (0.88)</b>
<b>Allen County</b> Lima	27	2050EST			0	0			<b>Hail (1.75)</b>
<b>Putnam County</b> Columbus Grove	29	1334EST			0	0			<b>Hail (0.75)</b>
<b>Putnam County</b> Columbus Grove	29	1334EST			0	0			<b>Thunderstorm Wind (G53)</b>
<b>Putnam County</b> Leipsic	29	1354EST			0	0			<b>Hail (1.00)</b>
<b>Putnam County</b> Leipsic	29	1354EST			0	0			<b>Thunderstorm Wind (G61)</b>

## OHIO, Southeast

**OHZ066>067-075>076-085**      **Perry - Morgan - Athens - Washington - Meigs**

01	0000EST				0	0			<b>Monthly Rainfall</b>
30	2300EST								

The total June rainfall of 10 to 13 inches was common, except less for western portions of Athens County. The greatest amounts from official cooperative observers included Beverly of Washington County with 15.9 inches. Bellville Lock at Reedsville of Meigs County had 15.3 inches.

<b>Jackson County</b> 3 NE Oak Hill to Oak Hill	02	1317EST			0	0			<b>Hail (0.88)</b>
<b>Gallia County</b> Rio Grande	02	1330EST			0	0	200K		<b>Hail (1.25)</b>
<b>Gallia County</b> Rio Grande	02	1335EST			0	0	30K		<b>Thunderstorm Wind</b>
<b>Gallia County</b> Gallipolis	02	1345EST			0	0	750K		<b>Hail (1.75)</b>
<b>Gallia County</b> 1 SW Gallipolis to 1 S Gallipolis	02	1350EST 1351EST	0.3	40	0	0	50K		<b>Tornado (F0)</b>

Fallen trees caused minor damage to about 6 buildings in the region where Route 141 and 7 enters the city from the southwest.

A supercell developed in Jackson County and moved southeast through the Rio Grande and Gallipolis vicinity. The storm was strengthening as it headed toward the Ohio River. Numerous large trees were blown down around the university and community college at Rio Grande. Hail dented vehicles and broke windows on dwellings around Gallipolis. People used shovels to clear the hail off sidewalks in Gallipolis.

<b>Gallia County</b> Gallia to Gage	10	0120EST			0	0	10K		<b>Hail (1.75)</b>
<b>Lawrence County</b> Getaway	10	0130EST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Vinton County</b> Countywide	12	2255EST 2310EST			0	0	20K		<b>Thunderstorm Wind</b>

Fallen trees blocked several county roads.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southeast</b>									
<b>Athens County</b> Athens	12	2315EST			0	0	5K		Thunderstorm Wind
									Several big trees were knocked down in town.
<b>Meigs County</b> Darwin	12	2330EST			0	0	2K		Thunderstorm Wind
									Trees were down along Route 33.
<b>Gallia County</b> Mercerville	14	2330EST			0	0	5K		Flash Flood
	15	0300EST							
<b>Lawrence County</b> Countywide	14	2330EST			0	0	10K		Flash Flood
	15	0300EST							
									Rains of 1.5 to 2 inches in less than 3 hours, caused small streams to flood and damage roads. No dwellings were evacuated.
<b>Gallia County</b> 1 N Gallipolis	15	1438EST			0	0			Hail (0.75)
<b>Gallia County</b> Patriot to Addison	15	1730EST 1900EST			0	0	10K		Flash Flood
									Patriot measured 2.1 inches of rain. Minor stream flooding blocked secondary roads.
<b>Lawrence County</b> Ironton	16	1235EST			0	0	250K		Hail (1.75)
									Hail the size of quarters to golfballs fell in town, denting vehicles.
<b>Lawrence County</b> Ironton	16	1255EST			0	0	25K		Hail (0.88)
<b>Lawrence County</b> Waterloo	16	1300EST			0	0			Hail (1.00)
<b>Perry County</b> Maxville	16	1320EST			0	0			Hail (1.00)
<b>Gallia County</b> Patriot to Cadmus	16	1330EST 1500EST			0	0	5K		Flash Flood
									Symmes Creek and its tributaries flowed across Route 141.
<b>Gallia County</b> 1 N Rio Grande	16	1330EST			0	0	5K		Thunderstorm Wind
									Several trees were blown down.
<b>Jackson County</b> Oak Hill	16	1330EST			0	0			Hail (1.00)
<b>Jackson County</b> 3 SE Oak Hill	16	1400EST 1630EST			0	0	5K		Flash Flood
									Route 279 was blocked by overflowing streams.
<b>Meigs County</b> Syracuse	16	1415EST			0	0			Hail (0.75)
<b>Meigs County</b> Rutland to 3 NE Rutland	16	1430EST 1630EST			0	0	5K		Flash Flood
									Streams flooded from the Wolfpen region along Thomas Fork to Little Leading Creek around Rutland.
<b>Washington County</b> Reno	22	1930EST			0	0	20K		Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southeast</b>									
Bleachers and a press box at a car race track were damaged. Across Route 7, a conveyor at a car crusher business was damaged.									
<b>Washington County</b> New Matamoras	26	1705EST			0	0	2K		Hail (1.00)
<b>Athens County</b> 3 N Mineral	26	1812EST			0	0	2K		Thunderstorm Wind
Trees were down on Route 56.									
<b>Washington County</b> Newport to New Matamoras	26	2045EST			0	0	3K		Thunderstorm Wind
<b>Washington County</b> Lowell to Lower Salem	26 27	2300EST 0130EST			0	0	5K		Flash Flood
State Routes 60 and 821 were impassable.									
<b>Perry County</b> Thornville to Somerset	27	0015EST 0025EST			0	0	5K		Thunderstorm Wind
The sheriff department reported trees down across roads.									
<b>Washington County</b> Coalrun to Lowell	27	0600EST 0830EST			0	0	25K		Flash Flood
One house was flooded in Coal Run. One section of railroad tracks in Lowell was undermined.									
This was the first of three consecutive nights of thunderstorms across southeast Ohio. The trend was for the heaviest rains to sink a bit further south each night. During this Friday night the 26th into the early morning of Saturday the 27th, several separate rounds of thunderstorms swept southeast. Rains of 1 to 3 inches fell mainly north of a Marietta to Athens line. This set the stage for more significant wind damage and flooding, from the second night of thunderstorms.									
<b>Perry County</b> New Lexington	27	1900EST			0	0	5K		Thunderstorm Wind
<b>Morgan County</b> 6 W Malta	27	1905EST			0	0	2K		Thunderstorm Wind
<b>Washington County</b> 2 N Marietta	27	1925EST			0	0	2K		Thunderstorm Wind
An estimated wind gust of 60 mph knocked down trees.									
<b>Washington County</b> Marietta to Reno	27	1930EST			0	0	750K		Thunderstorm Wind
Numerous large trees were blown down by strong wind gusts. The wind was associated with a bow echo configuration to the thunderstorms. Wind gusts of around 70 mph likely occurred. Several homes and businesses were hit by fallen trees. Residents described the aftermath in the hardest hit portions of downtown Marietta as looking like a war zone.									
<b>Athens County</b> Coolville	27	1932EST			0	0	5K		Thunderstorm Wind
<b>Washington County</b> Countywide	27 29	2230EST 0900EST			1	0	10M		Flash Flood
M40VE									
<b>Washington County</b> Marietta	28	0120EST			0	0	2K		Hail (1.00)
<b>Morgan County</b> Countywide	28	0230EST 0530EST			0	0	400K		Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southeast</b>									
<b>Athens County</b> North Portion to Southeast Portion	28	0400EST 2300EST			0	0	4M		Flash Flood
<b>Perry County</b> Countywide	28	0400EST 2300EST			0	0	2M		Flash Flood
<b>Meigs County</b> Northeast Portion	28	0500EST 2300EST			1	0	3M		Flash Flood
		F55MH							
<b>OHZ067-076-085&gt;086</b>									
<b>Morgan - Washington - Meigs - Gallia</b>	28	0700EST			0	0	50K		Flood
	30	0700EST							
<b>Morgan County</b> Countywide	28	2200EST			0	0	400K		Flash Flood
	29	0700EST							
<b>Gallia County</b> Vinton	29	0011EST			0	0			Hail (1.00)
<b>Jackson County</b> Jackson	29	0015EST			0	0	5K		Thunderstorm Wind
<b>Meigs County</b> Countywide	29	0130EST 1400EST			0	0	15K		Flash Flood
<b>Vinton County</b> Allensville to Hamden	29	0400EST 0730EST			0	0	40K		Flash Flood
<b>Jackson County</b> North Portion	29	0415EST 0900EST			0	0	450K		Flash Flood
<b>Perry County</b> Glenford	29	2150EST			0	0	5K		Thunderstorm Wind

The second night of thunderstorms hit during Saturday night the 27th, into Sunday morning, the 28th. Portions of Athens, Washington, and Meigs Counties were hit hard by flooding from this round. The third night of thunderstorms was on Sunday the 28th into Monday the 29th. The final night was a bit further south and west, hitting Jackson County the hardest, but still affecting areas previously under water.

Total three day rains of 6 to 12 inches fell from the East Branch of the Shade River across northeastern Meigs County on north, into the lower Muskingum River drainage. An unofficial rain gauge near Tupper's Plain of Meigs County reported 11.5 inches. An automatic rain gauge near Amesville of Athens County measured 5 inches of rain in just 3 hours, with 7.6 inches in 6 hours early Sunday morning the 28th. The Corps of Engineers at the Belleville Lock on the Ohio River at Reedsville measured 4 inches of rain in just 2.5 hours between 0400 and 0630E on the 28th.

The hardest hit streams were Sunday and Federal Creeks in Athens County, Duck Creek in Washington County, and the smaller feeder creeks into the East Branch of the Shade River in southern Athens and northeastern Meigs Counties.

Late Saturday night the 27th, a 40 year old male was killed when he and his wife drove their truck into flood waters along Grandview Township Route 66 in Washington County. The woman escaped and survived, but the man did not escape the vehicle and was swept down Mill Creek. The other fatality in southeast Ohio was early Sunday morning, the 28th, in northeastern Meigs County. A 55 year old woman from Athens was visiting a friend. The mobile home was washed down a short hollow along Smith-Baker Road and went into Lickskittit Run. The body was recovered about 2 miles down the stream. The other female occupant, escaped the flood waters, by hanging on to a sycamore branch about 500 yards down the stream. Elsewhere in the Shade River basin, people were rescued by boat from their floated homes. Where the East Branch of the Shade River crosses Route 7, the water was over the surface of the bridge. Portland was isolated, with all roads exiting this Ohio River community washed out or flooded.

A presidential federal disaster declaration was made for Perry, Morgan, Washington, Athens, Meigs, and Jackson Counties. Between 500 and 600 dwellings were affected by the flood, the most being in Athens, Perry, and Washington Counties.

In Athens County, the gauge at Amesville along Federal Creek was the highest on record. The crest was around 0700E Sunday, but

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OHIO, Southeast

did not subside until 2000E. The water was 13 feet deep in the fire station, and 10 feet on Route 550. The mayor of Amesville said that even before the creek flooded, 1 to 2 feet of water was running off the hills. The mayor of Glouster said the West Branch of Sunday Creek rose 10 to 14 feet, affecting about a quarter of the town. The USGS gauge on Sunday Creek crested at 18.62 feet. Trimble and Jacksonville were also hard hit by the flood waters of Sunday Creek. Further south in Athens County, the area around Lottridge and Vanderhoof was also flooded. The 160 year old Orange Christian Church was swept a half mile down the headwaters of the East Branch of the Shade River. About 200 homes were affected just in Athens County.

Perry County also had about 200 homes affected to various degrees by the flooding. The area around New Lexington and Corning were affected the most.

In Washington County, the West Fork of Duck Creek rose some 20 feet and inundated the communities of Macksburg and Elba. The flooding in the headwaters around Caldwell and Dexter City of Noble County got worst as you travelled down the stream into Washington County. In Macksburg, water was 4 feet in some homes. The community was without public water for 10 days. In the small community of Elba, 21 out of the 25 homes had damage. The flood waters were swift here, and 1 home was forced 100 yards down Duck Creek. Further down the Duck Creek watershed, the East Fork meets the West Fork in the vicinity of Lower Salem and Warner. About 17 homes were flooded for 12 hours in Lower Salem. The combine waters of these forks inundated the Whipple region. The stream was 20 to 30 feet out of its banks. In the weeks following the flood, hay was still hanging from the elevated power lines along Route 821. A 6 week old church in Whipple had 5 feet of water inside. In Marietta, the damage from both the fallen trees and flooding was substantial. Several businesses were surprised, when storm sewers overflowed, or water came through roofs that were damaged by the wind. Stores on Second Street were especially hard hit by the flooding. The county engineer reported 18 county bridges washed out or damaged. The Ohio National Guard was in Washington County for 10 days following the flood.

In Jackson County, the flooding occurred early on the 29th. The communities of Jackson, Wellston, Coalton, Byer, and Bronx Corner were affected the most. Homes and vehicles were flooded. Outbuildings were destroyed around Bronx Corner. In Jackson Township, Woodrow Hale and Cain Roads sustained heavy damage.

Only minor river flooding occurred in the wake of the flash flooding. The river flooding was confined to block roads. The lower Muskingum River crested 1 to 2 feet above flood stage from around McConnellsville of Morgan County on toward its mouth in Washington County. The Ohio River crested at or just over flood stage from near Racine on through Pomeroy to Gallipolis.

## OHIO, Southwest

<b>Darke County</b> Greenville	02	1051EST 1055EST			0	0			Hail (1.75)
<b>Miami County</b> Laura to West Milton	02	1105EST 1220EST			0	0			Hail (0.75)
<b>Hamilton County</b> Cheviot	09	2254EST			0	0			Thunderstorm Wind (G59)
Winds gusted to an estimated 70 mph.									
<b>Clermont County</b> Moscow to Felicity	10	0010EST 0015EST			0	0	3K		Thunderstorm Wind (G50)
Trees downed.									
<b>Clermont County</b> Felicity	10	0015EST 0045EST			0	0	100K		Flash Flood
Heavy rainfall washed out several roads and a bridge.									
<b>Brown County</b> Higginsport to Ripley	10	0037EST 0045EST			0	0	3K		Thunderstorm Wind (G50)
Trees downed.									
<b>Hamilton County</b> Bridgetown	10	0100EST			0	0	25K		Lightning
Lightning struck a home causing significant damage.									
<b>Brown County</b> Hamersville	10	0130EST 0400EST			0	0	5K		Flood
Numerous roads flooded by heavy rainfall.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
<b>Butler County</b>									
New Miami	10	0200EST 0205EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Adams County</b>									
Lynx	10	0230EST 0235EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Clermont County</b>									
Laurel	10	0248EST 0250EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Brown County</b>									
Hamersville	10	0330EST 0335EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Adams County</b>									
Pebbles	10	0350EST 0355EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Clermont County</b>									
Countywide	11	0955EST 1330EST			0	0	5K		Flood
			Numerous roads were closed due to heavy rainfall.						
<b>Shelby County</b>									
Countywide	11	0956EST 1430EST			0	0	5K		Flood
			Heavy rainfall caused numerous roads to be closed.						
<b>Butler County</b>									
Countywide	11	1015EST 1145EST			0	0	5K		Flood
			Numerous roads were closed due to heavy rainfall.						
<b>Darke County</b>									
Countywide	11	1025EST 1300EST			0	0	5K		Flood
			Heavy rainfall caused several roads to be closed.						
<b>Hamilton County</b>									
Countywide	11	1030EST 1330EST			0	0	10K		Flood
			Several hours of heavy rainfall caused numerous roads to be closed.						
<b>Miami County</b>									
Countywide	11	1040EST 1300EST			0	0	5K		Flood
			Numerous roads closed due to heavy rainfall.						
<b>Adams County</b>									
Countywide	11	1500EST 1530EST			0	0	5K		Flood
			Roads were closed due to heavy rainfall.						
<b>Brown County</b>									
Countywide	11	1500EST 1530EST			0	0	5K		Flood
			Numerous roads closed.						
<b>Mercer County</b>									
Coldwater	11	2100EST 2105EST			0	0			Hail (1.75)
<b>Mercer County</b>									
Countywide	11	2150EST 2200EST			0	0			Flood
			Heavy rain caused water to flood across county roads.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
<b>Brown County</b> St Martin	11	2335EST 2340EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Clermont County</b> Owensville	11	2335EST 2340EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Shelby County</b> Jackson Center	12	1925EST 1930EST			0	0	3K		Thunderstorm Wind (G50)
		Numerous trees downed.							
<b>Auglaize County</b> Wapakoneta	12	1930EST 1935EST			0	0			Hail (1.75)
<b>Preble County</b> New Paris	12	1955EST 2000EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Darke County</b> Countywide	12	2000EST 2015EST			0	0	5K		Thunderstorm Wind (G50)
		Many trees downed across the county.							
<b>Miami County</b> Phoneton	12	2029EST 2035EST			0	0			Hail (0.75)
<b>Butler County</b> Hamilton	12	2045EST 2050EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Clark County</b> Springfield	12	2045EST 2055EST			0	0	5K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Greene County</b> Fairborn	12	2045EST 2055EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Montgomery County</b> Englewood	12	2055EST 2100EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Franklin County</b> Columbus	12	2100EST 2110EST			0	0	5K		Thunderstorm Wind (G50)
		Trees downed.							
<b>Hamilton County</b> Blue Ash	12	2100EST 2105EST			0	0	3K		Thunderstorm Wind (G50)
		Numerous trees downed.							
<b>Warren County</b> Countywide	12	2115EST 2130EST			0	0	10K		Thunderstorm Wind (G50)
		Trees down across the county.							
<b>Clinton County</b> Sabina	12	2130EST 2135EST			0	0	3K		Thunderstorm Wind (G50)
		Trees downed.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
<b>Fayette County</b>									
Washington Court Hou	12	2135EST 2140EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Clermont County</b>									
Countywide	12	2145EST 2200EST			0	0	10K		Thunderstorm Wind (G50)
			Trees downed across the county.						
<b>Highland County</b>									
Hillsboro	12	2145EST 2150EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Brown County</b>									
Sardinia	12	2212EST 2215EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Adams County</b>									
West Union	12	2221EST 2225EST			0	0			Thunderstorm Wind (G51)
			Winds gusted to 60 mph.						
<b>Ross County</b>									
Chillicothe	12	2230EST 2235EST			0	0	3K		Thunderstorm Wind (G50)
			Several trees downed.						
<b>Hocking County</b>									
Countywide	12	2240EST 2245EST			0	0	5K		Thunderstorm Wind (G50)
			Trees down across the county.						
<b>Scioto County</b>									
Minford	12	2245EST 2250EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Pike County</b>									
Idaho	12	2250EST 2255EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Scioto County</b>									
Portsmouth	14 15	2315EST 0015EST			0	0	50K		Flash Flood
			A bridge was washed out due to persistent heavy rainfall.						
<b>OHZ077</b>									
			<b>Hamilton</b>						
	15	0900EST			0	0			Flood
	18	0300EST							
			Heavy rainfall over several days caused the Great Miami River at Miami town to overflow its banks twice. The river first crested at an estimated 18.0 feet around 200 PM EST on the 15th. The river then fell below the flood stage of 16.0 feet around 400 PM EST that day. More heavy rainfall caused the river to rise back out its banks at 300 PM EST on the 16th. This time the river reached an estimated 20.0 feet causing flooding in Miami and Whitewater townships.						
<b>Butler County</b>									
Countywide	16	1035EST 1145EST			0	0			Flood
			Heavy rainfall caused water to flood across roads.						
<b>Butler County</b>									
Monroe	16	1050EST 1055EST			0	0			Hail (0.75)
<b>Hamilton County</b>									
Cincinnati	16	1100EST 1105EST			0	0			Hail (1.75)
<b>Warren County</b>									
Lebanon	16	1115EST 1120EST			0	0	3K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
			Numerous trees downed.						
<b>Clinton County</b> Martinsville	16	1125EST 1130EST			0	0			Hail (0.75)
<b>Hamilton County</b> Newtown	16	1125EST 1130EST			0	0			Hail (0.75)
<b>Clermont County</b> Milford	16	1130EST 1135EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Clermont County</b> 3 W Batavia	16	1145EST 1430EST			0	0			Flood
			Roads were flooded near the Eastgate Mall.						
<b>Fayette County</b> 5 E Washington Court Hou	16	1150EST 1155EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Highland County</b> Hillsboro	16	1150EST 1155EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Adams County</b> Cedar Mills	16	1210EST 1215EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Brown County</b> Georgetown	16	1215EST 1220EST			0	0	3K		Thunderstorm Wind (G50)
			Several trees downed.						
<b>Franklin County</b> 4 SW Pleasant Corners to Pleasant Corners	16	1225EST 1230EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Pickaway County</b> Darbyville	16	1230EST 1235EST			0	0			Hail (0.75)
<b>Delaware County</b> Sunbury	16	1250EST 1255EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Fairfield County</b> Millersport	16	1250EST 1255EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Scioto County</b> Rarden	16	1300EST 1305EST			0	0			Hail (0.75)
<b>Pike County</b> Piketon	16	1305EST 1310EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Delaware County</b> Delaware	16	1310EST 1315EST			0	0			Hail (1.00)
<b>Licking County</b> Brownsville	16	1330EST 1335EST			0	0	3K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
Numerous trees downed.									
<b>Hocking County</b> Logan	16	1400EST 1405EST			0	0	3K		Thunderstorm Wind (G50)
Trees downed.									
<b>Scioto County</b> Minford	16	1525EST 1530EST			0	0			Hail (1.00)
<b>Darke County</b> 5 N Greenville	15	1540EST 1545EST	0.2	50	0	0	10K		Tornado (F0)
A brief tornado touchdown produced downed power lines and damaged a camper. Also, 1 home received minor structural damage.									
<b>Adams County</b> Louden	15	1915EST 2030EST			0	0			Flood
Heavy rainfall from earlier in the day caused area creeks and streams to rise out of their banks. Some evacuations occurred due to the rising creeks.									
<b>Darke County</b> Countywide	19	0106EST 0120EST			0	0	50K		Thunderstorm Wind (G70)
Winds gusting well over 70 mph caused numerous downed trees and power lines. Also, three buildings received major damage and a tree was thrown into a house									
<b>Butler County</b> Countywide	19	0110EST 0120EST			0	0	10K		Thunderstorm Wind (G60)
Many trees downed.									
<b>Mercer County</b> Coldwater	19	0115EST 0120EST			0	0	50K		Thunderstorm Wind (G70)
Winds gusting over 70 mph caused numerous downed trees. Also, roofs were blown off several structures.									
<b>Preble County</b> Countywide	19	0115EST 0130EST			0	0	10K		Thunderstorm Wind (G60)
Numerous trees and power lines.									
<b>Hamilton County</b> Countywide	19	0130EST 0145EST			0	0	10K		Thunderstorm Wind (G60)
Numerous trees downed.									
<b>Auglaize County</b> Countywide	19	0140EST 0155EST			0	0	10K		Thunderstorm Wind (G60)
Numerous trees downed across the county.									
<b>Miami County</b> Countywide	19	0140EST			0	0	10K		Thunderstorm Wind (G50)
Numerous trees downed, especially in the western part of the county.									
<b>Shelby County</b> Anna	19	0145EST 0155EST			0	0	10K		Thunderstorm Wind (G58)
Many trees and power lines downed from winds that were measured at 67 mph.									
<b>Clermont County</b> Goshen	19	0150EST 0200EST			0	0	10K		Thunderstorm Wind (G50)
Numerous trees downed.									
<b>Montgomery County</b> Countywide	19	0150EST 0205EST			0	0	10K		Thunderstorm Wind (G50)
Numerous trees downed.									
<b>Warren County</b> Countywide	19	0150EST 0205EST			0	0	10K		Thunderstorm Wind (G50)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
			Numerous trees downed.						
<b>Clinton County</b> Blanchester to Midland	19	0205EST 0215EST			0	0	10K		Thunderstorm Wind (G50)
			Trees downed, one of which fell on a van.						
<b>Champaign County</b> Countywide	19	0215EST 0230EST			0	0	10K		Thunderstorm Wind (G50)
			Many trees downed.						
<b>Clark County</b> Countywide	19	0215EST 0230EST			0	0	10K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Greene County</b> Countywide	19	0215EST 0230EST			0	0	10K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Hardin County</b> Countywide	19	0215EST 0230EST			0	0	5K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Logan County</b> Lakeview	19	0215EST 0230EST			0	0	5K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Madison County</b> London	19	0225EST 0230EST			0	0	5K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Brown County</b> 5 W Georgetown	19	0230EST 0240EST			0	0	3K		Thunderstorm Wind (G50)
			Numerous trees down.						
<b>Highland County</b> Willettsville	19	0230EST 0240EST			0	0	5K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Union County</b> Summersville	19	0244EST 0250EST			0	0	5K		Thunderstorm Wind (G50)
			Several trees downed.						
<b>Warren County</b> Maineville	22	1555EST 1600EST			0	0	10K		Thunderstorm Wind (G50)
			Several large trees were downed, one of which fell on a home.						
<b>Hamilton County</b> Newtown	22	1558EST 1605EST			0	0	10K		Thunderstorm Wind (G50)
			Numerous trees were downed, some of which fell on cars.						
<b>Clermont County</b> Batavia	22	1640EST 1645EST			0	0	5K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Brown County</b> Aberdeen	22	1650EST 1655EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Adams County</b> West Union	22	1700EST 1705EST			0	0	3K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
			Trees and power lines downed.						
<b>Adams County</b> Countywide	22	1745EST 2000EST			0	0			Flood
			Persistent heavy rainfall caused water to flood across county roads.						
<b>Clark County</b> 5 E Springfield	26	1555EST 1600EST			0	0			Hail (0.75)
<b>Hocking County</b> Union Furnace	26	1725EST 1730EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Franklin County</b> Westerville	26	2020EST 2025EST			0	0	5K		Thunderstorm Wind (G50)
			Numerous trees downed.						
<b>Fairfield County</b> Lancaster	26	2041EST 2045EST			0	0			Hail (1.75)
<b>Franklin County</b> Reynoldsburg	26	2127EST 2130EST			0	0			Hail (0.75)
<b>Fairfield County</b> Carroll	26	2205EST			0	0			Thunderstorm Wind (G61)
			Winds gusted to 70 mph.						
<b>Licking County</b> Countywide	26	2315EST 2330EST			0	0	5K		Thunderstorm Wind (G60)
			Numerous trees downed.						
<b>Licking County</b> Fallsburg	27	0400EST 0700EST			0	0			Flash Flood
			Over 8 inches of rain fell across the northeastern part of the county, much of which fell in less than 6 hours. Numerous roads were flooded and closed.						
<b>Delaware County</b> Ashley	27	1803EST 1805EST			0	0			Thunderstorm Wind (G50)
			Winds gusted to 58 mph.						
<b>Licking County</b> Countywide	27	1830EST 1900EST			0	0	25K		Thunderstorm Wind (G70)
			Nearly 100 trees were downed, mainly in the eastern half of the county.						
<b>Licking County</b> Fallsburg	28	1925EST 1930EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Champaign County</b> 5 SE Mechanicsburg	28	2153EST 2155EST			0	0			Hail (1.75)
<b>Madison County</b> 3 NW Mt Sterling	28	2230EST 2235EST			0	0			Hail (0.75)
<b>Pickaway County</b> Five Pts	28	2230EST 2235EST			0	0	3K		Thunderstorm Wind (G50)
			Trees downed.						
<b>Hocking County</b> 5 W Logan	28	2330EST 2335EST			0	0	3K		Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OHIO, Southwest</b>									
			Trees and power lines downed.						
<b>Franklin County West Portion</b>	29	0015EST 0625EST			0	0	1M		<b>Flash Flood</b>
			Nearly 10 inches of rain fell in southwestern parts of the county causing significant flooding, especially near Wrightsville, Darbydale, Pleasant Corners, and Grove City. Numerous roads were closed, including Interstate 71. Several homes were flooded and some evacuations occurred.						
<b>Madison County East Portion</b>	29	0015EST 0615EST			0	0	100K		<b>Flood</b>
			From 6 to 8 inches of rain fell across the eastern portion of the county, much of which fell in less than 6 hours. Numerous roads were flooded, especially around West Jefferson.						
<b>Pickaway County Countywide</b>	29	0015EST 0625EST			0	0	500K		<b>Flash Flood</b>
			Over 8 inches of rain fell, of which most fell in less than 6 hours. Area creeks and streams rose out of their banks. Several homes were inundated causing evacuations and numerous roads were closed.						
<b>Auglaize County St Marys</b>	29	0025EST 0030EST			0	0			<b>Hail (1.75)</b>
<b>Auglaize County Moulton</b>	29	0040EST 0045EST			0	0			<b>Hail (1.75)</b>
<b>Franklin County Pleasant Corners</b>	29	0100EST 0105EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Pickaway County Orient</b>	29	0100EST 0105EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Numerous trees downed.						
<b>Franklin County Pleasant Corners</b>	29	0210EST 0215EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>OHZ054&gt;055-064-064</b>			<b>Madison - Franklin - Pickaway</b>						
	29	0330EST 2359EST			0	0			<b>Flood</b>
			In less than 6 hours, from 5 to nearly 10 inches of rain fell in the Big Darby Creek drainage basin. The creek rose quickly out of its banks and reached a crest of 14.6 feet at Darbyville at 500 PM EST on the 29th. Numerous roads were flooded across Madison, Franklin, and Pickaway counties. Also, flooding occurred in the Shady Acres Mobile Home Park near Circleville.						
<b>Union County South Portion</b>	29	0400EST 0625EST			0	0	50K		<b>Flood</b>
			Frp,						
<b>Darke County Greenville</b>	29	1930EST 1935EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Miami County 1 S Laura</b>	29	1945EST 1950EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Miami County West Milton to Tipp City</b>	29	2015EST 2025EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>
			Trees downed.						
<b>Darke County Greenville</b>	29	2105EST 2110EST			0	0	3K		<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OHIO, Southwest

Trees downed.

**Hamilton County**  
Harrison

29	2155EST 2200EST					0	0	3K	Thunderstorm Wind (G50)
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Trees downed.

**Miami County**  
Tipp City

29	2215EST 2330EST					0	0		Flood
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Several hours of heavy rainfall caused roads to be closed, including Interstate 75 near Tipp City.

**Clermont County**  
Milford

29	2230EST 2235EST					0	0	3K	Thunderstorm Wind (G50)
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Trees downed.

## OKLAHOMA, Eastern

**Sequoyah County**  
Roland

04	1720CST					0	0		Hail (0.75)
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**Sequoyah County**  
2 NE Roland

04	1725CST					0	0		Hail (1.00)
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**Choctaw County**  
4 W Boswell to  
3 E Swink

04	1920CST 2015CST					0	0	45K	Thunderstorm Wind
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A large and powerful severe thunderstorm moved across Choctaw County from west to east on the evening of June 4. This storm produced the radar signature of a large bow echo and was a prolific wind producer. The worst part of the storm moved eastward along US Hwy 70, downing numerous trees and power lines countywide. While the storm produced damage countywide, the worst-hit areas of Choctaw County were near Fort Towson. This storm produced widespread wind damage from Bryan County east to the Arkansas border. Specific reports from Choctaw County follow:

- The Choctaw Electric Cooperative reported outages at each of its 13 substations due to broken power poles and trees which toppled onto transmission lines. Nearly 7,500 CEC customers in eastern Choctaw and western McCurtain Counties were without electricity after the storm. CEC replaced 20 broken poles, eight transformers, and one mile of line.
- Public Service Company of Oklahoma reported 1,500 customers without electricity in the Fort Towson area following the storm. Hugo and Swink also had scattered power outages according to PSO.
- Around 820 PM CDT, a large tree was blown down along US Hwy 70 one mile west of Boswell.
- Around 842 PM CDT, spotters estimated wind gusts of 60 to 70 miles an hour in Hugo. These winds uprooted numerous trees and power lines which blocked several roadways around town. A newspaper clipping from the Hugo Daily News showed a picture of a very large uprooted tree that barely missed falling onto two homes on Clayton Street.
- Around 845 PM CDT, a large tree was blown onto US Hwy 70 one mile east of Hugo, blocking the roadway.
- Spotters reported tree damage between Hugo and Sawyer around 849 PM CDT.
- The Oklahoma mesonet site 2 miles northwest of Hugo measured a 53 mph gust between 845 and 900 PM CDT.
- Seven large trees were blown down in Ft. Towson's Hopson Park. Large branches were snapped off of trees all over town, blocking streets and falling on vehicles. At least one falling tree caused considerable damage to a car (pictured in the Hugo Daily News).
- A barn was flattened near Fort Towson (pictured in the Hugo Daily News).

**Okfuskee County**  
2 E Castle

04	2045CST					0	0		Hail (1.75)
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**Okmulgee County**  
Henryetta

04	2113CST					0	0		Hail (0.88)
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Location: intersection of I-40 and US Hwy 75

**Wagoner County**  
3 NE Wagoner

04	2135CST					0	0		Hail (1.75)
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Reported by public in the Snug Harbor area

**Wagoner County**  
3 N Wagoner

04	2145CST					0	0		Hail (0.88)
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In addition, the Post Office at Red Bird reported hail of unknown size.

Summary of events for June 4 1998:

Several severe thunderstorms developed on the afternoon and evening of June 4 in east-central and southeast Oklahoma in the

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## **OKLAHOMA, Eastern**

presence of an unseasonably strong cold front, extremely unstable air, and strong mid-level winds.

The first severe thunderstorm formed along the front in Sequoyah County after 530 PM CDT, producing hail to quarter-size and then moving east into Arkansas.

A second severe thunderstorm developed in south-central Oklahoma late in the afternoon and had moved east to Choctaw County by 830 PM CDT, producing widespread wind damage.

Finally, an isolated severe thunderstorm developed in Okfuskee County, well north of the cold front. This thunderstorm moved from near Okemah to Wagoner and then weakened. The primary threat with this storm was hail as large as golfballs.

### **OKZ060**

#### **Tulsa**

<b>06</b>	<b>0000CST 2359CST</b>	<b>0</b>	<b>0</b>	<b>Record Cool</b>
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This was the coolest June 6 on record at the Tulsa International Airport. The morning low of 50 degrees Fahrenheit broke the old record low of 53 degrees set in 1997. The afternoon high of 73 was the coolest high temperature on record for June 6, breaking the old record low max temp. of 74 set in 1983. This was caused by an unseasonably strong Canadian high pressure that had moved southward down the Plains.

#### **Rogers County**

<b>Inola</b>	<b>08 0620CST</b>	<b>0</b>	<b>0</b>	<b>Hail (1.00)</b>
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#### **Mayes County**

<b>Chouteau</b>	<b>08 0630CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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#### **Creek County**

<b>Bristow</b>	<b>08 0845CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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#### **Creek County**

<b>Bristow</b>	<b>08 0850CST</b>	<b>0</b>	<b>0</b>	<b>Hail (1.00)</b>
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#### **Adair County**

<b>2 SW Bunch</b>	<b>08 0855CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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#### **Adair County**

<b>Bunch</b>	<b>08 0900CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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#### **Tulsa County**

<b>1 SW Glenpool</b>	<b>08 0921CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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#### **Tulsa County**

<b>2 SW Bixby</b>	<b>08 0933CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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#### **Muskogee County**

<b>Webbers Falls</b>	<b>08 1000CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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#### **Sequoyah County**

<b>7 NW Vian</b>	<b>08 1015CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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Summary of events for the morning of June 8 1998:

An area of showers and thunderstorms with scattered embedded severe thunderstorms moved quickly northeast across northeast Oklahoma on the morning of June 8. These storms were in response to an upper level disturbance interacting with elevated instability. The primary threats with these thunderstorms were hail as large as quarters and marginally severe wind gusts.

#### **Osage County**

<b>8 W Burbank</b>	<b>08 1635CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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#### **Osage County**

<b>2 NW Shidler</b>	<b>08 1645CST</b>	<b>0</b>	<b>0</b>	<b>Funnel Cloud</b>
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Emergency management reported funnel cloud between Shidler and Webb City.

#### **Mcintosh County**

<b>Hanna</b>	<b>08 1905CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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#### **Mcintosh County**

<b>1 N Hanna</b>	<b>08 1914CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G52)</b>
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Location: near the toll gate on the Indian Nations Turnpike

#### **Pittsburg County**

<b>7 NW Scipio to 9 WSW Indianola</b>	<b>08 1928CST 1939CST</b>	<b>9</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>Tornado (F0)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
<b>Pittsburg County</b> 4 SW Indianola to 4 W Crowder	08	1943CST 1955CST	8	200	0	0			Tornado (F0)
<b>Pittsburg County</b> 4 WSW Crowder to 2 W Crowder	08	1955CST 1958CST	2	100	0	0			Tornado (F0)
<b>Pittsburg County</b> 3 NW Blocker to 2 NE Featherston	08	2010CST 2028CST	12	200	0	0			Tornado (F0)
<b>Pittsburg County</b> 1 NE Blocker to 1.5 NE Blocker	08	2031CST 2032CST	0.5	30	0	0			Tornado (F0)
<b>Pittsburg County</b> Northeast Portion	08	2035CST 2130CST			0	0			Flash Flood
SH 71 was closed 2 miles north of Quinton due to considerable water over the roadway.									
<b>Pittsburg County</b> 2 SE Quinton to 3 SE Quinton	08	2040CST 2041CST	1	50	0	0	30K		Tornado (F1)
This tornado moved from Pittsburg into Haskell County at 941 PM CDT. Two houses were heavily damaged south of Quinton.									
<b>Pittsburg County</b> 1 SW Quinton	08	2040CST			0	0			Thunderstorm Wind (G88)
<b>Haskell County</b> 4 W Lewisville to 3 WSW Kinta	08	2041CST 2047CST	4	100	0	0			Tornado (F0)
This tornado originally developed in Pittsburg County and then moved into Haskell County at 941 PM CDT.									
<b>Haskell County</b> Countywide	08	2045CST			0	0			Flash Flood
Longtown Creek overflowed its banks 5 miles south of Enterprise. The NWS cooperative observer 1_SE McCurtain reported 2.0 0 inches of rain from the intense isolated thunderstorm that moved eastward across Haskell County.									
<b>Pittsburg County</b> Russellville	08	2051CST	0.5	30	0	0			Tornado (F0)
<b>Haskell County</b> 2 S Kinta	08	2055CST	0.5	50	0	0	60K		Tornado (F2)
An F2 tornado destroyed one single family dwelling, while another single family dwelling received major damage.									
<b>Creek County</b> 4 W Depew	08	2125CST			0	0			Hail (0.75)
Location: along old Route 66									
<b>Okfuskee County</b> 8 N Castle	08	2137CST			0	0			Thunderstorm Wind (G61)
<b>Le Flore County</b> 3 W Panama	08	2146CST			0	0			Hail (1.00)
<b>Le Flore County</b> Calhoun	08	2150CST			0	0			Funnel Cloud
<b>Okmulgee County</b> 3 W Beggs	08	2153CST			0	0			Hail (0.75)
<b>Le Flore County</b> Spiro	08	2155CST			0	0			Hail (0.75)
<b>Le Flore County</b> Panama	08	2156CST			0	0			Thunderstorm Wind (G52)
<b>Le Flore County</b> 2 W Shady Pt	08	2156CST	0.5	30	0	0			Tornado (F0)
<b>Okmulgee County</b> Beggs	08	2157CST 2158CST			0	0			Hail (0.75)
<b>Okmulgee County</b> Beggs	08	2157CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
<b>Le Flore County</b> Shady Pt	08	2208CST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Le Flore County</b> Poteau	08	2209CST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Le Flore County</b> 2 N Cameron	08	2213CST			0	0			<b>Hail (1.00)</b>
<b>Muskogee County</b> Taft	08	2240CST			0	0			<b>Hail (0.75)</b>
	Location: Taft Lake								
<b>Muskogee County</b> Muskogee	08	2246CST			0	0			<b>Hail (0.88)</b>
<b>Muskogee County</b> 2 W Muskogee	08	2300CST			0	0			<b>Hail (0.75)</b>
<b>Muskogee County</b> Muskogee	08	2303CST			0	0	2K		<b>Thunderstorm Wind</b>
	A wind-driven tree limb penetrated the roof of a residence east of Country Club Road on Old Shawnee Avenue. A large tree was also blown over in Civitan Park.								
<b>Muskogee County</b> Braggs	08	2310CST			0	0			<b>Hail (0.88)</b>
<b>Muskogee County</b> Ft Gibson	08	2315CST			0	0	25K		<b>Thunderstorm Wind</b>
	A church under construction collapsed, and large trees were blown down. Power lines were also blown down, and a pontoon boat was flipped.								
<b>Muskogee County</b> Central Portion	08 09	2335CST 0030CST			0	0			<b>Flash Flood</b>
	US Hwy 69 was covered by one foot of water in Muskogee. The NWS cooperative observer in Muskogee reported 2.57 inches of rain.								
<b>Cherokee County</b> 8 SW Pettit	08	2345CST			0	0			<b>Hail (0.88)</b>
	Location: Tenkiller Harbor								
<b>Muskogee County</b> Braggs	08	2350CST			0	0	1K		<b>Thunderstorm Wind</b>
	Numerous trees blown down around Braggs								
<b>Adair County</b> Bunch	09	0000CST			0	0	0.10K		<b>Thunderstorm Wind</b>
	Several large tree limbs were blown down								
<b>Adair County</b> South Portion	09	0000CST 0100CST			0	0			<b>Flash Flood</b>
	About three inches of rain washed gravel off of county roads near Bunch. The NWS cooperative observer 2 miles north of Lyons measured 2.82 inches of rain.								
<b>Cherokee County</b> South Portion	09	0015CST			0	0			<b>Flash Flood</b>
	County roads in the Woodall community (10 miles southwest of Tahlequah) were flooded. The Oklahoma mesonet site just SSW of Cookson measured 2.76 inches of rain.								
<b>Cherokee County</b> 10 SW Tahlequah	09	0015CST			0	0	20K		<b>Thunderstorm Wind</b>
	Thunderstorm winds blew 20-30 big trees down, destroyed three barns, and unroofed a shed near the Woodall community.								
<b>Sequoyah County</b> Marble City	09	0030CST			0	0	1K		<b>Thunderstorm Wind</b>
	Numerous trees were blown down								
<b>Sequoyah County</b> Roland	09	0110CST			0	0			<b>Hail (0.75)</b>

Summary of events for the evening of June 8 and the early morning of June 9 1998:

A classic southern plains severe weather event shaped up on the afternoon and evening of June 8 as a number of isolated severe

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

thunderstorms developed over central Oklahoma to the east of a dryline.

The first severe thunderstorm to affect eastern Oklahoma scraped the northwestern part of Osage County, causing a report of a severe thunderstorm gust. This storm quickly died as it entered Kansas.

A second more serious severe thunderstorm formed west of Oklahoma City and tracked all the way to the Arkansas state line south of Fort Smith, traversing Pittsburg, Haskell, and Le Flore Counties. This storm travelled east along an instability axis and a warm front. From a radar perspective, this storm was impressive in that it kept a classic, well-defined hook on its entire journey across southeast Oklahoma. From a human perspective, this storm was impressive in that it produced ten tornadoes in southeast Oklahoma, hail as large as golfballs, damaging thunderstorm winds, and torrential flooding rains.

A third cluster of severe thunderstorms developed over Creek County and moved east across Okmulgee, Muskogee, Cherokee, and Adair Counties before weakening as it entered Arkansas. These storms slowed their movement across Muskogee County and regeneration along the southwest flank of the storms caused torrential rainfalls that dumped nearly three inches of rain in northern Muskogee, southern Cherokee, southern Adair, and northern Sequoyah Counties. In addition to flooding rains, these storms produced hail as large as nickels and damaging thunderstorm winds.

### **Pushmataha County**

#### **Antlers**

<b>09</b>	<b>2015CST</b>	<b>0</b>	<b>0</b>	<b>3K</b>	<b>Thunderstorm Wind</b>
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Several trees were blown down in Antlers. Trees and power lines were blown down throughout Pushmataha County.

### **OKZ066-068>072-074**

#### **Okmulgee - Cherokee - Adair - Muskogee - McIntosh - Sequoyah - Haskell**

<b>09</b>	<b>2030CST</b>	<b>0</b>	<b>0</b>	<b>10.5K</b>	<b>High Wind (G65)</b>
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Strong southerly winds developed around 930 PM CDT along the I-40 corridor on the evening of June 9 as rapidly sinking air to the north of a thunderstorm complex over southeast Oklahoma hit the ground and spread out. However, these winds were not in direct association with the thunderstorms. The Henryetta and Checotah areas suffered from the strongest winds as several unofficial reports of winds as high as 75 miles an hour were received from the general public. The McIntosh County emergency management director reported many trees and power lines down in and around Checotah. There were other reports of 50 mph gusts further east along the I-40 corridor, and the Webbers Falls mesonet site reported a gust to 45 miles an hour. Doppler radar showed this narrow stripe of winds as it moved east along and just north of I-40 through 1100 PM CDT. The stripe of strong winds exited Oklahoma east of Stilwell.

### **Choctaw County**

#### **Hugo**

<b>09</b>	<b>2035CST</b>	<b>0</b>	<b>0</b>	<b>6K</b>	<b>Thunderstorm Wind</b>
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Numerous trees were blown down around Hugo and across much of Choctaw County. A newspaper clipping pictured a very large oak tree that had fallen onto a storage building in a backyard along West Poplar Street. In addition, the metal roofing was blown off of a car wash in Hugo.

### **Le Flore County**

#### **Heavener**

<b>09</b>	<b>2151CST</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G52)</b>
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### **Muskogee County**

#### **Muskogee**

<b>10</b>	<b>0130CST</b>	<b>0</b>	<b>0</b>	<b>15K</b>	<b>Lightning</b>
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A lightning strike during the early morning of June 10 at the Frontier Terminal on the Arkansas River caused a pump to activate, spilling an estimated 11000 gallons of asphalt oil and diesel fuel. One thousand gallons of the diesel fuel entered the river, affecting 5 miles of the river before it could be contained. (Time estimated)

Summary of events for June 9 PM-June 10 AM 1998:

A line of severe thunderstorms moved quickly across southeast Oklahoma on the evening of June 9 between 900 and 1100 PM CDT. These thunderstorms demonstrated bow echo signatures on radar and primarily caused widespread strong thunderstorm winds as they moved across Choctaw, Pushmataha, and southern Le Flore Counties. To the north of this large complex of storms, rapidly sinking air from the anvil tops of the thunderstorms caused locally strong winds to develop along the I-40 corridor from Henryetta to the Arkansas state line near Stilwell.

Later during the early morning of June 10, there was a repeat of the earlier events between 130 and 400 AM CDT with a line of thunderstorms containing widespread wind gusts of 45 to 50 miles an hour moved across Pittsburg, Latimer, and Le Flore Counties in southeast Oklahoma. As with the thunderstorms on the evening of June 9, high winds developed well north of the thunderstorm complex to the north of the I-40 corridor.

### **OKZ065>072-074**

#### **Okfuskee - Okmulgee - Wagoner - Cherokee - Adair - Muskogee - McIntosh - Sequoyah - Haskell**

<b>10</b>	<b>0001CST</b>	<b>0</b>	<b>0</b>	<b>6K</b>	<b>High Wind (G65)</b>
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Summary of non-convective high wind event during early AM of June 10 1998:



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

Localized areas of high wind developed again during the early morning of June 10 due to rapidly sinking air to the north of a thunderstorm complex moving across southeast Oklahoma. The winds first developed around Okemah and moved east to the Arkansas state line generally north of I-40 and south of US Hwy 412.

Along the way, there were widespread wind gusts in excess of 45-50 mph with local gusts to 75 mph. Spotters reported wind gusts to 75 mph just northeast of Checotah in McIntosh County at 151 AM CDT. Spotters near Eufaula reported a gust to 60 mph at 208 AM CDT. The Oklahoma mesonet site at 5 SSE Haskell measured a gust to 61 mph at 210 AM CDT. The Channel 2 weather net site at Henryetta measured a gust to 52 mph around 200 AM CDT, and their site in Muskogee measured a gust to 57 mph between 215 and 230 AM CDT. The winds knocked down numerous trees and power lines in the affected counties. In Muskogee, about 1/4 of the city was without power, and there were at least two electrical fires caused by downed power lines. Winds to 50 mph were reported in Gore at 317 AM CDT.

<b>Okfuskee County</b> 10 W Okemah	10	1505CST			0	0			Thunderstorm Wind (G52)
<b>Tulsa County</b> Tulsa	10	1606CST			0	0			Thunderstorm Wind (G53)
Spotters reported a measured wind gust to 61 mph at 61st and Peoria.									
<b>Tulsa County</b> 5 S Bixby	10	1609CST			0	0			Thunderstorm Wind (G61)
<b>Tulsa County</b> Tulsa	10	1610CST			0	0			Thunderstorm Wind (G52)
Spotters reported 60 mph wind gusts and tree limbs blown down near 46th Street S. and Mingo.									
<b>Tulsa County</b> Tulsa	10	1615CST			0	0			Thunderstorm Wind (G53)
Measured by Channel 2 weather net site at 67th and Garnett									
<b>Tulsa County</b> Tulsa	10	1615CST			0	0			Thunderstorm Wind (G50)
Measured by Channel 2 weather net on top of Hillcrest Medical Center (10 stories up) at 11th and Utica.									
<b>Tulsa County</b> (Tul)Tulsa Intl Arpt	10	1616CST			0	0			Tstm Wind/Hail
No hail was reported, but there was a 49 kt (56 mph) wind gust at the Tulsa International Airport with the passing thunderstorms.									
<b>Tulsa County</b> Broken Arrow	10	1619CST			0	0	2K		Thunderstorm Wind
Power lines down near 71st and 145th E Ave									
<b>Tulsa County</b> Tulsa	10	1621CST			0	0	1K		Thunderstorm Wind
Power lines blown down near 41st Street S. and Hudson									
<b>Tulsa County</b> Owasso	10	1625CST			0	0	0.50K		Thunderstorm Wind
Shingles blown off a roof									
<b>Rogers County</b> 4 W Inola	10	1630CST			0	0			Thunderstorm Wind (G52)
<b>Osage County</b> Hominy	10	1634CST			0	0			Thunderstorm Wind (G52)
<b>Wagoner County</b> Coweta	10	1640CST			0	0	1K		Thunderstorm Wind
A tree was blown down onto a power line.									
<b>Mayes County</b> 5 NW Pryor	10	1657CST			0	0			Thunderstorm Wind (G52)
<b>Le Flore County</b> Whitesboro	10	1850CST			0	0			Thunderstorm Wind (G52)
<b>Le Flore County</b> 7 S Heavener	10	1910CST			0	0			Thunderstorm Wind (G61)
<b>Le Flore County</b> Panama	10	1925CST			0	0			Thunderstorm Wind (G52)
<b>Sequoyah County</b> 3 E Roland	10	2000CST			0	0	0.10K		Thunderstorm Wind
A tree was blown down by thunderstorm winds.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

Summary of events for June 10 1998:

Severe thunderstorms that originally formed over north Texas weakened as they moved from central into northeast Oklahoma on the afternoon of June 10. Despite the fact that they produced no hail and little rain in northeast Oklahoma, these remnant thunderstorms produced copious amounts of wind along their wide track from Okemah through Tulsa and points northeast. As these storms moved through the Tulsa metro area, they knocked out power to 15,000 PSO customers and caused locally reduced visibilities due to blowing dust.

Later in the evening, a line of thunderstorms moved northeastward across Le Flore and Sequoyah Counties. These storms were similar to the earlier ones in that they produced no hail and little rain but copious amounts of wind. There were numerous reports (in addition to those listed) throughout Le Flore County of winds in excess of 50 mph.

<b>Osage County</b> Grainola	13	1910CST			0	0			Hail (0.75)
<b>Pawnee County</b> 2 W Pawnee	13	1950CST			0	0			Hail (1.25)
<b>Pawnee County</b> Pawnee	13	2000CST			0	0			Hail (1.25)
<b>Pawnee County</b> 10 W Cleveland	13	2013CST			0	0			Funnel Cloud
Funnel cloud reported halfway to ground									
<b>Creek County</b> 2 W Bristow	13	2051CST			0	0			Hail (1.25)
Location: on I-44 just west of Bristow									
<b>Creek County</b> 2 W Bristow	13	2051CST			0	0			Thunderstorm Wind (G52)
<b>Rogers County</b> Oologah	13	2100CST			0	0			Hail (0.75)
<b>Rogers County</b> Oologah	13	2154CST			0	0			Hail (0.75)

Summary of events for June 13 1998:

Severe thunderstorms formed along a dryline over central Oklahoma on the afternoon of June 13. A couple of these storms remained severe as they entered eastern Oklahoma during the evening. One storm crossed extreme northwest Osage County, producing a report of dime-sized hail. Another storm, with strong rotation on radar, travelled from near Stillwater to Pawnee, producing half-dollar sized hail and a funnel cloud. This storm reintensified again over northern Rogers County around 1100 PM CDT, producing a report of dime-sized hail. Finally, a severe storm moved across Creek County, producing half-dollar sized hail near Bristow and weakening as it approached Tulsa County.

<b>Nowata County</b> 2 E Childers	15	1600CST			0	0	2K		Thunderstorm Wind
Strong winds blew a tree onto the roof of the cook shack at the Happy Hills Camp. Several other trees in the area were damaged.									
<b>Sequoyah County</b> Marble City	18	0937CST			0	0			Hail (0.75)
Summary: an elevated thunderstorm rooted above a cap of warm air in the mid-levels of the atmosphere, briefly strengthened to severe levels while moving across Sequoyah County on the morning of June 18, producing dime-sized hail.									
<b>Creek County</b> 4 S Mannford	18	1545CST			0	0			Hail (1.75)
<b>Nowata County</b> Nowata	18	1600CST			0	0			Hail (0.88)
<b>Creek County</b> 1 N Kellyville	18	1612CST			0	0			Hail (2.00)
<b>Creek County</b> 3 N Kellyville	18	1617CST			0	0			Hail (2.75)
Location: on the Turner Turnpike (I-44) north of Kellyville									
<b>Creek County</b> Kellyville	18	1619CST			0	0			Hail (4.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
Creek County 3 NW Sapulpa	18	1619CST			0	0			Hail (1.75)
Tulsa County 2 SW Glenpool	18	1633CST			0	0			Hail (2.50)
Creek County Sapulpa	18	1636CST			0	0			Thunderstorm Wind (G70)
Okmulgee County Dewar	18	1640CST			0	0			Thunderstorm Wind (G57)
Tulsa County 1 SW Glenpool	18	1641CST			0	0			Hail (2.75)
Creek County Sapulpa	18	1645CST 1745CST			0	0			Flash Flood
There was widespread street flooding and water over roads in Sapulpa.									
Tulsa County Glenpool	18	1650CST			0	0			Hail (2.00)
Tulsa County Tulsa	18	1658CST			0	0	3K		Thunderstorm Wind
Planks blown out of a wooden fence near 91st Street S. and Harvard. Trees and power lines blown down across much of the southern part of the city of Tulsa, generally south of 61st Street.									
Tulsa County Tulsa	18	1658CST			0	0			Thunderstorm Wind (G59)
A 68 mph gust was measured near 81st Street S. and Lewis in south Tulsa.									
Tulsa County 3 W Bixby	18	1659CST			0	0			Thunderstorm Wind (G61)
Tulsa County Broken Arrow	18	1700CST 1800CST			0	0			Flash Flood
Street flooding was reported in Broken Arrow.									
Tulsa County Jenks	18	1700CST			0	0	0.30K		Thunderstorm Wind
Several large trees were blown down in Jenks.									
Tulsa County Tulsa	18	1700CST			0	0			Thunderstorm Wind (G61)
Location: near 71st Street S. and Yale Ave.									
Creek County 3 N Sapulpa	18	1703CST			0	0			Hail (0.75)
Tulsa County 6 S Broken Arrow	18	1720CST			0	0			Thunderstorm Wind (G52)
Okfuskee County Welty	18	1721CST			0	0			Hail (0.88)
Muskogee County 3 WNW Taft	18	1730CST			0	0			Hail (1.75)
Muskogee County 4 N Haskell	18	1731CST			0	0			Hail (1.75)
Muskogee County 4 N Haskell	18	1732CST			0	0	0.50K		Thunderstorm Wind (G70)
Tree damage and 80 mph gusts reported									
Okfuskee County 1 SE Welty	18	1736CST			0	0			Hail (1.75)
Wagoner County 5 W Porter	18	1740CST 1741CST	0.5	50	0	0	10K		Tornado (F0)
There was a brief tornado touchdown 5 miles west of Porter that blew a vehicle off of SH 51-A.									
Muskogee County 1 E Taft	18	1744CST			0	0			Hail (2.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
<b>Okfuskee County</b> 5 W Okfuskee	18	1800CST 1900CST			0	0			Flash Flood
			Water overflowed a county road to the west of Okfuskee.						
<b>Muskogee County</b> Muskogee	18	1815CST			0	0			Hail (0.88)
			Location: in the northern part of Muskogee						
<b>Okfuskee County</b> 1 E Mason	18	1815CST			0	0			Hail (1.00)
<b>Muskogee County</b> Muskogee	18	1820CST			0	0	0.10K		Thunderstorm Wind
			Ten-inch diameter tree limbs were blown down.						
<b>Okmulgee County</b> Schulter	18	1827CST			0	0			Hail (1.00)
<b>Okmulgee County</b> Schulter	18	1827CST			0	0			Thunderstorm Wind (G57)
<b>Okmulgee County</b> Henryetta	18	1836CST			0	0			Hail (1.75)
<b>Okmulgee County</b> Henryetta	18	1836CST			0	0	5K		Thunderstorm Wind
			There was wind damage to a restaurant and motel in Henryetta.						
<b>Okmulgee County</b> Okmulgee	18	1836CST			0	0			Hail (0.75)
<b>Okmulgee County</b> Dewar	18	1840CST			0	0			Hail (2.75)
<b>Okmulgee County</b> 2 N Henryetta	18	1845CST			0	0			Hail (1.00)
<b>Pittsburg County</b> 2 SW Savanna	18	1849CST			0	0			Hail (0.75)
<b>Muskogee County</b> Muskogee	18	1855CST			0	0			Hail (0.75)
<b>Muskogee County</b> Muskogee	18	1900CST			0	0	2K		Thunderstorm Wind
			A barn shop was blown down on the south side of Muskogee.						
<b>Okfuskee County</b> Castle	18	1900CST			0	0			Hail (0.75)
<b>Ottawa County</b> Quapaw	18	1910CST			0	0	0.10K		Thunderstorm Wind
			Several large tree limbs were blown down.						
<b>Mcintosh County</b> 5 SW Hitchita	18	1914CST			0	0			Hail (1.00)
<b>Mcintosh County</b> 5 N Eufaula	18	1927CST			0	0			Hail (1.00)
<b>Pittsburg County</b> 8 NE Canadian	18	1940CST			0	0			Hail (2.00)
<b>Haskell County</b> 2 NW Enterprise	18	2000CST			0	0			Hail (2.50)
<b>Latimer County</b> 4 WSW Higgins	18	2001CST			0	0			Hail (1.75)
			Reported on the Pittsburg/Latimer County line						
<b>Pittsburg County</b> 6 SW Haileyville	18	2033CST			0	0			Hail (1.75)
<b>Sequoyah County</b> Moffett	18	2045CST			0	0	0.30K		Thunderstorm Wind
			Large trees were blown down in Moffett						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
Haskell County Stigler	18	2055CST			0	0			Hail (1.75)
Haskell County Stigler	18	2055CST			0	0	0.10K		Thunderstorm Wind (G52)
Large tree limbs were knocked down.									
Pushmataha County 5 N Clayton	18	2055CST			0	0			Hail (1.00)
Latimer County 5 S Wilburton	18	2100CST 2300CST			0	0			Flash Flood
Water covered a low-water crossing over North Gaines Creek.									
Latimer County Yanush	18	2100CST			0	0			Hail (1.75)
Le Flore County Talihina	18	2100CST			0	0			Thunderstorm Wind (G52)
Latimer County 4 NE Yanush	18	2105CST			0	0			Hail (1.00)
Le Flore County 1 W Whitesboro	18	2130CST			0	0	0.50K		Thunderstorm Wind
A tree limb was knocked down across a road, and trees were knocked down just west of Whitesboro.									
Latimer County 1 S Higgins	18	2217CST			0	0			Hail (1.75)
Latimer County 4 NE Yanush	18	2225CST			0	0			Hail (1.25)
Mcintosh County 3 W Eufaula	18	2235CST			0	0			Hail (0.88)
Le Flore County Talihina	18	2245CST			0	0	2.5K		Thunderstorm Wind
The roof was blown off of a building, and trees were blown down in Talihina.									
Mcintosh County Eufaula	18	2249CST			0	0			Hail (1.25)
Le Flore County 4 SE Talihina	18	2255CST			0	0			Thunderstorm Wind (G50)
Measured at Oklahoma mesonet site									
Le Flore County Talihina	18	2255CST			0	0	1.5K		Thunderstorm Wind
A roof was blown off of a garage, and several trees were blown down									
Le Flore County 4 SE Talihina	18	2300CST			0	0			Thunderstorm Wind (G53)
Measured at Oklahoma mesonet site									
Haskell County 6 W Hoyt	18	2335CST			0	0			Hail (0.88)
Mcintosh County 8 E Eufaula	18	2335CST			0	0			Hail (1.00)
Le Flore County Hodgen	19	0015CST			0	0	0.30K		Thunderstorm Wind
Trees were blown down in Hodgen.									
Le Flore County Wister	19	0136CST			0	0			Thunderstorm Wind (G75)
Le Flore County Poteau	19	0145CST			0	0	10K		Thunderstorm Wind
A large tree was blown onto a residence on Mockingbird Lane. One of the larger branches tore through a bedroom wall, narrowly missing the bed. Termites or ants had apparently been inside the tree for some time and the large tree was rotted from the inside.									

Summary of events for June 18-19 1998:

An approaching cold front and a vigorous upper level low moving into the southern plains helped ignite an outbreak of severe

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

thunderstorms on the late afternoon of June 18, lasting into the early morning of June 19. The first storms of the day formed along the I-44 corridor near the front with the severe weather emphasis slowly shifting southward during the evening and early morning. This outbreak of severe weather produced the full gamut of severe weather including very large hail to the size of baseballs, damaging thunderstorm winds, and a brief tornado touchdown. In addition, cell mergers were fairly common with this event, causing localized areas of excessive rainfall and flash flooding.

### OKZ060

<b>Tulsa</b>							
<b>20</b>	<b>0000CST</b>			<b>0</b>	<b>0</b>		<b>Record Warmth</b>
	<b>2359CST</b>						

The low temperature at the Tulsa International Airport on June 20 was 82 degrees Fahrenheit, occurring at 506 AM CDT. This breaks the previous record high minimum temperature of 77 degrees set in 1964. In addition, this was the warmest low temperature on record for the month of June as long as records have been kept in Tulsa.

### OKZ059>060

<b>Pawnee - Tulsa</b>							
<b>20</b>	<b>1950CST</b>			<b>0</b>	<b>0</b>	<b>1K</b>	<b>High Wind</b>
	<b>2230CST</b>						

Summary of high winds on June 20 1998:

Localized areas of high wind known as heat bursts took place in parts of northeast Oklahoma on the evening of June 20. These heat bursts occurred randomly in the affected counties, affecting small areas with winds in excess of 60 mph and a sudden 10-degree temperature jump to as high as 100 degrees Fahrenheit.

At 855 PM CDT, a heat burst took place in Jennings (Pawnee County), blowing down several large tree limbs. At 1035 PM CDT, an off-duty NWS employee reported a heat burst near Bixby (Tulsa County) with a measured wind gust to 61 mph. In addition, power lines were blown down near 91st Street S. and Garnett in south Tulsa.

### Osage County

<b>Fairfax</b>							
<b>21</b>	<b>0015CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>	<b>Thunderstorm Wind</b>

Several trees were blown down, and 12 power poles were blown down.

### Osage County

<b>2 S Wynona</b>							
<b>21</b>	<b>0045CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>

58 mph gust measured at Oklahoma mesonet site.

### Osage County

<b>2 S Wynona</b>							
<b>21</b>	<b>0050CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G55)</b>

63 mph gust measured at Oklahoma mesonet site.

### Osage County

<b>Hominy</b>							
<b>21</b>	<b>0053CST</b>			<b>0</b>	<b>0</b>	<b>80K</b>	<b>Thunderstorm Wind (G70)</b>

Eighty mph winds reported by spotters caused extensive damage in Hominy. Specific reports follow:

- On the north side of town: a barn was smashed, the doors were torn off of an airport hangar, hay bails were thrown across the highway, the roof of Hominy High School was heavily damaged and the air conditioner was blown off of the roof, and play equipment was blown about 1/4 mile away.
- On the east side of town: three houses were unroofed and a swing set was thrown into a fence.
- On the south end of town: windows were blown in, several trailers were unsided, and power poles were blown down.
- On Main Street: windows were blown in, signs were blown down, and awnings were damaged.
- All over town, structures sustained serious roof damage, there was heavy tree and power line damage, and car windows were shattered. Fifty percent of the town's residents lost electricity.

### Pawnee County

<b>Cleveland</b>							
<b>21</b>	<b>0055CST</b>			<b>0</b>	<b>0</b>	<b>1K</b>	<b>Thunderstorm Wind</b>

Numerous large trees were blown down in Cleveland. These trees blocked several roads in town, including East Pawnee, East Miami, and East Otoe. The Cleveland American weekly newspaper pictured a large tree blown over in Feyodi Park.

### Pawnee County Jennings

<b>21</b>	<b>0055CST</b>			<b>0</b>	<b>0</b>	<b>0.10K</b>	<b>Thunderstorm Wind (G65)</b>
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75 mph wind gusts blew down several tree limbs.

### Pawnee County Jennings

<b>21</b>	<b>0057CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G83)</b>
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### Osage County

<b>Hominy</b>							
<b>21</b>	<b>0100CST</b>			<b>0</b>	<b>0</b>		<b>Flash Flood</b>
	<b>0200CST</b>						

Water was knee-deep in some of Hominy's streets.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Eastern</b>									
<b>Osage County</b> 1 N Hominy	21	0100CST			0	0			Hail (1.75)
<b>Osage County</b> Hominy	21	0100CST			0	0			Hail (0.88)
<b>Pawnee County</b> Pawnee	21	0100CST			0	0	2K		Thunderstorm Wind
									A roof was peeled from a building at the corner of 7th and Harrison and blown into the Phillips 66 service station drive across the street. Several trees were damaged, causing scattered power outages.
<b>Tulsa County</b> 8 W Sand Spgs	21	0115CST			0	0	8K		Thunderstorm Wind
									Strong winds caused considerable damage to the floating gas docks at the Pier 51 marina on Lake Keystone. The restaurant on the second floor of the gas dock had to be closed for repairs. Three or four trees were blown over in the Keystone State Park.
<b>Creek County</b> Oilton	21	0120CST			0	0	0.10K		Thunderstorm Wind
									4-inch diameter tree limbs were blown down.
<b>Creek County</b> Mannford	21	0125CST			0	0	2K		Thunderstorm Wind
									Several business signs in Mannford were blown out. The north dugout of the high school basefield had its top blown across the street. A tree at Greenwood and GreenBriar was broken off.
<b>Creek County</b> Kellyville	21	0130CST			0	0	9K		Thunderstorm Wind
									Power lines were blown down onto a house.
<b>Osage County</b> Tulsa	21	0130CST			0	0	0.50K		Thunderstorm Wind
									Large trees were blown down along Gilcrease Road.
<b>Pawnee County</b> Terlton	21	0130CST			0	0	0.50K		Thunderstorm Wind
									Large trees were blown down.
<b>Tulsa County</b> Sand Spgs	21	0132CST			0	0	3K		Thunderstorm Wind (G61)
									Spotters estimated winds in Sand Springs of 70 mph. These winds blew down power lines in and north of Sand Springs, especially in the McKinley Hill area.
<b>Tulsa County</b> Tulsa	21	0132CST 0150CST			0	0	90K		Thunderstorm Wind (G83)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

Winds measured as high as 96 mph caused extensive damage in downtown Tulsa and throughout a large part of the city. Specific reports follow:

- At 232 AM CDT, the NWS received reports of transformers blowing up in north Tulsa. Eventually, 70,000 PSO customers lost electrical service. Numerous power lines, including 27 distribution poles and 10 transmission poles as tall as 75 feet, were blown down. Nine of these were along Sheridan Road between Admiral and 11th Street S. PSO reported damage located in an area from Keystone Dam east to Broken Arrow and from Tulsa International Airport to 31st Street S. The worst damage was near 11th and Sheridan.
- At 240 AM CDT, spotters reported a 65 mph gust in east Tulsa.
- At 240 AM CDT, spotters measured a 96 mph gust near US Hwy 75 and Apache.
- At 242 AM CDT, a KOTV (Channel 6) meteorologist reported 85 to 90 mph winds at their studios in downtown Tulsa. Much of downtown Tulsa lost electrical service.
- Around 245 AM CDT, winds tore the roof off of Houston Elementary School on North Cincinnati. New Hope Baptist Church next door lost part of its roof as well.
- Large trees and traffic signals were blown down in the downtown area, blocking several streets. A newspaper clipping had a picture of a traffic signal laying on the ground at Second Street and Cincinnati.
- The roofs of at least two units at the Osage Hills Apartments (423 W. Haskell) were blown off. Downed tree branches nearby broke out several windows on a car.
- The roof was blown off of the Town Center Building (507 E. Archer) in downtown Tulsa.
- Two large plate glass windows were blown out of the 400 S. Boston Building in downtown Tulsa. The glass was at least one-half inch thick.
- A newspaper clipping showed a picture of a very large tree that was blown onto a Nissan Maxima near 37th and Troost, totalling the car.
- Gasoline pumps at a gas station (2718 W. Edison) were torn from their bases, and the station's large metal canopy was blown across the street.
- There was one indirect injury as a man was trimming a tree that had fallen on power lines. A limb fell and contacted a live power line, shocking the man. Also, the Tulsa Regional Medical Center admitted five patients for reasons related to the power outage.

<b>Tulsa County</b> 1 W Sperry	<b>21</b>	<b>0145CST</b>		<b>0</b>	<b>0</b>	<b>1K</b>	<b>Thunderstorm Wind</b>
A shed was blown down near 110th Street N. and 34th West Ave.							
<b>Rogers County</b> Catoosa	<b>21</b>	<b>0150CST</b>		<b>0</b>	<b>0</b>	<b>0.50K</b>	<b>Thunderstorm Wind</b>
Several trees were blown down.							
<b>Tulsa County</b> (Tul)Tulsa Intl Arpt	<b>21</b>	<b>0153CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G53)</b>
A 61 mph gust was measured by ASOS at the Tulsa International Airport (TUL).							
<b>Tulsa County</b> Broken Arrow	<b>21</b>	<b>0205CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G70)</b>
Location: near 91st Street and 193rd East Ave.							
<b>Wagoner County</b> Coweta	<b>21</b>	<b>0216CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G61)</b>
<b>Wagoner County</b> Wagoner	<b>21</b>	<b>0230CST</b>		<b>0</b>	<b>0</b>	<b>0.50K</b>	<b>Thunderstorm Wind</b>
Several trees were blown down.							
<b>Muskogee County</b> 2 W Ft Gibson	<b>21</b>	<b>0240CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G83)</b>
Location: on the Muskogee Turnpike							
<b>Wagoner County</b> Okay	<b>21</b>	<b>0240CST</b>		<b>0</b>	<b>0</b>	<b>0.50K</b>	<b>Thunderstorm Wind</b>
Several trees were blown down, one of which blocked a highway.							
<b>Cherokee County</b> Tahlequah	<b>21</b>	<b>0315CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G57)</b>
<b>Cherokee County</b> 1 NE Tahlequah	<b>21</b>	<b>0320CST</b>		<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G59)</b>

Summary of events for June 21 1998:

A nearly stationary broken line of thunderstorms developed from western Osage County southeast into the city of Tulsa along a weak surface boundary around midnight CDT on the early morning of June 21. Around 100 AM CDT, a thunderstorm along the



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Eastern

line over central Osage County began to strengthen and move southeast. This thunderstorm became a prolific wind producer as it moved southeast through southeast Osage and central Tulsa Counties. As it moved across the city of Tulsa, the worst of the storm moved from near Sand Springs through the downtown area and east to just south of the international airport. The storm produced several wind reports as high as 96 mph and extensive widespread damage. Once the storm moved east of Tulsa, it began to gust out, and it weakened below severe limits by the time it reached the Arkansas state line.

### OKZ060

<b>Tulsa</b>	<b>22</b>	<b>1200CST</b>			<b>0</b>	<b>6</b>			
		<b>1900CST</b>							<b>Excessive Heat</b>

In the wake of the storm in Tulsa on the early morning of June 21, about 25,000 PSO customers in Tulsa remained without electricity on Monday evening, June 22. The loss of air conditioning left many people vulnerable to afternoon temperatures of 96 degrees and heat indices in excess of 105 degrees. Local hospitals reported about half of a dozen cases of heat-related illnesses on June 22.

### OKZ060

<b>Tulsa</b>	<b>26</b>	<b>0000CST</b>			<b>0</b>	<b>0</b>			
		<b>2359CST</b>							<b>Record Warmth</b>

The low temperature at the Tulsa International Airport on June 26 was 80 degrees Fahrenheit, recorded at 635 AM CDT. This was enough to tie the record high minimum temperature for the date previously set in 1978.

### OKZ060

<b>Tulsa</b>	<b>26</b>	<b>0000CST</b>			<b>1</b>	<b>0</b>			
		<b>2359CST</b>							<b>Excessive Heat</b>

A 40-year old man in Tulsa collapsed from heat stroke on June 26 and later died on July 13. After a morning low in Tulsa of 80 degrees Fahrenheit, the high temperature reached 96 degrees with a heat index was around 105 degrees. Similar conditions prevailed across much of eastern Oklahoma from June 22-29 with lows running in the upper 70s and highs from 96-98. Heat indices usually peaked out each day from 105 to 110.

M400T

### Delaware County

5 NE Grove

<b>30</b>	<b>0345CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>			
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Winds tore loose a floating cafe on Grand Lake. One boat was missing after the storm.

### Adair County

1 N Watts

<b>30</b>	<b>0620CST</b>			<b>0</b>	<b>0</b>	<b>0.30K</b>			
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Several trees were blown down.

### Craig County

1 E Vinita

<b>30</b>	<b>0930CST</b>			<b>0</b>	<b>0</b>				
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### Craig County

1 E Vinita

<b>30</b>	<b>0930CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>			
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Trees and power lines were blown down.

### Rogers County

South Portion

<b>30</b>	<b>1100CST</b>			<b>0</b>	<b>0</b>				
	<b>1300CST</b>								<b>Flash Flood</b>

### Tulsa County

Tulsa

<b>30</b>	<b>1115CST</b>			<b>0</b>	<b>0</b>	<b>5K</b>			
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Power lines were blown down near 11th Street and S. Sheridan.

Summary of events for June 30 1998:

A complex of thunderstorms associated with a slowly southward-moving cold front moved out of southeast Kansas and across far northern Oklahoma on the morning of June 30. Several thunderstorms produced severe wind reports and reports of hail as large as nickels.

## OKLAHOMA, Extreme Southeast

### Mccurtain County

Valliant

<b>04</b>	<b>2025CST</b>			<b>0</b>	<b>0</b>				
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### Mccurtain County

10 N Valliant

<b>04</b>	<b>2025CST</b>			<b>0</b>	<b>0</b>				
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Trees down at Pine Creek Lake.

### Mccurtain County

Broken Bow

<b>04</b>	<b>2045CST</b>			<b>0</b>	<b>0</b>				
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### Mccurtain County

Idabel

<b>04</b>	<b>2045CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>			
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Mobile home damaged from high wind gusts.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>OKLAHOMA, Extreme Southeast</u></b>									
<b>Mccurtain County Pickens</b>	<b>09</b>	<b>2100CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G53)</b>
			Skywarn spotter at a local convenience store reported numerous trees down.						
<b>Mccurtain County 5 N Broken Bow</b>	<b>09</b>	<b>2125CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G53)</b>
			Power company reported numerous downed trees and power lines.						
<b>Mccurtain County 5 W Broken Bow</b>	<b>09</b>	<b>2130CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G53)</b>
			Power company reported numerous downed trees and power lines.						
<b>Mccurtain County 8 E Idabel</b>	<b>09</b>	<b>2135CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G53)</b>
			Power company reported numerous downed trees and power lines.						
<b><u>OKLAHOMA, Panhandle</u></b>									
<b>Cimarron County Kenton</b>	<b>07</b>	<b>2012CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Cimarron County 5 NE Kenton</b>	<b>07</b>	<b>2014CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
			Severe thunderstorms across the western Oklahoma panhandle during the evening hours produced some hail.						
<b>Beaver County 5 W Balko</b>	<b>22</b>	<b>1747CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.75)</b>
			Severe thunderstorms over the northeast Texas panhandle moved north into the western Oklahoma panhandle and produced very large hail during the early evening hours.						
<b>Cimarron County 5 SE Kenton</b>	<b>30</b>	<b>2040CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G50)</b>
<b>Texas County 2 E Goodwell</b>	<b>30</b>	<b>2325CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G55)</b>
			Severe thunderstorms moved across the western and central Oklahoma panhandle late in the evening producing high winds.						
<b><u>OKLAHOMA, Western, Central and Southeast</u></b>									
<b>Bryan County Calera</b>	<b>04</b>	<b>1835CST</b>			<b>0</b>	<b>0</b>	<b>0.75K</b>		<b>Thunderstorm Wind</b>
			Telephone poles were blown down.						
<b>Bryan County Cartwright</b>	<b>04</b>	<b>1835CST</b>			<b>0</b>	<b>0</b>	<b>0.50K</b>		<b>Thunderstorm Wind</b>
			Trees were blown down.						
<b>Bryan County Calera</b>	<b>04</b>	<b>1850CST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind</b>
			Significant and widespread wind damage was reported in Calera. A roof was blown off a trailer house on the east side of town, at least three trailer houses were destroyed, and one brick home was damaged by downed trees. Numerous barns and outbuildings were damaged and/or unroofed. Three businesses in an industrial complex at the airport sustained structural damage. Fifteen other businesses received minor damage.						
<b>Bryan County 5.5 SE Durant</b>	<b>04</b>	<b>1855CST</b>			<b>0</b>	<b>0</b>	<b>0.50K</b>		<b>Thunderstorm Wind</b>
			Trees up to 2.5 feet in diameter were blown down.						
<b>Bryan County Durant</b>	<b>04</b>	<b>1855CST</b>			<b>0</b>	<b>0</b>	<b>150K</b>		<b>Thunderstorm Wind (G60)</b>
			Severe thunderstorm winds estimated at 70 mph caused major damage in and around Durant. At least 4 businesses in downtown sustained damage. A building was unroofed on Main Street and a nearby clinic was partially unroofed. The roof of a feed store was blown off and then tossed onto a car. The Walmart greenhouse was also blown away. Buildings in an industrial park suffered damage to overhead doors and one building had a corner blown out. Choctaw Bingo reported damage to awnings and the roof. Outbuildings at approximately 6 residences just north of the airport were damaged or destroyed. 1000-gallon tanks were blown over at 21st and Evergreen. Several trees up to 1-foot in diameter were uprooted and numerous fences were blown down. One downed tree landed on the roof of a fire station, causing \$2500 in damage.						
<b>Bryan County Roberta</b>	<b>04</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>	<b>25K</b>		<b>Thunderstorm Wind</b>
			A trailer house was destroyed.						
<b>Bryan County Bokchito</b>	<b>04</b>	<b>1915CST</b>			<b>0</b>	<b>0</b>	<b>0.50K</b>		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

Severe thunderstorm winds downed large trees.

Summary of events of June 4, 1998:

Severe thunderstorms over Bryan County produced widespread wind and hail damage. Hardest-hit was Calera, where 3 mobile homes were destroyed, 2 other mobile homes sustained major damage, and 2 houses were damaged. Durant also reported extensive damage to roofs, outbuildings, and trees.

See preceding individual Storm Data entries for further details and additional reports.

<b>Harper County</b> 7 NW Laverne	07	1637CST			0	0			Hail (0.75)
<b>Harper County</b> 9 E Selman	07	1720CST			0	0			Hail (1.25)
<b>Woods County</b> 1 SW Plainview	07	1730CST			0	0			Hail (0.75)
<b>Woods County</b> 13 NW Alva	07	1756CST			0	0			Hail (0.75)
<b>Marshall County</b> Madill	07	2255CST			0	0			Hail (0.75)
<b>Grady County</b> Cox City	08	0600CST			0	0			Hail (1.00)
<b>McClain County</b> Purcell	08	0615CST			0	0	20K		Thunderstorm Wind
Severe thunderstorm winds estimated at 70 to 80 mph downed large trees and power lines in town. One large tree was uprooted and landed on a minivan. Another uprooted tree landed on power lines, cutting power to most of the south part of town.									
<b>Washita County</b> 3 N Cordell	08	1400CST			0	0			Hail (1.75)
<b>Washita County</b> Cordell	08	1415CST			0	0			Hail (1.00)
<b>Washita County</b> 4 ENE Colony	08	1420CST			0	0			Thunderstorm Wind (G52)
<b>Caddo County</b> Hinton	08	1439CST			0	0			Hail (1.75)
<b>Major County</b> Cleo Spgs	08	1440CST			0	0	0.01K		Thunderstorm Wind
Severe thunderstorm winds downed five-inch tree limbs.									
<b>Caddo County</b> 2 SE Hinton	08	1441CST			0	0			Hail (1.75)
<b>Caddo County</b> 2 SE Hinton	08	1441CST			0	0			Thunderstorm Wind (G52)
<b>Alfalfa County</b> 3 WSW Helena	08	1449CST			0	0			Hail (0.75)
<b>Canadian County</b> 12 SW El Reno	08	1500CST			0	0			Hail (1.25)
<b>Canadian County</b> 5 WNW El Reno	08	1505CST			0	0			Thunderstorm Wind (G59)
Measured by the Oklahoma Mesonet									
<b>Canadian County</b> 5 S Calumet	08	1510CST			0	0			Hail (1.75)
<b>Canadian County</b> 5 S Calumet	08	1510CST			0	0	15K		Thunderstorm Wind
Severe thunderstorm winds (combined with golf ball sized hail) blew 3 windows out of homes and downed numerous trees, several billboards, and other signs.									
<b>Canadian County</b> Yukon	08	1515CST			0	0	1K		Lightning
Lightning struck a house and blew a hole in the roof.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Canadian County</b> El Reno	08	1520CST			0	0	50K		<b>Thunderstorm Wind</b> Severe thunderstorm winds snapped and uprooted trees and large limbs, damaging homes, businesses, and cars.
<b>Garfield County</b> Hillsdale	08	1523CST			0	0			<b>Hail (0.88)</b>
<b>Garfield County</b> Hillsdale	08	1523CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Canadian County</b> Yukon	08	1530CST			0	0			<b>Hail (1.75)</b> On the north and west sides of town
<b>Oklahoma County</b> Oklahoma City	08	1535CST			0	0			<b>Hail (1.75)</b> Reported at NW 63rd and Meridian
<b>Oklahoma County</b> Oklahoma City	08	1535CST			0	0			<b>Hail (2.75)</b> Reported at NW 63rd and Meridian
<b>Oklahoma County</b> Oklahoma City	08	1535CST			0	0			<b>Hail (0.88)</b> Reported at NW 63rd and May.
<b>Oklahoma County</b> Oklahoma City	08	1537CST			0	0			<b>Hail (1.75)</b> Reported at NW 63rd and Portland.
<b>Grant County</b> 2 W Salt Fork	08	1540CST			0	0			<b>Hail (1.50)</b> Vehicle windows were broken.
<b>Oklahoma County</b> Oklahoma City	08	1545CST			0	0			<b>Hail (1.00)</b> Occurred at 39th and McArthur
<b>Oklahoma County</b> Oklahoma City	08	1545CST			0	0	0.50K		<b>Thunderstorm Wind</b> Severe thunderstorm winds downed numerous 6 to 10 -inch diameter trees.
<b>Grant County</b> Salt Fork	08	1550CST			0	0			<b>Hail (1.50)</b>
<b>Garfield County</b> 2 E Hunter	08	1553CST			0	0			<b>Hail (1.75)</b>
<b>Caddo County</b> 8.5 E Anadarko	08	1601CST			0	0			<b>Hail (0.75)</b>
<b>Kay County</b> Blackwell	08	1613CST			0	0			<b>Hail (0.75)</b>
<b>Kay County</b> Ponca City	08	1615CST			0	0			<b>Hail (1.75)</b> Hail as large as golf balls caused extensive window and roof damage across the northern half of Ponca City. One apartment complex alone lost over 100 windows to the hail.
<b>Kay County</b> 8 S Ponca City	08	1615CST			0	0			<b>Hail (0.75)</b>
<b>Kay County</b> Blackwell	08	1617CST			0	0	50K		<b>Lightning</b> Lightning struck the roof of a funeral home, blowing one 3-foot hole, and 3 grapefruit-sized holes in the roof. The bolt set fire to the attic, causing extensive damage to the structure and its contents.
<b>Kay County</b> Ponca City	08	1620CST			0	2			<b>Hail (2.75)</b> A man and an elderly woman were injured when they were caught outside in the hailstorm. The woman was taken to a local hospital and treated for cuts and bruises from the hail and a fractured hip.
<b>Grady County</b> 5 NW Chickasha	08	1625CST			0	0			<b>Hail (0.88)</b>
<b>Kay County</b> (Pnc)Ponca City Arprt	08	1630CST			0	0			<b>Hail (1.50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Kay County</b> Kildare	08	1630CST			0	0			Hail (1.00)
<b>Kay County</b> Kildare	08	1630CST			0	0			Hail (1.75)
<b>Kay County</b> Kaw City	08	1640CST			0	0			Hail (1.75)
<b>McClain County</b> 3 W Newcastle	08	1655CST			0	0			Hail (1.00)
		Occurred at the intersection of Highways 130 and 76							
<b>Cleveland County</b> Norman	08	1700CST 1745CST			0	0	500K		Hail (1.75)
		Severe thunderstorm winds and hail as large as golf balls caused widespread damage in Norman, particularly in south-central and southwest parts of town. Hundreds of glass window panes at the University of Oklahoma were broken. Car windows were broken, large tree limbs were downed, and two trees were blown over onto a house. The severe winds also toppled a 140-ton crane (with damage estimated at \$250,000).							
<b>Grady County</b> 23 NE Chickasha	08	1705CST			0	0			Hail (1.75)
<b>McClain County</b> Newcastle	08	1705CST			0	0			Hail (0.88)
<b>McClain County</b> 5 W Newcastle	08	1705CST			0	0			Hail (1.75)
<b>Cleveland County</b> Norman	08	1710CST			0	0			Hail (1.50)
<b>Cleveland County</b> Norman	08	1710CST			0	0			Hail (1.75)
		Occurred on the west side of town							
<b>Cleveland County</b> Norman	08	1710CST			0	0			Thunderstorm Wind (G50)
		Occurred on the west side of town							
<b>Cleveland County</b> Norman	08	1710CST			0	0			Thunderstorm Wind (G56)
		Severe thunderstorm winds up to 65 mph downed large trees.							
<b>Oklahoma County</b> Oklahoma City	08	1711CST			0	0			Hail (0.88)
		Reported at 89th and Penn.							
<b>Cleveland County</b> Norman	08	1723CST			0	0			Hail (1.75)
<b>Logan County</b> 10 WSW Seward	08	1800CST			0	0			Hail (0.88)
<b>Pottawatomie County</b> 1 ESE Tecumseh	08	1804CST			0	0			Hail (0.75)
<b>Pottawatomie County</b> 1 ESE Tecumseh	08	1810CST			0	0			Hail (1.75)
<b>Pottawatomie County</b> 3.5 WSW Maud to .5 S Maud	08	1811CST 1813CST	2.5	50	0	0			Tornado (F1)
		Surveys revealed that a narrow tornado touched down around 711 pm 3 miles west-southwest of Maud destroyed a barn, then moved east destroying another barn about one-half mile south of Maud as it crossed into Seminole county. It lifted 1/2 mile east of the county line in Seminole County at around 715 pm. The tornado was rated F1.							
<b>Seminole County</b> 12 WSW Wewoka to 11 WSW Wewoka	08	1813CST 1815CST	1	50	0	0			Tornado (F1)
		Surveys revealed that a narrow tornado touched down around 711 pm 3 miles west-southwest of Maud in Pottawatomie County where it destroyed a barn. The tornado then moved east destroying another barn about one-half mile south of Maud as it crossed into Seminole county. It lifted 1/2 mile east of the Seminole County line at around 715 pm. The tornado was rated F1.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Pottawatomie County</b> 5 E Shawnee	08	1815CST			0	0			Hail (0.88)
<b>Seminole County</b> 6 SW Seminole	08	1822CST			0	0			Hail (4.50)
<b>Pottawatomie County</b> 2 W Macomb	08	1830CST			0	0	1K		Thunderstorm Wind
			Trees and power lines were blown down.						
<b>Seminole County</b> 2.5 SW Wewoka to 3.5 ESE Wewoka	08	1835CST 1845CST	6	440	0	0			Tornado (F2)
			Surveys showed that at about 735 pm, a tornado touched down about 1/2 mile southwest of the intersection of US-270 and SH-59, or about 2.5 miles southwest of Wewoka. The storm moved east through the south side of Wewoka causing damage in a neighborhood in the southwest side of Wewoka and along state highway 56 in the south part of town. The tornado continued moving east destroying two mobile homes southeast of Wewoka before crossing into Hughes County. It caused minor damage to a couple of homes and unroofed a mobile home near State Highway 48. The tornado then turned northeast and apparently merged with the Yeager tornado (see separate Storm Data entry) just northeast of the intersection of State Highway 48 and county road EW129.						
			This tornado was on the ground for 8 miles and had a maximum width of 1/3 of a mile. The tornado was rated F2 (winds estimate d between 113 and 157 mph) based on damage in southwest Wewoka including a brick house unroofed and the south exterior wall blown in. Eyewitness reports indicate that this was likely a multiple vortex tornado.						
<b>Hughes County</b> 5 WSW Yeager to 3 W Yeager	08	1845CST 1850CST	2	440	0	0			Tornado (F2)
			Surveys showed that at about 735 pm, a tornado touched down about 1/2 mile southwest of the intersection of US-270 and SH-59, or about 2.5 miles southwest of Wewoka. The storm moved east through the south side of Wewoka causing damage in a neighborhood in the southwest side of Wewoka and along state highway 56 in the south part of town. The tornado continued moving east destroying two mobile homes southeast of Wewoka before crossing into Hughes County. It caused minor damage to a couple of homes and unroofed a mobile home near State Highway 48. The tornado then turned northeast and apparently merged with the Yeager tornado (see separate Storm Data entry) just northeast of the intersection of State Highway 48 and county road EW129.						
			This tornado was on the ground for 8 miles and had a maximum width of 1/3 of a mile. The tornado was rated F2 (winds estimate d between 113 and 157 mph) based on damage in southwest Wewoka including a brick house unroofed and the south exterior wall blown in. Eyewitness reports indicate that this was likely a multiple vortex tornado.						
<b>Hughes County</b> 4.5 WSW Yeager to 4 E Yeager	08	1850CST 1915CST	8	587	0	0			Tornado (F2)
			Surveys revealed that this tornado formed about a mile east of the intersection of State Highway 48 and county road EW129. About one mile after touching down, the Wewoka tornado apparently merged with it. This tornado damaged a house and destroyed numerous pecan trees shortly after the merger. The tornado moved east passing one-half mile south of the town of Yeager, but overturning a mobile home and downing power lines along a railroad just south of town. The tornado then began moving east-northeast as it moved south of Yeager. It completely destroyed a mobile home and toppled an oil pumping jack and storage tank east of Yeager. The last damage was a barn damaged 4 miles east of Yeager and the tornado lifted at 815 pm.						
			The Yeager tornado was on the ground for 8 miles with a maximum width of four-tenths of a mile. This tornado was rated F2 (winds estimated between 113 and 157 mph) based on the destruction of a mobile home east of Yeager.						
<b>Canadian County</b> 12 WSW El Reno	08	1900CST			0	0			Hail (0.88)
<b>Canadian County</b> El Reno	08	1929CST			0	0			Hail (0.75)
<b>Canadian County</b> El Reno	08	1931CST			0	0			Hail (1.00)
<b>Oklahoma County</b> Oklahoma City	08	2000CST			0	0			Thunderstorm Wind (G56)
			Occurred at 63rd and McArthur						
<b>Oklahoma County</b> Oklahoma City	08	2005CST			0	0			Hail (0.88)
			Occurred at Northwest Expressway and Rockwell						
<b>Lincoln County</b> 3 SW Wellston	08	2030CST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **OKLAHOMA, Western, Central and Southeast**

<b>Lincoln County</b> 3 SW Wellston	<b>08</b>	<b>2030CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
Wind gusts were estimated between 60 and 70 mph.									
<b>Oklahoma County</b> 2 NE Choctaw	<b>08</b>	<b>2045CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Lincoln County</b> Countywide	<b>08</b>	<b>2050CST</b> <b>2120CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
Severe thunderstorm winds caused extensive tree damage across the southern half of Lincoln County. Numerous trees up to 5-feet in diameter were destroyed by the severe winds.									
<b>Lincoln County</b> 6 S Warwick	<b>08</b>	<b>2115CST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind (G61)</b>
Severe thunderstorm winds estimated at 60 to 70 mph destroyed a garage under construction.									
<b>Marshall County</b> Madill	<b>08</b>	<b>2255CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
Summary of events of June 8, 1998:									
Severe thunderstorms developed and moved across much of Oklahoma during the afternoon and evening of the 8th, producing hail as large as softballs, wind gusts to 70 mph, and 3 tornadoes.									
The tornadoes were spawned by a single storm between 6 and 715 pm CST in Pottawatomie and Seminole Counties. The first tornado (an F1) touched down 3.5 miles west-southwest of Maud in Pottawatomie County, moved east into Seminole County, lifting about 11 miles west-southwest of Wewoka. The second tornado (rated F2) touched down 2.5 miles southwest of Wewoka in Seminole County, moved east through Wewoka, and crossed into Hughes County. Meanwhile, the third tornado (also an F2) developed about 4.5 miles west-southwest of Yeager in Hughes County. These two tornadoes then merged about 3.5 miles southwest of Yeager and continued east until they lifted 4 miles east of Yeager.									
This tornadic thunderstorm also produced hail as large as softballs southwest of Seminole in Seminole County. Baseball sized hail was reported with a different storm in Oklahoma City in Oklahoma County. Widespread hail and wind damage occurred in Ponca City in Kay County and in Norman in Cleveland County.									
Wind gusts were estimated as high as 70 mph near Wellston and Warwick in Lincoln County. Significant thunderstorm wind damage occurred throughout Lincoln County, in Purcell in McClain County, and near Calumet and El Reno in Canadian County.									
See preceding individual Storm Data entries for further details and additional reports.									
<b>Cotton County</b> 4 S Randlett	<b>09</b>	<b>1630CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Cotton County</b> 5 S Randlett	<b>09</b>	<b>1700CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Jefferson County</b> 5 W Waurika	<b>09</b>	<b>1730CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
<b>Murray County</b> Davis	<b>09</b>	<b>1738CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Murray County</b> 2 SE Davis	<b>09</b>	<b>1743CST</b>			<b>0</b>	<b>0</b>	<b>0.01K</b>		<b>Thunderstorm Wind (G52)</b>
Severe thunderstorm winds up to 60 mph downed tree limbs up to 5 inches in diameter.									
<b>Murray County</b> 2 SE Davis	<b>09</b>	<b>1745CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Carter County</b> Healdton	<b>09</b>	<b>1758CST</b> <b>1810CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G70)</b>
<b>Carter County</b> 3 S Healdton	<b>09</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>	<b>7.5K</b>		<b>Thunderstorm Wind</b>
Severe winds damage a trailer home and a storage building. Large trees were also downed by the severe thunderstorm winds.									
<b>Carter County</b> 3 W Wilson	<b>09</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
A house roof was blown off and 2 trailer homes were destroyed.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Carter County</b> 6 W Wilson	09	1800CST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds destroyed a barn.
<b>Carter County</b> 5 SW Wilson	09	1800CST			0	0	40K		Thunderstorm Wind
									Severe thunderstorm winds tore the roofs off several houses.
<b>Carter County</b> 2 W Wilson	09	1800CST			0	0	1K		Thunderstorm Wind
									A fruit stand roof was blown into a house.
<b>Jefferson County</b> 3 W Ringling	09	1801CST			0	0			Hail (1.00)
<b>Jefferson County</b> 3 W Ringling	09	1801CST			0	0			Thunderstorm Wind (G74)
<b>Jefferson County</b> Ringling	09	1805CST			0	0	30K		Thunderstorm Wind (G69)
									Severe thunderstorm winds estimated at 70 to 80 mph caused extensive damage in Ringling. One carport and several metal sheds were destroyed. A barn was blown away, leaving the setting hens still sitting (unharmd), but killing 4 turkeys. Another barn suffered major damage. Porches were also torn from homes. One covered porch was torn from the front of a house and blown over the house into the back yard. Numerous large trees were uprooted. Roof damage was extensive, particularly on the south side of town. In one unusual case, an asphalt shingle was torn from a roof and wedged between the door and window glass of a truck. Neither the door or window were damaged.
<b>Jefferson County</b> Ryan	09	1805CST			0	0	10K		Thunderstorm Wind
									Severe thunderstorm winds tore awnings from businesses and destroyed signs. Trees were downed and roofs were damaged throughout town. Four 40-foot utility poles were also blown down by the severe winds.
<b>Murray County</b> Sulphur	09	1805CST			0	0			Hail (0.88)
<b>Carter County</b> Wilson	09	1815CST			0	0	5K		Thunderstorm Wind
									Severe thunderstorm winds overturned a mobile home and damaged numerous roofs. Power lines were also blown down in the area.
<b>Love County</b> Marietta	09	1825CST			0	0	0.50K		Thunderstorm Wind
									Severe thunderstorm winds downed trees and power lines.
<b>Love County</b> 9 W Marietta	09	1831CST			0	0	0.60K		Thunderstorm Wind
									Trees and power lines were blown down.
<b>Carter County</b> Lone Grove	09	1835CST			0	0	0.60K		Thunderstorm Wind
									Trees and power lines were blown down.
<b>Marshall County</b> Powell	09	1854CST			0	0			Thunderstorm Wind (G52)
<b>Carter County</b> Wilson	09	1900CST			0	0	5K		Thunderstorm Wind
									Severe thunderstorm winds destroyed signs, downed limbs, and damaged roofs in Wilson.
<b>Johnston County</b> Connerville	09	1900CST			0	0	0.60K		Thunderstorm Wind
									Several trees and power lines were blown down.
<b>Johnston County</b> Countywide	09	1900CST			0	0	20K		Thunderstorm Wind (G69)
									Severe thunderstorm winds were estimated at 70 to 80 mph across northern Johnston County. Trees and power lines were downed throughout the area. A hay barn and mobile home in Connerville lost their roofs, a tree was downed onto a car in Wapanucka, and a storage building was destroyed in Tishomingo.
<b>Marshall County</b> Kingston	09	1900CST			0	1	12K		Thunderstorm Wind
									Severe thunderstorm winds downed a large tree onto a mobile home. A woman suffered a broken leg when the tree struck her as she was fleeing the mobile home.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Marshall County</b> Kingston	09	1905CST			0	0			Thunderstorm Wind (G78)
									Severe thunderstorm winds estimated at 90 mph downed several trees.
<b>Pontotoc County</b> 7 S Fittstown	09	1905CST			0	0			Hail (0.75)
<b>Pontotoc County</b> 7 S Fittstown	09	1905CST			0	0			Thunderstorm Wind (G61)
<b>Love County</b> 2 NE Thackerville	09	1915CST			0	0	0.01K		Thunderstorm Wind
									Severe winds downed 2-inch tree limbs.
<b>Atoka County</b> Atoka	09	1930CST 2000CST			0	0			Thunderstorm Wind (G64)
									Severe thunderstorm wind gusts were measured at up to 74 mph by local officials. Damage in Atoka was extensive. The severe winds partially unroofed the elementary school gymnasium and scattered debris across a neighboring playground. The roof was also torn off the high school gymnasium. A large tree was uprooted and toppled onto a car and porch roof. Other large trees and power lines were downed throughout town.
<b>Atoka County</b> 2 W Atoka	09	1936CST			0	0			Hail (0.88)
<b>Atoka County</b> Atoka	09	1936CST			0	0			Thunderstorm Wind (G61)
									Severe thunderstorm winds downed large trees.
<b>Bryan County</b> Durant	09	1940CST			0	0			Hail (1.00)
<b>Bryan County</b> Durant	09	1940CST			0	0			Thunderstorm Wind (G70)
<b>Tillman County</b> 2 S Tipton	09	1940CST			0	0			Hail (1.00)
<b>Bryan County</b> Achille	09	1945CST			0	0			Thunderstorm Wind (G61)
									Severe thunderstorm winds estimated at 60 to 70 mph tore the roof off a mobile home and damaged numerous other roofs across town. Several large trees were toppled.
<b>Bryan County</b> Durant	09	1945CST			0	0			Thunderstorm Wind (G52)
									Severe thunderstorm winds estimated at 60 mph caused extensive roof damage to 2 businesses.
<b>Coal County</b> Coalgate	09	1945CST			0	0			Hail (0.88)
<b>Coal County</b> Coalgate	09	1945CST			0	0	0.60K		Thunderstorm Wind
									Severe thunderstorm winds downed trees and power lines.
<b>Tillman County</b> Tipton	09	1950CST			0	0			Hail (1.00)
<b>Atoka County</b> Atoka	09	2000CST			0	0			Thunderstorm Wind (G61)
<b>Atoka County</b> Farris	09	2006CST			0	0			Hail (1.75)
<b>Comanche County</b> 1 W Chattanooga	09	2015CST			0	0			Hail (0.88)
<b>Tillman County</b> 18 E Frederick	09	2015CST			0	0			Hail (0.88)
<b>Cotton County</b> 12 N Devol	09	2023CST			0	0			Hail (0.75)
<b>Comanche County</b> Faxon	09	2025CST			0	0			Hail (0.75)
<b>Cotton County</b> 6 NW Walters	09	2044CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Cotton County</b> 6 NW Walters	09	2044CST			0	0			Thunderstorm Wind (G52)
<b>Cotton County</b> 1 NW Walters	09	2055CST			0	0			Thunderstorm Wind (G58)
		Measured by the Oklahoma Mesonet							
<b>Comanche County</b> Lawton	09	2146CST			0	0			Hail (0.75)
<b>Comanche County</b> Lawton	09	2200CST			0	0			Hail (0.88)
<b>Stephens County</b> 2 NE Duncan	09	2221CST			0	0			Hail (0.88)
<b>Carter County</b> Ratliff City	09	2222CST			0	0			Hail (1.75)
<b>Murray County</b> 3 W Davis	09	2238CST			0	0			Hail (1.00)
<b>Stephens County</b> 7 SE Marlow	09	2250CST			0	0			Hail (1.25)
<b>Murray County</b> 2 W Sulphur	09	2254CST			0	0			Hail (1.75)
<b>Pontotoc County</b> 2 S Roff	09	2256CST			0	0			Hail (1.00)
<b>Pontotoc County</b> Roff	09	2303CST			0	0	0.01K		Thunderstorm Wind
		Severe winds downed large tree limbs.							
<b>Kiowa County</b> Mountain View	09	2310CST			0	0			Hail (1.00)
<b>Washita County</b> 8 S Cowden	09	2315CST			0	0			Hail (1.00)
<b>Washita County</b> 8 S Cowden	09	2315CST			0	0			Thunderstorm Wind (G52)
<b>Kiowa County</b> Mountain View	09	2325CST			0	0			Hail (1.75)
<b>Kiowa County</b> Mountain View	09	2325CST			0	0			Thunderstorm Wind (G52)
<b>Coal County</b> Countywide	09 10	2355CST 0010CST			0	0	80K		Thunderstorm Wind (G52)
		Severe thunderstorm winds estimated at 60 mph caused widespread damage across Coal County. Trees and power poles were downed throughout the county. The most extensive structural damage occurred in Coalgate where several roofs were blown off houses, barns were damaged or destroyed, a restaurant lost its roof, and a lumberyard sustained \$25,000 in damage to its roof. Countless trees and power poles were toppled, including several large trees that landed on buildings. Other structural damage was reported in Lehigh and Centrahoma. In Lehigh a porch was destroyed and the roof was torn off an office building. In Centrahoma an unoccupied mobile home was literally wrapped around a tree and destroyed by the severe winds.							
<b>Coal County</b> Tupelo	10	0055CST			0	0			Lightning
		Lightning struck an oil storage tank, causing it to explode.							

Summary of events of June 9, 1998:

Severe thunderstorms moved across southern Oklahoma during the evening of the 9th, lasting into the very early morning hours of the 10th. Although a few reports of large hail were received, severe thunderstorm winds caused by far the most damage. Wind gusts were estimated at 85 mph west of Ringling in Jefferson County and at 90 mph in Kingston in Marshall County. Significant wind damage occurred around Healdton and Wilson in Carter County, in Ringling and Ryan in Jefferson County, and in Atoka in Atoka County. Widespread damage occurred in Johnston, Marshall, and Coal Counties.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

See preceding individual Storm Data entries for further details and additional reports.

<b>Johnston County</b> 3 S Tishomingo	10	1334CST			0	0			Hail (2.00)
<b>Pontotoc County</b> Roff	10	1345CST			0	0	10K		Thunderstorm Wind
Severe thunderstorm winds unroofed a house.									
<b>Pontotoc County</b> Roff	10	1350CST			0	0	25K		Thunderstorm Wind
Severe thunderstorm winds tore the roof off a 100-year-old historic bank and partially unroofed the high school gymnasium.									
<b>Murray County</b> Sulphur	10	1400CST			0	0	2K		Thunderstorm Wind
Severe thunderstorm winds downed large trees and signs around Sulphur.									
<b>Pontotoc County</b> Ada	10	1400CST			0	0	0.10K		Thunderstorm Wind
Severe winds downed trees.									
<b>Seminole County</b> Bowlegs	10	1450CST			0	0			Thunderstorm Wind (G52)
<b>Garfield County</b> Enid	10	1710CST 1720CST			0	0			Thunderstorm Wind (G61)
Severe thunderstorm winds estimated at 70 mph downed numerous trees onto power lines, and at least one tree landed on a house . A shed was also blown into a car.									
<b>Garfield County</b> Enid	10	1720CST 1740CST			0	0			Hail (1.00)
<b>Garfield County</b> Enid	10	1720CST 1740CST			0	0	0.50K		Thunderstorm Wind
Severe thunderstorm winds wrapped a trampoline around a pole and downed many tree limbs.									
<b>Garfield County</b> Enid	10	1720CST			0	0			Thunderstorm Wind (G61)
Thunderstorm wind gust of 70 mph was reported by a spotter.									
<b>Garfield County</b> Vance Afb	10	1723CST			0	0			Thunderstorm Wind (G50)
<b>Garfield County</b> Enid	10	1730CST			0	0			Thunderstorm Wind (G61)
<b>Garfield County</b> Kremlin	10	1730CST			0	0	0.50K		Thunderstorm Wind
Power lines were blown down.									
<b>Bryan County</b> Achille	10	1928CST			0	0			Thunderstorm Wind (G61)
<b>Bryan County</b> Achille	10	1930CST			0	0	12K		Thunderstorm Wind
Severe thunderstorm winds ripped the roof off a mobile home and downed power lines and large trees.									
<b>Bryan County</b> Calera	10	1930CST			0	0	2K		Thunderstorm Wind
Severe thunderstorm winds blew siding off a house, tore the roof from a fruit stand, and downed many trees.									
<b>Bryan County</b> Durant	10	1930CST			0	0	10K		Thunderstorm Wind
Roofs were blown off of downtown buildings.									
<b>Bryan County</b> Achille	10	1937CST			0	0			Thunderstorm Wind (G52)
<b>Bryan County</b> 3 NE Colbert	10	2000CST			0	0	10K		Thunderstorm Wind
A mobile home was blown over.									
<b>Stephens County</b> Duncan	10	2128CST			0	0			Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Stephens County</b> 2 NE Duncan to Duncan	10	2141CST			0	0			Hail (0.75)
<b>Comanche County</b> Cache	11	0030CST			0	0	20K		Lightning
							Lightning struck and set fire to 2 buildings at an old amusement park. Both buildings were completely destroyed.		
<b>Jefferson County</b> 10 E Waurika	11	0030CST			0	0	0.10K		Thunderstorm Wind
							Large tree limbs were blown down.		
<b>McClain County</b> 2 W Newcastle	11	0045CST			0	0	0.10K		Thunderstorm Wind
							A six to eight foot diameter tree was blown down.		
Summary of events of June 10th, 1998:									
Severe thunderstorms formed during the afternoon across central and northern Oklahoma, spreading into southern Oklahoma during the evening. Thunderstorm wind damage was widespread, with only a few reports of large hail. Wind gusts were estimated to be 70 mph in Enid in Garfield County and in Achille in Bryan County. Significant wind damage occurred in Roff (Pontotoc County), in Sulphur (Murray County), in Enid (Garfield County), and across much of Bryan County.									
See preceding individual Storm Data entries for further details and additional reports.									
<b>Love County</b> 2 E Rubottom	12	1834CST			0	0			Hail (0.75)
<b>Love County</b> 5 E Rubottom	12	1835CST			0	0			Hail (1.00)
<b>Love County</b> 6 N Burneyville	12	1847CST			0	0			Hail (0.75)
<b>Garfield County</b> 4 W Hunter	13	1515CST			0	0			Hail (0.75)
<b>Dewey County</b> 4 NW Lenora	13	1525CST			0	0			Hail (0.88)
<b>Blaine County</b> 1 W Longdale	13	1545CST	0.1	10	0	1			Tornado (F0)
							The Blaine County Sheriff reported a brief tornado. One child was injured with extent of injuries unknown. Several trees were also damaged.		
<b>Blaine County</b> Watonga	13	1556CST			0	0			Hail (0.75)
<b>Garfield County</b> 6 S Drummond	13	1635CST			0	0			Hail (2.50)
<b>Kingfisher County</b> 3 S Kingfisher	13	1638CST			0	0			Hail (1.25)
<b>Garfield County</b> 2 N Hillsdale	13	1645CST			0	0			Thunderstorm Wind (G65)
							Severe thunderstorm winds estimated at 75 mph downed power lines on Highway 32.		
<b>Garfield County</b> Waukomis	13	1645CST			0	0			Hail (2.00)
<b>Grant County</b> 4 S Nash	13	1645CST			0	0			Thunderstorm Wind (G65)
							Severe thunderstorm winds estimated at 75 mph downed power lines onto Highway 32.		
<b>Kingfisher County</b> 1 E Kingfisher	13	1646CST			0	0			Hail (1.75)
<b>Caddo County</b> 4 S Hydro	13	1735CST			0	0			Hail (0.88)
<b>Logan County</b> 3 SW Guthrie	13	1743CST 1746CST	2	50	0	0			Tornado (F1)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
									A tornado touched down about 3 miles southwest of Guthrie. Two houses suffered shingle and siding damage. A third house sustained broken windows, a damaged roof, and a broken porch post. A barn was unroofed, an outbuilding was destroyed, numerous fences were broken and a hood was torn off an old pick-up truck. The tornado was rated an F1.
<b>Canadian County</b> 3 NW Calumet	13	1800CST			0	0			<b>Hail (1.50)</b>
<b>Kingfisher County</b> 3 N Hennessey	13	1800CST			0	0			<b>Hail (1.00)</b>
<b>Canadian County</b> 3 NW Calumet	13	1807CST			0	0			<b>Hail (1.75)</b>
<b>Canadian County</b> Calumet	13	1814CST			0	0			<b>Hail (2.50)</b>
<b>Canadian County</b> 5 WNW El Reno	13	1815CST	0.2	10	0	0			<b>Tornado (F0)</b> A tornado touched down briefly in open country. No damage was reported and the tornado was rated F0.
<b>Canadian County</b> 2 W El Reno	13	1816CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Canadian County</b> 4 NW El Reno	13	1817CST 1822CST	0.2	15	0	0			<b>Tornado (F0)</b> A tornado touched down in open country. No damage was reported and the tornado was rated F0.
<b>Garfield County</b> 10 SW Covington	13	1835CST			0	0			<b>Hail (0.88)</b>
<b>Canadian County</b> Oklahoma City	13	1838CST			0	0			<b>Hail (0.88)</b> Occurred at NW Expressway and County Line Road on the Oklahoma/Canadian County line.
<b>Oklahoma County</b> Oklahoma City	13	1838CST			0	0			<b>Hail (0.88)</b> Reported at NW Expressway and County Line Road on the Canadian/Oklahoma County line.
<b>Oklahoma County</b> Oklahoma City	13	1839CST			0	0			<b>Hail (0.88)</b> Reported at NW Expressway and Rockwell
<b>Garfield County</b> 6 S Covington	13	1840CST			0	0			<b>Hail (1.00)</b>
<b>Oklahoma County</b> Oklahoma City	13	1840CST			0	0			<b>Hail (1.50)</b> Reported at Wilshire and Council,
<b>Canadian County</b> 2 WNW Yukon	13	1845CST	0.1	30	0	0			<b>Tornado (F0)</b> A storm chaser observed a brief tornado touching down in an open field with no known damage.
<b>Kay County</b> 4 SE Blackwell	13	1850CST			0	0			<b>Thunderstorm Wind (G53)</b> Recorded by Oklahoma Mesonet.
<b>Kay County</b> Ponca City	13	1850CST			0	0			<b>Thunderstorm Wind (G74)</b> Measured at KPNC observing site.
<b>Kay County</b> Ponca City	13	1854CST			0	0			<b>Hail (1.75)</b>
<b>Kay County</b> Ponca City	13	1856CST			0	0			<b>Thunderstorm Wind (G99)</b> Severe thunderstorm winds overturned a trailer house and downed power lines.
<b>Oklahoma County</b> Oklahoma City	13	1857CST			0	0			<b>Hail (1.00)</b> Reported at Memorial and Western.
<b>Oklahoma County</b> Oklahoma City	13	1900CST 1930CST			0	0			<b>Thunderstorm Wind (G91)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## **OKLAHOMA, Western, Central and Southeast**

Extensive straight-line wind damage occurred with a tornadic thunderstorm as it tracked across Oklahoma County. The damage occurred from Lake Hefner east across southern sections of The Village and northern sections of Nichols Hills, then northeast across northern Oklahoma City, crossing Interstate 35 in the vicinity of Hefner Rd and 122nd Street. The damage path then narrowed about 1 mile southwest of I35, from approximately 1-2 miles wide to near 3/4 mile wide. The damage path dissipated over extreme southeast Edmond. Estimated path length was 16 miles. Maximum width was 2 miles at points between Lake Hefner and the Broadway Extension. 105 MPH winds were measured at Lake Hefner by a media Chaser. Widespread damage to power lines (40,000 customers of OG&E), trees, roofs, antennas, signs, and windows occurred. The WKY broadcast tower, designed to withstand 125 mph winds, was toppled in the area between Kelly and Broadway Ext., and just south of Britton Rd.

**Oklahoma County**  
**Oklahoma City**

<b>13</b>	<b>1902CST</b>	<b>0.8</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>300K</b>	<b>Tornado (F1)</b>
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This tornado touched down as a waterspout over Lake Hefner and moved east to dissipate between May Avenue and Lake Hefner Parkway. Total path length was approximately 3/4 mile and its width was approximately 50 yards. Numerous boats in dry dock suffered damage at the Oklahoma City Boat Club as the tornado passed slightly south of the marina. Boats that were in the water suffered little, if any, damage. Damage to the OKC Boat Club facilities and nearby boats was estimated at \$250 K. Traffic signs along the east shore of the lake were bent and a small storage shed was destroyed approximately 1/8 mile south of the OKC Boat Club. Minor roof damage occurred to homes immediately east of Lake Hefner Parkway.

**Oklahoma County**  
**Oklahoma City**

<b>13</b>	<b>1904CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G91)</b>
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Reported near Hefner Parkway and Britton Road.

**Caddo County**  
**9 E Binger**

<b>13</b>	<b>1905CST</b>			<b>0</b>	<b>0</b>		<b>Hail (1.75)</b>
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**Oklahoma County**  
**Oklahoma City**

<b>13</b>	<b>1907CST</b>	<b>0.8</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>200K</b>	<b>Tornado (F1)</b>
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This tornado formed near NW 84th Street and Walker and traveled northeast until dissipating immediately east of the Broadway Extension 1/4 mile south of Britton Road. Total path length was 3/4 mile. Path width approximately 50 yards. This tornado was rated F1(73-112 mph). Along the damage path, a large portion of the roof decking was removed from a home on the southeast corner of 84th and Walker. Street signs also were torn from the ground (not well anchored) at this location. Several vehicles were damaged by flying debris. Minor roof damage occurred to other homes on 84th, 85th, and 86th Streets. On 87th and 88th Streets near Harvey, several homes suffered major roof damage and the western one-half of the New Life Baptist Church was destroyed. A portion of the church roof was thrown southeastward across 88th causing major damage to a home. Failure of the north, west and south walls of the church occurred as the roof lifted off.

**Oklahoma County**  
**1 WSW Nichols Hills to**  
**.5 SE Nichols Hills**

<b>13</b>	<b>1908CST</b>	<b>1.5</b>	<b>75</b>	<b>0</b>	<b>4</b>	<b>150K</b>	<b>Tornado (F2)</b>
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This tornado touched down 1 block west of north May Avenue and Pembroke Terrace and moved east to Woods Park in Nichols Hills. Total path length was 1.5 miles and maximum width was 75 yards. This tornado was rated F2(113-157 mph). Four persons were injured and transported to local hospitals. Considerable damage was done to the strip mall in the 7400 block of north Ma y Avenue. Windows were blown out of several businesses, several lost roofs, power lines were downed and large signs were bent. One business on the east side of May Ave. suffered collapse of an exterior south facing wall. On Pembroke Terrace, an RV was thrown into a house, a car was over-turned, trees were toppled, and shingles and roof decking were partially blown away. Lesser damage occurred eastward into Nichols Hills. Interestingly, this tornado rotated anticyclonically. Although the over-turned car and major damage to one wood frame house roof suggested the tornado may have reached F2 intensity in a very small area, the majorit y of the damage was consistent with an F1 rating.

**Noble County**  
**1 S Lucien**

<b>13</b>	<b>1910CST</b>			<b>0</b>	<b>0</b>		<b>Hail (1.00)</b>
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**Oklahoma County**  
**Oklahoma City**

<b>13</b>	<b>1912CST</b>	<b>5.5</b>	<b>200</b>	<b>0</b>	<b>17</b>	<b>1M</b>	<b>Tornado (F2)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

This tornado was the most intense of the day. The tornado touched down approximately 1/4 mile southwest of the corner of Bryant Avenue and Hefner Road, and moved northeast crossing Interstate 35 at the Frontier City theme park parking lot. The tornado continued northeast along northeast 122nd Street and eventually dissipated 1/4 mile northeast of Interstate 44 at Douglas Blvd. The total path length was approximately 5 1/2 miles. Maximum width was 200 yards east of Interstate 35 and south of Interstate 44. The tornado was rated F2 (At 122nd Street approximately 1-2 miles east of I-35). Seventeen minor injuries (3 transported to hospital) occurred at Frontier City. Along the track, major structural damage occurred to businesses along Interstate 35 from 122nd Street southward for approximately three-quarters of a mile. The Frontier City theme park was among the hardest hit businesses. The tornado passed through the parking lot damaging numerous vehicles before striking a two-story concrete block building at the northeast corner of the park. This building suffered partial failure of external walls and the entire roof was removed. Damage to adjacent areas of the park was mainly due to strong inflow into the tornado.

On the east side of Interstate 35, a Texaco truck stop was severely damaged. Empty semi-tractor trailers located in the east parking lot of the truck stop were overturned and rolled tens of feet. One trailer was briefly airborne and landed on another empty trailer. A small portable building containing a CB radio shop in the parking area was completely swept away into a grove of trees east of the lot. Numerous homes suffered major damage to roofs, windows, and garage doors in the Nottingham and Quail Ridge Run subdivisions located along 122nd Street 1-2 miles east of I-35. Several homes suffered major or nearly complete roof failure, though most exterior walls remained intact. These homes were of recent construction and were well built with brick exterior facades (some likely in excess of \$200K). No means of anchoring the roofs to the exterior walls was noted. The tornado may have approached F3 at times in these neighborhoods. The most severely damaged home was located atop a small hill with garage doors on the upwind side of the home. Debris patterns suggest the garage doors failed allowing the wind to lift the roof. Without the roof in place, failure of the external garage walls occurred. The most severe damage to trees occurred in these subdivisions and areas immediately adjacent.

<b>Noble County</b> Perry	13	1920CST			0	0			Hail (2.75)
<b>Grady County</b> 5 NW Pocasset	13	1930CST			0	0			Hail (0.88)
<b>McClain County</b> 3 NW Newcastle	13	1950CST			0	0			Hail (0.75)
<b>Canadian County</b> 3 SE Yukon	13	1959CST			0	0			Thunderstorm Wind (G61)
<b>Oklahoma County</b> 2 SW Bethany	13	1959CST			0	0			Thunderstorm Wind (G61)
<b>Oklahoma County</b> Oklahoma City	13	2003CST			0	0			Thunderstorm Wind (G55)
<b>Cleveland County</b> 4 NW Moore	13	2010CST			0	0			Hail (1.25)
			Reported at 89th and Penn on the Oklahoma and Cleveland County line.						
<b>Oklahoma County</b> Oklahoma City	13	2010CST			0	0			Hail (1.25)
			Reported at 89th and Penn on the Oklahoma/Cleveland County line.						
<b>Oklahoma County</b> 8 S Choctaw	13	2025CST			0	0			Hail (0.88)
<b>Pottawatomie County</b> 6 W Shawnee	13	2041CST			0	0			Hail (1.75)
<b>Seminole County</b> 2 N Little	13	2115CST			0	0			Hail (0.88)

Summary of events of June 13, 1998:

During the afternoon and evening four supercell thunderstorms developed near a dryline in western Oklahoma and tracked east into central sections of the state. The most significant storm developed in Washita county at approximately 400 pm CST and intensified as it moved east toward central Oklahoma. This storm produced at least six tornadoes as it tracked from Canadian County across Oklahoma County during the early evening. The most damaging tornado (an F2) touched down in northeast Oklahoma City and crossed Interstate 35 near the Frontier City theme park. Other tornadoes damaged the Oklahoma City Boat Club, portions of The Village and Nichols Hills, the Highland Park neighborhood west of Broadway Extension, and the area near May and Grand Avenues in Oklahoma City. Three weak tornadoes also touched down in open country northwest of El Reno and near Yukon. In addition to damaging tornadoes, the storm produced extensive straight-line wind damage from Lake Hefner, across Nichols Hills and The Village, into northeast Oklahoma County. Winds likely exceeded 100 mph in some areas. There were no fatalities and only 21 relatively minor injuries reported in Oklahoma County. The majority of the injuries were sustained at the Frontier City theme park.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **OKLAHOMA, Western, Central and Southeast**

Earlier, another supercell thunderstorm produced tornadoes near Longdale in Blaine County and 3 miles southwest of Guthrie. Supercells that tracked across Noble County and northern Cleveland County produced large hail and severe winds, but no tornadoes.

See preceding individual Storm Data entries for further details and additional reports.

<b>Jackson County</b> 5 NW Duke	17	1823CST			0	0			Hail (1.00)
<b>Greer County</b> 12 S Mangum	17	1825CST			0	0			Hail (1.75)
Golfball sized hail was reported by spotter on the Greer and Jackson County line.									
<b>Jackson County</b> 4 N Duke	17	1825CST			0	0			Hail (1.75)
Golfball sized hail was reported by spotter on the Greer and Jackson County line.									
<b>Greer County</b> Granite	17	1843CST			0	0			Hail (1.75)
<b>Greer County</b> Granite	17	1845CST			0	0			Hail (2.00)
Hail up to 2 inches in diameter damaged several vehicles.									
<b>Kiowa County</b> 12 NW Lone Wolf	17	1847CST			0	0			Hail (1.75)
<b>Washita County</b> Burns Flat	17	1858CST			0	0			Thunderstorm Wind (G52)

Summary of events of June 17, 1998:

Severe thunderstorms moved across southwest Oklahoma during the evening hours of the 17th. Numerous reports of hail as large as golf balls were received, with the largest hail (2-inch diameter) reported in Granite in Greer County.

See preceding individual Storm Data entries for further details and additional reports.

<b>Stephens County</b> Comanche	18	1602CST			0	0			Hail (0.88)
<b>Stephens County</b> 3 NE Comanche	18	1605CST			0	0			Hail (0.75)
<b>Stephens County</b> 6 W Velma	18	1610CST			0	0			Hail (0.75)
<b>Garvin County</b> Foster	18	1626CST			0	0			Hail (0.88)
<b>Stephens County</b> 2 S Loco	18	1755CST			0	0			Hail (0.88)
<b>Garvin County</b> Pernell	18	1800CST			0	0			Hail (0.88)
<b>Jefferson County</b> Addington	18	1800CST 2200CST			0	0			Hail (1.75)

Severe thunderstorms lasted for more than 4 hours around Addington. Ranchers near Addington witnessed hail as large as golf balls falling at least 10 times during those thunderstorms. The large hail damaged a barn roof and cracked a car windshield.

<b>Carter County</b> Fox	18	1805CST			0	0			Hail (0.88)
<b>Jefferson County</b> 4 NW Addington	18	1818CST			0	0			Hail (0.75)
<b>Stephens County</b> Loco	18	1830CST			0	0			Hail (1.75)
<b>Jefferson County</b> 10 E Waurika	18	1835CST			0	0			Thunderstorm Wind (G52)
<b>Carter County</b> 1 W Tatums	18	1839CST			0	0			Hail (1.00)
<b>Jefferson County</b> 1 N Ringling	18	1840CST			0	0			Thunderstorm Wind (G75)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
Measured by the Oklahoma Mesonet									
<b>Garvin County</b> Pernell	18	1845CST			0	0			Hail (0.88)
<b>Jefferson County</b> Claypool	18	1845CST			0	0	2K		Thunderstorm Wind
Severe thunderstorm winds destroyed a vacant trailer house and downed power lines.									
<b>Jefferson County</b> 1 N Ringling	18	1845CST			0	0			Thunderstorm Wind (G65)
Measured by the Oklahoma Mesonet									
<b>Carter County</b> 1 W Healdton	18	1855CST			0	0			Hail (1.00)
<b>Jefferson County</b> Ringling	18	1905CST			0	0			Hail (1.75)
<b>Jefferson County</b> Ringling	18	1905CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Ringling	18	1916CST			0	0			Hail (1.75)
<b>Carter County</b> Lone Grove	18	1926CST			0	0			Hail (1.00)
<b>Carter County</b> Wilson	18	1934CST			0	0			Hail (0.75)
<b>Carter County</b> Wilson	18	1934CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> Addington	18	1945CST 2300CST			0	0			Flash Flood
Over 3 hours of heavy rain from thunderstorms over Jefferson County caused flash flooding of Cow Creek and Monument Creek. Ranchers measured 10 inches of rain in the area before they witnessed the floods.									
<b>Carter County</b> 4 S Ardmore	18	2005CST			0	0			Thunderstorm Wind (G65)
<b>Jefferson County</b> Addington	18	2015CST			0	0			Hail (0.88)
<b>Love County</b> 1.5 E Rubottom	18	2016CST			0	0			Thunderstorm Wind (G61)
<b>Carter County</b> Wilson	18	2020CST			0	0			Hail (0.88)
<b>Love County</b> 2 SE Burneyville	18	2020CST			0	0			Thunderstorm Wind (G62)
Measured by the Oklahoma Mesonet									
<b>Love County</b> 7 W Overbrook	18	2020CST			0	0			Hail (0.75)
<b>Love County</b> 7 W Overbrook	18	2020CST			0	0			Thunderstorm Wind (G52)
<b>Love County</b> 5 E Overbrook	18	2020CST			0	0	0.50K		Thunderstorm Wind
Two power poles were blown down.									
<b>Love County</b> 2 SE Burneyville	18	2025CST			0	0			Thunderstorm Wind (G55)
Measured by the Oklahoma Mesonet									
<b>Love County</b> 2 SE Burneyville	18	2030CST			0	0			Thunderstorm Wind (G59)
Measured by the Oklahoma Mesonet									
<b>Love County</b> Burneyville	18	2032CST			0	0			Thunderstorm Wind (G52)
<b>Jefferson County</b> 1.5 N Addington	18	2045CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

<b>Love County</b> Leon	18	2115CST							
				0	0	0.25K			Thunderstorm Wind
									Severe thunderstorm winds downed trees.

<b>Jefferson County</b> 7 E Addington	18	2145CST							
				0	0				Hail (0.75)

<b>Stephens County</b> 10 E Duncan	18	2245CST							
				0	0				Hail (0.75)

<b>Stephens County</b> 10 E Duncan	18	2300CST							
				0	0				Hail (1.00)

<b>Stephens County</b> 3 N Velma	19	0000CST							
				0	0				Hail (0.75)

Summary of events of June 18, 1998:

Severe thunderstorms developed over southwest Oklahoma during the early evening of the 18th and moved across southern Oklahoma, producing large hail, damaging winds, and flash flooding. Storms were particularly persistent over Jefferson County, lasting for more than 4 hours. Rainfall amounts were reported to be in excess of 10 inches near Addington. Wind gusts measured up to 86 mph, and golf ball sized hail fell during the course of the severe thunderstorms in Jefferson County. Love County sustained tree and power line damage from the storms as they tracked across south-central Oklahoma late in the evening.

See preceding individual Storm Data entries for further details and additional reports.

<b>Garfield County</b> 1 W Enid	19	1640CST							
				0	0				Hail (1.75)

<b>Garfield County</b> 1 N Enid	19	1652CST							
				0	0				Hail (2.75)

<b>Tillman County</b> 9 E Davidson	19	1713CST							
				0	0				Hail (0.88)

<b>Caddo County</b> Binger	19	1731CST							
				0	0				Hail (1.75)

<b>Comanche County</b> Chattanooga	19	1742CST							
				0	0				Hail (1.00)

<b>Caddo County</b> Hinton	19	1800CST							
				0	0				Hail (3.50)

Hail up to 3.5 inches in diameter broke holes in the roofs of houses and barns. Numerous cars were dented and had their windows broken by the giant hail.

<b>Comanche County</b> 1.5 S Lawton	19	1804CST							
				0	0				Hail (0.75)

<b>Comanche County</b> Lawton	19	1810CST							
				0	0				Hail (0.75)

<b>Comanche County</b> Ft Sill Aaf	19	1815CST							
				0	0				Hail (0.88)

<b>Comanche County</b> 4 E Lawton	19	1815CST							
				0	0				Hail (0.88)

<b>Garfield County</b> 3 NE Breckinridge	19	1830CST							
				0	0				Hail (2.75)

<b>Comanche County</b> Sterling	19	1833CST							
				0	0				Hail (0.75)

<b>Caddo County</b> 4 NW Eakly	19	1843CST							
				0	0				Hail (1.75)

<b>Garfield County</b> Hunter	19	1850CST							
				0	0				Hail (0.88)

<b>Caddo County</b> 2 S Cogar	19	1918CST							
				0	0				Hail (0.88)

<b>Canadian County</b> 12 WSW El Reno	19	1920CST							
				0	0				Hail (0.88)

<b>Garfield County</b> 2 N Enid	19	1928CST							
				0	0				Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Garfield County</b>									
Enid	19	1930CST			0	0			Hail (2.25)
<b>Caddo County</b>									
4 S Cogar	19	1935CST			0	0			Hail (1.75)
<b>Caddo County</b>									
2 NE Lookeba	19	1940CST			0	0			Hail (1.00)
<b>Grady County</b>									
6 W Minco	19	1940CST			0	0			Hail (0.75)
<b>Caddo County</b>									
2 NE Lookeba	19	1950CST			0	0			Hail (0.88)
<b>Garfield County</b>									
3 NE Enid	19	2010CST			0	0			Hail (1.75)
<b>Canadian County</b>									
2 E Niles	19	2030CST			0	0			Hail (1.00)
<b>Canadian County</b>									
10 W Calumet	19	2045CST 2056CST			0	0			Hail (1.00)
<b>Blaine County</b>									
Geary	19	2053CST			0	0			Hail (1.00)
<b>Canadian County</b>									
Calumet	19	2108CST			0	0			Hail (1.75)
<b>Canadian County</b>									
8 WSW Okarche	19	2124CST			0	0			Hail (1.75)

Summary of events of June 19, 1998:

Severe thunderstorms affected several areas in the state the evening of the 19th. The largest hail reported was 3.5 inches in Hinton(Caddo County). In north-central Oklahoma, hail as large as baseballs fell in Garfield County; in southwest Oklahoma, Tillman and Comanche Counties reported hail as large as quarters; and in central Oklahoma hail to the size of golf balls fell in Canadian Counties.

See preceding individual Storm Data entries for further details and additional reports.

<b>Blaine County</b>									
Hitchcock	20	1615CST			0	0			Hail (1.75)
<b>Blaine County</b>									
4 E Watonga	20	1635CST			0	0			Hail (1.00)
<b>Garfield County</b>									
6 S Drummond	20	1636CST			0	0			Hail (1.75)
<b>Garfield County</b>									
Drummond	20	1650CST			0	0			Hail (1.80)
<b>Garfield County</b>									
10 S Enid	20	1654CST			0	0			Hail (1.75)
<b>Garfield County</b>									
Drummond	20	1655CST			0	0			Hail (1.75)
<b>Kingfisher County</b>									
15 NW Hennessey	20	1700CST			0	0			Hail (1.50)
<b>Garfield County</b>									
Enid	20	1730CST			0	0			Hail (1.25)
<b>Comanche County</b>									
8 NNW Indianoma	20	1745CST			0	0			Hail (0.88)
<b>Kingfisher County</b>									
Loyal	20	1748CST			0	0			Hail (1.00)
<b>Caddo County</b>									
Hinton	20	1750CST			0	0			Hail (1.00)
<b>Garfield County</b>									
2 W Kremlin	20	1750CST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

<b>Kingfisher County</b> 3 E Loyal	20	1805CST			0	0			Hail (1.00)
<b>Comanche County</b> Lawton	20	1830CST			0	0	0.75K		Thunderstorm Wind
Severe thunderstorm winds downed 6 utility poles.									
<b>Garfield County</b> Enid	20	1830CST			0	0			Hail (1.00)
<b>Kingfisher County</b> 1 W Kingfisher	20	1830CST			0	0			Hail (1.00)
<b>Canadian County</b> 6 WNW El Reno	20	1855CST			0	0			Hail (0.88)
<b>Oklahoma County</b> Bethany	20	1910CST			0	0	0.50K		Thunderstorm Wind
Severe thunderstorm winds downed power lines.									
<b>Canadian County</b> El Reno	20	1912CST			0	0			Hail (0.88)
<b>Oklahoma County</b> Oklahoma City	20	1923CST			0	0	0.50K		Thunderstorm Wind
Severe thunderstorm winds downed power lines in western Oklahoma City.									
<b>Canadian County</b> 6 NW Yukon	20	1927CST			0	0			Hail (1.00)
<b>Canadian County</b> 3 N Yukon	20	1935CST 1939CST			0	0			Hail (1.00)
<b>Canadian County</b> 5 SE Piedmont	20	1940CST			0	0			Hail (2.50)
<b>Logan County</b> 2 SW Guthrie	20	1940CST			0	0			Hail (0.88)
<b>Oklahoma County</b> Oklahoma City	20	1940CST			0	0			Hail (1.00)
Occurred on the northwest side of the city.									
<b>Oklahoma County</b> Oklahoma City	20	1952CST			0	0			Hail (1.25)
Occurred on the northwest side of the city.									
<b>Kay County</b> Tonkawa	20	2230CST			0	0			Hail (0.75)
<b>Grant County</b> Medford	20	2240CST			0	0			Hail (1.75)
<b>Grant County</b> Medford	20	2300CST 2305CST			0	0			Hail (0.88)
<b>Grant County</b> 5 NW Renfrow	21	0000CST			0	0			Hail (0.88)
<b>Kay County</b> Braman	21	0003CST			0	0			Hail (0.75)

Summary of events of June 20, 1998:

Severe thunderstorms moved across northern and central Oklahoma during the evening of the 20th. By far the greatest impact of the storms was the large hail. Widespread reports of large hail were received, with the largest hail (as large as tennis balls) reported southeast of Piedmont in Canadian County.

See preceding individual Storm Data entries for further details and additional reports.

<b>Harmon County</b> 9 NNE Hollis	21	1750CST			0	0			Hail (0.75)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Greer County</b> Willow	21	1830CST			0	0			Hail (1.00)
<b>Grant County</b> 6 SW Manchester	21	1855CST			0	0			Hail (1.00)
<b>Alfalfa County</b> 11 E Byron	21	1859CST			0	0			Hail (2.25)
<b>Grant County</b> 7 SSW Manchester	21	1859CST			0	0			Hail (2.25)
<b>Kiowa County</b> 12 NW Lone Wolf	21	1900CST			0	0			Hail (2.75)
<b>Washita County</b> Sentinel	21	1920CST			0	0			Hail (1.75)
<b>Grant County</b> 2 WNW Gibbon	21	1935CST			0	0			Hail (1.00)
<b>Washita County</b> 6 SW Dill City	21	1940CST			0	0	25K		<b>Thunderstorm Wind</b> Severe thunderstorm winds destroyed a hay barn and pop-up camper. The neighboring house and outbuildings also sustained roof damage.
<b>Washita County</b> 3 S Cordell	21	1942CST			0	0			Hail (1.00)
<b>Custer County</b> Weatherford	21	2007CST			0	0			Hail (0.88)
<b>Blaine County</b> 16 WSW Geary	21	2014CST			0	0			Hail (0.75)
<b>Grant County</b> 5 SE Renfrow	21	2035CST			0	0			Hail (1.00)
<b>Tillman County</b> 4 S Tipton	21	2140CST			0	0			<b>Thunderstorm Wind (G54)</b> Measured by the Oklahoma Mesonet

Summary of events of June 21, 1998:

Evening severe thunderstorms moved across northern and western Oklahoma, producing large hail and damaging thunderstorm winds. The largest hail was reported northwest of Lone Wolf in Kiowa County, where as large as baseballs fell. Thunderstorm wind gusts were measured at 62 mph by the Oklahoma mesonet site south of Tipton in Tillman County. Wind damage was reported southwest of Dill City in Washita County.

See preceding individual Storm Data entries for further details and additional reports.

<b>OKZ025</b>	<b>Oklahoma</b> 21 2200CST	1	0	<b>Excessive Heat</b> An 81-year old woman was found dead in her Oklahoma City home. F81PH
<b>OKZ025</b>	<b>Oklahoma</b> 29 1200CST	1	0	<b>Excessive Heat</b> A 76-year old man from Del City was found dead in his house.

Excessive heat and drought conditions affected western and central Oklahoma as well as western portions of north Texas from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September across central and southern Oklahoma and western portions of north Texas. The heat and drought was less severe across northwest and north central Oklahoma. In total, there were 21 fatalities and at least 5 injuries directly related to the heat. Agricultural losses are estimated at nearly 2 billion dollars for Oklahoma and 2.1 billion dollars for Texas. Sixty of Oklahoma's 77 counties and all of Texas's counties were declared federal disaster areas.

Excessive heat and drought began in May, intensified in July and August, and diminished in September and early October. Oklahoma City experienced it's 6th warmest and 16th driest May on record, while Wichita Falls experienced it's 3rd warmest and 3rd driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western and central Oklahoma and western portions of north Texas until early September. The heat and drought then ended

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## OKLAHOMA, Western, Central and Southeast

in early October when widespread rain and cooler temperatures returned to the southern plains.

The first fatality directly related to the heat occurred on June 21st, when an 81 year-old woman was found dead in her house in Oklahoma City (Canadian County). A 76 year-old man was then found dead in his Del City home on June 29th. The heat claimed 17 lives in July. The first occurred in Wichita Falls (Wichita County) on July 3rd, when a 75 year-old man was found dead in his home. Four heat related fatalities occurred between the 9th and the 11th. Two persons died on the 9th. A 46 year-old man was found dead in a hotel room in Oklahoma City with no air conditioning. The temperature in the room was 115 degrees. A 73 year-old man was then found dead in his Oklahoma City home. On July 10th, a 79 year-old man was found dead in his mobile home in Mulhall (Logan County). Another heat related fatality occurred on the 11th, when a 51 year-old woman was found dead in her home in Wewoka (Seminole County). The second and last report of a heat related fatality in western portions of north Texas occurred on the 14th, when a 74 year-old man was found dead in his Wichita Falls home.

On July 17th, in Altus (Jackson County, Oklahoma), a 79 year-old man was found dead in his home, while on the 19th, there were 3 heat related deaths reported. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City. The second fatality occurred in Guthrie (Logan County) when a 55 year-old man was found dead in his house, while the 3rd fatality occurred to a 78 year-old woman when she was found dead in her Oklahoma City apartment. On July 20th, a 78 year-old woman was found dead in her Duncan (Stephens County) home, while on the 21st, another 78 year-old woman was found dead in her home, this time in Guthrie (Logan County). Two persons died in their homes from the heat on the 27th, the first, a 61 year-old man from Oklahoma City, the second, a 67 year-old man found from Cromwell (Seminole County). The last heat related fatality occurred on the 30th, when a 62 year-old woman was found dead in her Oklahoma City home.

Three heat related fatalities were reported in August. The first occurred on the 2nd when a 53 year-old man was found dead inside his Oklahoma City home. The second heat related fatality occurred on the 3rd, when an 82 year-old man was found dead inside his Oklahoma City home. The last heat related fatality in August occurred on the 5th in Gene Autry (Carter County) when a 76 year-old man was found dead inside his home. Only one heat related fatality was reported in September, and occurred on the 4th. A 76 year-old man was found dead outside of a retirement home in Oklahoma City. He was found after he went for a walk and did not return.

Only 5 heat related injuries were reported during the 5 month-long heat and drought. Two persons from Wichita Falls were treated for heat related injuries on June 2nd at United Regional Health Care. Three troop members from Fort Sill (Comanche County) were rushed to a local hospital on July 22nd and treated for heat related injuries as well.

Statistics provided by the Oklahoma State Department of Agriculture indicate economic losses of approximately 2 billion dollars to the state's agriculture business. Figures were not available for individual counties. Hay and cotton crops were particularly hard hit. Hay producers harvested only 30 to 80 percent of the normal yield, a loss of perhaps 80 million dollars. Cotton production was reduced by about 70 percent, a loss of 38 million dollars. Other crops such as grain sorghum, peanuts and soybeans also suffered major losses. In total, crop losses across Oklahoma were near 500 million dollars, but because of the multiplying effect on the overall economy, this figure is more like 2 billion dollars when considering the effect on the state's economy. Agricultural losses across Texas total about 2.1 billion dollars with no specific statistics available on a county-by-county basis, however cotton losses are expected to contribute significantly to the total loss.

The summer of 1998 (June-August) was the 4th hottest and 5th driest in Oklahoma City on record, and the 2nd hottest and 7th driest in Wichita Falls. The drought ended gradually in September and early October, but record warm temperatures continued through September. Oklahoma City recorded an average temperature of 81.2 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of heat and drought to affect Oklahoma and western portions of north Texas, still ranks as the hottest summer ever for both Oklahoma City and Wichita Falls, however Oklahoma City did experience a drier summer in 1998 than in 1980.

M76PH

<b>Grant County</b> 5 SE Renfrow	<b>30</b>	<b>0835CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
<b>Kay County</b> 1 N Blackwell	<b>30</b>	<b>0900CST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G69)</b> Severe thunderstorm winds estimated at 70 to 80 mph downed power lines and blew a car off of Highway 11 east of I-35.
<b>Payne County</b> 8 NNW Stillwater	<b>30</b>	<b>1205CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
<b>Blaine County</b> Watonga	<b>30</b>	<b>1440CST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
<b>Blaine County</b> 7 W Watonga	<b>30</b>	<b>1507CST</b>	<b>0</b>	<b>0</b>	<b>Hail (1.50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA, Western, Central and Southeast</b>									
<b>Blaine County</b>									
Watonga	30	1515CST			0	0			Hail (1.00)
<b>Blaine County</b>									
17 SW Watonga	30	1550CST			0	0			Hail (1.75)
<b>Custer County</b>									
7 NW Weatherford	30	1555CST			0	0			Hail (1.00)
<b>Blaine County</b>									
Watonga	30	1600CST			0	0			Hail (1.00)
		Quarter size hail covered the ground.							
<b>Custer County</b>									
4 WSW Weatherford	30	1625CST			0	0			Thunderstorm Wind (G57)
		Measured by the Oklahoma Mesonet.							
<b>Custer County</b>									
4 WSW Weatherford	30	1705CST			0	0			Thunderstorm Wind (G64)
		Measured by the Oklahoma Mesonet.							
<b>Alfalfa County</b>									
Lambert	30	1707CST			0	0			Hail (0.88)
<b>Custer County</b>									
Arapaho	30	1710CST			0	0	0.10K		Thunderstorm Wind
		Severe thunderstorm winds downed a large tree.							
<b>Woods County</b>									
Hopeton	30	1740CST			0	0			Thunderstorm Wind (G52)
<b>Woods County</b>									
Dacoma	30	1743CST			0	0			Hail (0.75)
<b>Woods County</b>									
Waynoka	30	1830CST			0	0			Hail (0.75)
<b>Woods County</b>									
3 SSW Waynoka	30	1830CST			0	0			Hail (1.00)
<b>Major County</b>									
19 N Chester	30	1915CST			0	0			Hail (1.00)

Summary of events of June 30, 1998:

Severe thunderstorms moved across parts of northwest and western Oklahoma during the daytime hours of the 30th. Hail as large as golf balls fell southwest of Watonga in Blaine County. Thunderstorm winds were measured at speeds of up to 74 mph by the Oklahoma Mesonet near Weatherford in Custer County. Wind damage was reported in Arapaho in Custer County and north of Blackwell in Kay County.

See preceding individual Storm Data entries for further details and additional reports.

## **OREGON, Central and East**

**ORZ014**

**Central Oregon**

**01 0000PST**

**0 0**

**Flood**

**06 1200PST**

Flooding continued along Ochoco Creek in Prineville below the Ochoco Dam from heavy rain in late May. Seventy five residential structures were condemned as a result of flood damage and about 525 residences were affected by the flooding. Total flood damage was estimated at 13 million dollars, \$4.25 million in irrigation canal damage alone. There were no reports of deaths or injuries. The Governor of Oregon and President Clinton declared Crook County a disaster area. The rain had stopped falling by May 31 allowing Ochoco Creek returned to within its banks on June 6.

**Union County**

**La Grande**

**02**

**1600PST**

**0 0**

**Flash Flood**

**1900PST**

A sudden downpour caused flooding in southeast La Grande. Two creeks overflowed their banks closing several streets for nearly three hours. At least two houses had flood damage. Sand bags were used to try to keep water away from houses.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## OREGON, Central and East

### **Wasco County The Dalles**

02	1710PST 1745PST				0	0			<b>Heavy Rain</b>
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A thunderstorm that moved through The Dalles dumped up to 0.67 inches of rain in 20 minutes, knocked out power, and caused some flooding problems. The wind blew trees and tree limbs onto power lines causing power outages to much of the east side of town. Heavy rain caused minor street flooding, flooding of basements and businesses, and caused manhole covers to come loose. Rock slides were reported along hillsides. Pea sized hail was also reported.

### **Grant County Prairie City to Austin**

02	2030PST				0	0			<b>Flash Flood</b>
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Flash flooding was reported over Highway 26 in eastern Grant County. An RV park in Prairie City also flooded.

### **Crook County Post**

07	1150PST 1210PST				0	0			<b>Heavy Rain</b>
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One inch of rain fell in ten minutes.

### **ORZ019**

<b>Northeast Oregon</b>									
15	1800PST 2230PST				0	0	5K		<b>High Wind</b>

High wind blew tree branches onto wires causing three separate power outages of an hour each in the La Grande area. About 120 homes were without power.

### **Deschutes County Bend Sunriver Arpt**

30	1520PST 1550PST				0	0			<b>Heavy Rain</b>
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One inch of rain fell in thirty minutes with wind gusts 30 to 40 mph.

### **Deschutes County Tumalo**

30	1533PST 1600PST				0	0			<b>Hail (1.00)</b>
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Spotters in the Tumalo area reported one inch hail and wind gusts to 30 mph.

### **Crook County Prineville**

30	1540PST 1620PST				0	0			<b>Heavy Rain</b>
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Spotters in Prineville reported up to two inches of rain in 20 minutes, hail up to 1/2 inch, and wind gusts to 30 mph.

## OREGON, Northwest

NONE REPORTED.

## OREGON, Southeast

### **Malheur County 4 E Juntura**

12	1400MST				0	0	10K		<b>Flash Flood</b>
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### **Malheur County Juntura**

12	1400MST				0	0			<b>Hail (0.75)</b>
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During the afternoon of June 12th a severe thunderstorm moved through the Juntura area of southeast Oregon. Dime size hail was reported at Juntura. East of Juntura the storm triggered a flash flood onto Highway 21 near milepost 202. Six to 12 feet of water, mud and debris swept over the road. A car with two occupants was caught in the flood and carried 150 feet. No injuries were reported.

## OREGON, Southwest

NONE REPORTED.

## PACIFIC

NOT RECEIVED.

## PENNSYLVANIA, Central

### **Union County Lewisburg**

02	1035EST				0	0			<b>Thunderstorm Wind (G51)</b>
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Trees down south of Lewisburg.

### **Warren County Sugar Grove**

02	1550EST				0	0			<b>Thunderstorm Wind (G51)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
<b>Warren County</b> Scandia	02	1615EST			0	0			Hail (1.75)
Trees were down on Route 957 and Priest Hollow Road, east of Sugar Grove. Golf ball size hail fell in Scandia.									
<b>Schuylkill County</b> Pine Grove	02	1625EST			0	0			Hail (1.00)
<b>Snyder County</b> Selinsgrove	02	1625EST			0	0			Hail (1.30)
Hail, larger than quarters, dented vehicles south of Selinsgrove.									
<b>Mckean County</b> Custer City	02	1645EST 1650EST	8	440	0	0			Tornado (F1)
An F1 tornado touched down about 4 miles west of Custer City, leveling a large area of trees in the Allegheny National Forest. The storm crossed Route 219 at Custer City and then moved east along Route 770 for about 4 miles before ending in Tibbets Hollow. Extensive tree damage was observed within a 1/4-mile wide path, with downed trees causing most of the damage to homes. Thirty-one homes received minor damage, while seven homes were uninhabitable as a result of wind and tree damage. Additionally, the oil museum (a barn-like structure just north of Custer City), was destroyed. Eyewitnesses observed the tornado as it passed through the area.									
<b>Dauphin County</b> Gratz	02	1650EST			0	0			Hail (1.75)
Golf ball size hail.									
<b>Montour County</b> Mooresburg	02	1650EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Dauphin County</b> Williamstown	02	1704EST			0	0			Hail (1.00)
<b>Columbia County</b> Lime Ridge	02	1710EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Lebanon County</b> Fredericksburg	02	1725EST			0	0			Hail (1.00)
<b>Potter County</b> Clara	02	1725EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Schuylkill County</b> Pine Grove	02	1730EST			0	0			Hail (0.75)
<b>Dauphin County</b> Gratz	02	1745EST			0	0			Hail (0.75)
<b>Clearfield County</b> Mahaffey Jct	02	1800EST			0	0			Hail (1.00)
<b>Somerset County</b> Markleton to Boynton	02	1800EST 1830EST	12	880	0	0			Tornado (F2)
This F2 tornado was the first of two tornadoes to cross southern Somerset County on the evening of June 2. It would cross the path of the May 31st tornado that struck Salisbury. The tornado initially touched down about 4 miles southeast of Markleton, then tracked southeast for 12 miles across the Boynton area, crossing the May 31st track about 3 miles east of Salisbury. The storm continued southeast to the Maryland border, continuing an additional 12 miles into Maryland for a total damage length of 24 miles across two states. the town of Boynton was hard hit, but most of the remaining damage in Pennsylvania was to trees. There were no deaths or injuries. See additional details in the Seven Springs to Pocahontas tornado that paralleled the track of this storm just two hours later.									
<b>Potter County</b> Galeton	02	1805EST			0	0			Hail (0.88)
<b>Tioga County</b> Middlebury Center	02	1805EST			0	0			Thunderstorm Wind (G51)
Trees down. Funnel cloud sighted.									
<b>York County</b> Dover	02	1810EST			0	0			Hail (1.25)
<b>Schuylkill County</b> Pine Grove	02	1825EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **PENNSYLVANIA, Central**

### **Clearfield County**

<b>Irvona</b>	<b>02</b>	<b>1830EST 1832EST</b>	<b>0.2</b>	<b>50</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>
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An F0 tornado cut a narrow swath of tree damage along a 1/4-mile path, about two miles northwest of Irvona, around 7:30 pm in the evening of Tuesday, June 2. The tornado occurred along State Route 3014, along Holes Run, a small stream that runs parallel to the road. Damage was confined to trees. Width of the damage path was only about 50 yards wide. In addition, downburst winds caused intermittent tree damage over a three-mile wide and seven-mile wide long path stretching from near Newburg, southeast to Irvona.

### **York County**

<b>Loganville to Red Lion</b>	<b>02</b>	<b>1840EST 1855EST</b>	<b>4</b>	<b>25</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>
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A Fire Captain in Loganville reported sighting a big black funnel cloud. Although he did not observe any damage, he witnessed the funnel touch the ground. The tiny tornado did cause damage to crops and trees near Red Lion at the end of its path. Hail of ping pong balls fell just prior to the storm, and a corkscrew pattern of damage was noted in a field with trees damaged nearby.

### **Centre County**

<b>Snow Shoe</b>	<b>02</b>	<b>1842EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G51)</b>
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Trees damaged. Funnel clouds sighted.

### **Clearfield County**

<b>Sabula</b>	<b>02</b>	<b>1847EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G51)</b>
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Trees down.

### **Blair County**

<b>Tyrone</b>	<b>02</b>	<b>1850EST 1855EST</b>	<b>4</b>	<b>150</b>	<b>0</b>	<b>0</b>			<b>Tornado (F1)</b>
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An F1 tornado moved southeast along Route 453 northwest of Tyrone. Significant tree damage was noted in several locations along a 4-mile path, beginning about 5 miles northwest of Tyrone. No significant damage was reported in Tyrone, although eyewitnesses reported seeing clouds rotating as they crossed the city.

### **Elk County**

<b>St Marys</b>	<b>02</b>	<b>1930EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Huntingdon County**

<b>Warriors Mark</b>	<b>02</b>	<b>1935EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G51)</b>
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Trees down.

### **Somerset County**

<b>Bakersville to Pleasant Union</b>	<b>02</b>	<b>2000EST 2045EST</b>	<b>28</b>	<b>1760</b>	<b>0</b>	<b>0</b>			<b>Tornado (F3)</b>
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The second tornado of the evening, and the third to strike Somerset County in 3 days, this F3 was by far the longest and strongest of the trio. The storm created a path of damage 29 or more miles long, beginning in Fayette County from just southwest of the Seven Springs resort to just north of the Maryland state line east of Pocahontas. In some locations, the tornado was up to one mile wide. It followed a path nearly parallel to and about 3/4 mile north of the earlier tornado, but some locations in-between experienced damaging winds from both. Its southern extent also overlapped areas in the northern portion of the 31 May tornado track near Pocahontas. Damage from this tornado was rated at F3 on the Fujita scale, with winds of 158 to 206 mph. Many farms were completely destroyed as this tornado moved through generally rural areas in southern Somerset County. A family in Laurel Falls, near Summit Mills and St. Paul, took shelter in a basement corner behind a television set. As the twister passed, they looked up to find all three stories of their house gone, along with eight rows of foundation blocks. A battery operated clock found the next morning had stopped at 9:38 pm. A neighbor told of losing electricity, then getting a phone call from his brother to warn him. He and his family took shelter in a hall closet because they had no basement. They told of hearing a buzzing noise, like a giant bee's nest. Another neighbor found her mobile home flipped on its roof after taking shelter at her son's house. When the first tornado of the evening missed a Laurel Falls family mobile home, they proceeded to a neighbor's home. The second storm blew the trailer off its foundation. Residents of Boynton were cleaning up trees with chainsaws and front end loaders from the first tornado around 7:30 pm EDT when firefighters came by and told them to get back inside because another tornado was on its way. The second tornado broke all the windows from one house, ripped the roof off another and a barn. One person told of seeking shelter from rain in a shed when the first tornado passed, then going to the home basement when the second came through, mentioning that she was unable to pull the basement door shut behind her. The shed disappeared during the second storm. A carpentry shop near Pocahontas that had been destroyed by the May 31st tornado on Sunday was already being rebuilt by Amish farmers when the framing was blown over by this third tornado. Estimated damage from Tuesday evening tornadoes included 30 to 40 properties, including permanent and seasonal residences and farms. There were no deaths and no injuries from this severe (F3) tornado. However, over 100 head of cattle were killed in one barn alone, which was completely destroyed. Many other farms lost tens of cattle and other livestock.

### **Centre County**

<b>Howard</b>	<b>02</b>	<b>2005EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Centre County**

<b>Philipsburg</b>	<b>02</b>	<b>2035EST 2040EST</b>	<b>0.5</b>	<b>67</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **PENNSYLVANIA, Central**

An F0 tornado toppled a number of large walnut trees at a home off Dunkel Run Road about 3 miles northwest of Bald Eagle. A telephone pole was also snapped off. Eyewitnesses told of seeing the telephone pole twist around completely at least once before being snapped off. Hail up to 1 inch was observed just prior to the tornado touchdown.

### **Northumberland**

#### **County**

**Shamokin to  
Mt Carmel**

<b>02</b>	<b>2040EST 2055EST</b>	<b>15</b>	<b>440</b>	<b>0</b>	<b>0</b>	<b>Tornado (F1)</b>
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An F1 tornado first touched down in Irish Valley, northwest of Shamokin, around 9:40 pm and produced an intermittent path of extensive tree damage southeast into Mt. Carmel. The storm weakened as it crossed the mountain ridges, but regained strength through the valleys along the 15-mile path. Trees were leveled just south of Millers Crossroads where initial damage began. The tornado destroyed part of a barn in Irish Valley, then traveled eastward causing minor damage to structures and topping many trees in Weigh Scales just north of Shamokin. The tornado continued eastward over Big Mountain, through the community of Sagon, clipping the northern parts of Kulpmont and southern sections of Marion Heights. Tops of trees were broken off as the storm finally ended over the northern parts of Mt. Carmel. One hundred homes in Kulpmont sustained minor damage, mainly caused from falling debris, although many lost pieces of shingles or spouting.

### **Columbia County**

**Centralia**

<b>02</b>	<b>2045EST</b>			<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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### **Schuylkill County**

**Ashland**

<b>02</b>	<b>2110EST</b>			<b>0</b>	<b>0</b>	<b>Hail (1.00)</b>
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### **Schuylkill County**

**Frackville**

<b>02</b>	<b>2120EST</b>			<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G51)</b>
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Trees down.

### **Somerset County**

**Hooversville**

<b>13</b>	<b>1050EST</b>			<b>0</b>	<b>0</b>	<b>Hail (0.88)</b>
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### **Schuylkill County**

**Pottsville**

<b>13</b>	<b>1530EST</b>			<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G51)</b>
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Large trees and limbs were blown down.

### **York County**

**York**

<b>13</b>	<b>1630EST</b>			<b>0</b>	<b>1</b>	<b>Lightning</b>
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A 14-year old female was treated for minor injuries after being shocked by what was termed a static discharge when lightning struck a residence in York.

### **Dauphin County**

**Hershey**

<b>13</b>	<b>1700EST 1830EST</b>			<b>0</b>	<b>0</b>	<b>Flash Flood</b>
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2.5 inches of rain fell in 45 minutes, flooding roads and small streams in the Hershey area.

### **Lancaster County**

**Manheim**

<b>13</b>	<b>1730EST 1930EST</b>			<b>0</b>	<b>0</b>	<b>Flash Flood</b>
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Route 72 flooded with a foot of water. Street flooding also stalled vehicles in Lancaster.

### **Somerset County**

**Central City**

<b>16</b>	<b>1645EST</b>			<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G51)</b>
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Trees down.

### **Cambria County**

**Johnstown**

<b>16</b>	<b>1705EST 1710EST</b>	<b>0.2</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>Tornado (F1)</b>
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A tornado touched down in Coopersdale, a northern suburb of the city of Johnstown. The storm removed the roofs of two high-rise public housing apartment buildings, throwing debris onto a third building and damaging that roof also. The arched roofs had been built atop the original flat roofed buildings and, probably because of their shape, were lifted off by the strong winds. A few trees were damaged in the area, but surface damage was minimal considering the extent of damage to the roofs.

### **Blair County**

**Holidaysburg**

<b>16</b>	<b>1715EST</b>			<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G51)</b>
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Trees down in Homer Gap.

### **Bedford County**

**Osterburg**

<b>16</b>	<b>1715EST</b>			<b>0</b>	<b>1</b>	<b>Thunderstorm Wind (G51)</b>
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### **Bedford County**

**Menoh**

<b>16</b>	<b>1720EST</b>			<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G70)</b>
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### **Bedford County**

**Hyndman**

<b>16</b>	<b>1725EST</b>			<b>0</b>	<b>1</b>	<b>Thunderstorm Wind (G51)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
Thunderstorm winds blew down trees across the county. In Osterburg a woman suffered a broken arm when a tree fell on her near the ballfield. A farmer in Menoh escaped injury when he sought shelter in a milking parlor section of a barn, only to have the barn flattened around him. Fortunately, he was in a cinder block portion of the barn that remained in place. In Hyndman, many trees were downed, mobile home roofs were bowed, and lawn ornaments were blown away at a trailer park.									
<b>Fulton County</b> Mc Connellsburg	16	1745EST			0	0			<b>Thunderstorm Wind (G51)</b>
Thunderstorm winds blew parts of a roof off the milking parlor and took down some trees at the county fairgrounds.									
<b>Clearfield County</b> Beccaria	16	1749EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees down.									
<b>Lycoming County</b> Picture Rocks	16	1750EST 1755EST	2	250	0	0			<b>Tornado (F1)</b>
This tornado touched down in rural lands 6.5 miles east of Picture Rocks, uprooted and snapped off dozens of trees along a path containing 5 distinct swaths of damage. There was no damage to homes.									
<b>Adams County</b> Gettysburg	16	1753EST			0	0			<b>Thunderstorm Wind (G51)</b>
Winds gusted to 60 mph in Gettysburg and trees and powerlines were down across the county.									
<b>Huntingdon County</b> Warriors Mark	16	1800EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees down.									
<b>Centre County</b> State College	16	1810EST			0	0			<b>Thunderstorm Wind (G51)</b>
Winds gusted to 60 mph and trees were down in State College.									
<b>Columbia County</b> Benton	16	1810EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees down.									
<b>Franklin County</b> Waynesboro	16	1810EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees and wires down.									
<b>Mifflin County</b> Lewistown	16	1815EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees and wires down.									
<b>York County</b> York	16	1815EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees blocked roads and damaged some homes in York and other areas of the county.									
<b>Cumberland County</b> Carlisle	16	1825EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees were blown over and a funnel cloud was sighted.									
<b>Perry County</b> Newport	16	1835EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees were blown down in Newport and a roof was blown off a mobile home in Shermans Dale.									
<b>Juniata County</b> Mc Alisterville	16	1845EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees down.									
<b>Dauphin County</b> Harrisburg	16	1850EST			0	0			<b>Thunderstorm Wind (G53)</b>
Winds gusted to 61 mph and trees were blown down in Harrisburg.									
<b>Lancaster County</b> Lancaster	16	1850EST			0	0			<b>Thunderstorm Wind (G51)</b>
Trees were damaged in Lancaster or other areas of the county.									
<b>Lycoming County</b> Picture Rocks	16	1850EST 1855EST	0.2	30	0	0			<b>Tornado (F1)</b>
This unusual anticyclonic tornado probably occurred in coincidence with the cyclonic storm. It, too, was located 6.5 miles east of Picture Rocks on Route 2077. About a dozen trees were uprooted and at the end of the storm's path a window was blown out of a home.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
<b>Lebanon County</b>									
Lebanon	16	1900EST			0	0			Thunderstorm Wind (G51)
Trees were blown down in Lebanon and Annville. Tents were also destroyed at the Indian Town Gap National Guard.									
<b>Northumberland County</b>									
Sunbury	16	1930EST			0	0			Thunderstorm Wind (G51)
Trees and wires down.									
<b>Schuylkill County</b>									
Klingerstown	16	1930EST			0	0			Thunderstorm Wind (G51)
A tree was blown over on a firetruck.									
<b>Snyder County</b>									
Selinsgrove	16	1930EST			0	0			Thunderstorm Wind (G51)
A tree was blown onto a house in Selinsgrove.									
<b>Lancaster County</b>									
Ephrata	16	1935EST			0	0			Thunderstorm Wind (G51)
Trees and wires down.									
<b>Montour County</b>									
Danville	16	1940EST			0	0			Thunderstorm Wind (G52)
Wind gusts to 60 mph were reported in Danville.									
<b>Columbia County</b>									
Benton	16	1956EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Lycoming County</b>									
Muncy	16	2000EST 2300EST			0	0			Flash Flood
Streets and small streams flooded.									
<b>Columbia County</b>									
Benton	16	2015EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Lycoming County</b>									
Glen Mawr	16	2015EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Somerset County</b>									
Bakersville	19	0215EST			0	0			Hail (0.88)
Nickel size hail fell in Seven Springs.									
<b>Somerset County</b>									
Confluence	19	0700EST 1100EST			0	0			Flash Flood
Small streams flooded across southern parts of the county.									
<b>Cambria County</b>									
Johnstown	19 20	2315EST 0215EST			0	0			Flash Flood
Route 405 was closed by mudslides.									
<b>Clinton County</b>									
Flemington	20	1500EST			0	0			Thunderstorm Wind (G80)
Thunderstorm downbursts crossed the Flemington and Lock Haven areas, taking down at least 100 trees in Flemington and western parts of Lock Haven. The path of damage was about 4 miles long and 3/4-mile wide, touching down initially about 3 miles west-northwest of Lock Haven and traveling southeast into the city. Two microbursts occurred on the south edge of the downburst path. The first microburst uprooted about 100 trees with winds about 80 mph. No structures were damaged, but cars were struck by falling trees. The second microburst, of lesser intensity, snapped a dozen trees. One damaged a car, and another a building. Hail of 5/8 inch diameter or slightly less than dime size was also reported.									
<b>Elk County</b>									
Boot Jack	23	1400EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Elk County</b>									
West Central Portion	23	1400EST 1800EST			0	0			Flash Flood
Small stream and poor drainage flooding in rural areas west of Ridgway.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
<b>Mckean County</b>									
Port Allegany	23	1515EST			0	0			Tstm Wind/Hail
			Trees were down and nickel size hail was reported.						
<b>Potter County</b>									
Genesee	23	1530EST 1830EST			0	0			Flash Flood
			Three inches of rain fell in 40 minutes, causing rapid flooding of roads and small streams.						
<b>Tioga County</b>									
Tioga	23	1530EST 2130EST			0	0			Flash Flood
			Torrential downpours produced severe flooding in Tioga and Elkhorn. Roads were closed and people were evacuated.						
<b>Bedford County</b>									
Bedford	23	1600EST 1830EST			0	0			Flash Flood
			Roads closed by flooding.						
<b>Huntingdon County</b>									
Petersburg	23	1630EST			0	0			Thunderstorm Wind (G51)
			Trees down.						
<b>Centre County</b>									
Milesburg	23	1700EST			0	0			Thunderstorm Wind (G51)
			Trees down.						
<b>Franklin County</b>									
Quincy	23	1730EST 2030EST			0	0			Flash Flood
			Roads flooded.						
<b>York County</b>									
Spring Grove	23	1900EST 2300EST			0	0			Flash Flood
			Torrential rains flooded the Spring Grove and Hanover areas. Five people were rescued.						
<b>Lebanon County</b>									
Lebanon	23	2050EST 2330EST			0	0			Flash Flood
			Many roads flooded in the Lebanon area.						
<b>Dauphin County</b>									
Harrisburg	23	2100EST 2330EST			0	0			Flash Flood
			Heavy rains flooded roadways and small streams in the Harrisburg area.						
<b>Lebanon County</b>									
Indiantown Gap	26	1215EST			0	0			Thunderstorm Wind (G66)
			Wind gusts to 76 mph were reported at Fort Indiantown Gap.						
<b>Lebanon County</b>									
Ono	26	1245EST			0	0			Thunderstorm Wind (G51)
<b>Lebanon County</b>									
Lebanon	26	1245EST			0	0			Thunderstorm Wind (G51)
			Many trees were down in Ono, Palmyra, Lebanon, and other parts of the county.						
<b>Dauphin County</b>									
Middletown	26	1320EST			0	0			Hail (0.75)
<b>Lancaster County</b>									
Bowmansville	26	1320EST			0	0			Thunderstorm Wind (G51)
<b>Dauphin County</b>									
Hershey	26	1330EST			0	0			Thunderstorm Wind (G51)
			Trees down in Hershey and Hummelstown area.						
<b>Lancaster County</b>									
Neffsville	26	1330EST			0	0			Hail (1.25)
<b>Lancaster County</b>									
Denver	26	1336EST			0	0			Thunderstorm Wind (G51)
<b>Lancaster County</b>									
Churchtown	26	1356EST			0	0			Thunderstorm Wind (G51)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
Thunderstorms downed trees across parts of Lancaster County with trees reported on cars in Denver and Bowmansville. Pebble or quarter size hail fell in Neffsville. No injuries were reported.									
<b>Warren County Sheffield</b>	30	1300EST			0	0			<b>Hail (0.75)</b>
		Dime size hail.							
<b>Mckean County Kane</b>	30	1320EST			0	0			<b>Thunderstorm Wind (G51)</b>
<b>Mckean County Bradford</b>	30	1348EST			0	0			<b>Hail (0.88)</b>
<b>Mckean County Rew</b>	30	1400EST			0	0			<b>Hail (0.88)</b>
		Trees were down on Route 6 east of Kane, and nickel size hail was reported in Bradford and Rew.							
<b>Cameron County Emporium</b>	30	1405EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							
<b>Cameron County Sinnamahoning</b>	30	1430EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							
<b>Clearfield County Du Bois</b>	30	1430EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							
<b>Tioga County Wellsboro</b>	30	1434EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							
<b>Cambria County Vintondale to Nanty Glo</b>	30	1505EST 1515EST	5	50	0	0			<b>Tornado (F0)</b>
		A small F0 tornado embedded in a larger area of downburst tree damage extended from the community of Vintondale east along Route 271 to Nanty Glo. Width of the tornado damage was only about 50 yards, with downburst damage as wide as 1/2-mile in spots across the two towns. Eyewitnesses told of seeing a rotating funnel in both locations, and in Vintondale a man watched as his patio grill was lifted off the deck and spun over his roof. One home in Vintondale was significantly damaged when an uprooted tree toppled onto the structure. A fire chief in Nanty Glo described watching a rotating cloud from a high vantage point as the trees were downed on Lincoln Avenue.							
<b>Somerset County Gray to Stoystown</b>	30	1505EST 1530EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Downburst winds began at the top of Laurel Mountain in Forbes State Forest near the Westmoreland County line. Damage from the downburst extended east-southeast for nearly 23 miles, occasionally uprooting or snapping a tree and causing more general limb damage. Communities affected were Gray, Ralphton, Stoystown, and Buckstown. Path of minimal damage was up to 2 miles wide near Stoystown. A small (F1) tornado formed near the end of the damage path in Buckstown (see Buckstown tornado).							
<b>Cambria County Ebensburg</b>	30	1510EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Several trees down, one on a car.							
<b>Somerset County Thomas Mill</b>	30	1510EST			0	0			<b>Thunderstorm Wind (G51)</b>
<b>Clinton County Renovo</b>	30	1512EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							
<b>Lycoming County Jersey Shr</b>	30	1515EST			0	2			<b>Thunderstorm Wind (G51)</b>
		A Jersey Shore couple were injured when a tree fell on their pickup truck.							
<b>Centre County Phillipsburg</b>	30	1520EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees and powerlines down.							
<b>Clinton County Mackeyville</b>	30	1520EST			0	0			<b>Thunderstorm Wind (G51)</b>
		Trees down.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, Central</b>									
<b>Somerset County</b>									
Hooversville	30	1520EST			0	0			Thunderstorm Wind (G51)
<b>Somerset County</b>									
Buckstown	30	1525EST 1530EST	0.2	70	0	0			Tornado (F1)
This small (F1) tornado had just a 1/4-mile path, but was embedded within a larger area of downburst winds that began at the top of Laurel Mountain in Forbes State Forest and extended east-southeast for nearly 23 miles. Width of the damage was about 70 yards, with downburst damage nearly a mile wide. No one witnessed the tornado, but several told of hearing a roar, with wind and rain beginning simultaneously. About 100 trees were taken down by the storm.									
<b>Lycoming County</b>									
Montoursville	30	1531EST			0	0			Thunderstorm Wind (G51)
Winds gusted to 60 mph at Montoursville.									
<b>Blair County</b>									
Altoona	30	1535EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Fulton County</b>									
Wells Tannery	30	1555EST			0	0			Thunderstorm Wind (G51)
Trees down on Route 915 east of Wells Tannery.									
<b>Huntingdon County</b>									
Marklesburg	30	1555EST			0	0			Thunderstorm Wind (G51)
Trees down county-wide.									
<b>Bedford County</b>									
Bedford	30	1600EST			0	0			Thunderstorm Wind (G51)
Many trees were blown down in Bedford and surrounding areas. A recruitment trailer for the National Guard next to the WalMart on Route 30 was hurled about 30 feet by the winds and came to rest upside-down on a parked vehicle. No one was injured.									
<b>Union County</b>									
Lewisburg	30	1600EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Juniata County</b>									
Mifflintown	30	1610EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Sullivan County</b>									
Laporte	30	1610EST			0	0			Hail (0.75)
<b>Snyder County</b>									
Middleburg	30	1615EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Northumberland County</b>									
Milton	30	1620EST			0	0			Thunderstorm Wind (G51)
Trees down in Milton and other parts of the county.									
<b>Montour County</b>									
Danville	30	1620EST			0	0			Thunderstorm Wind (G51)
Trees down in Danville and other parts of the county.									
<b>Columbia County</b>									
Bloomsburg	30	1620EST			0	0			Thunderstorm Wind (G51)
Trees down in Bloomsburg and Berwick. A billboard was blown over in Bloomsburg.									
<b>Mifflin County</b>									
Lewistown	30	1620EST			0	0			Thunderstorm Wind (G51)
Trees down.									
<b>Perry County</b>									
Landisburg	30	1630EST			0	0			Thunderstorm Wind (G51)
Trees down in Landisburg and Shermansdale.									
<b>Schuylkill County</b>									
Mahanoy City	30	1635EST			0	0			Tstm Wind/Hail
Nickel size hail and trees down in Mahanoy City.									
<b>Franklin County</b>									
Greencastle	30	1641EST			0	0			Thunderstorm Wind (G51)
Fence blown over and gusts to 60 mph.									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## PENNSYLVANIA, Central

### **Cumberland County**

**Camp Hill**      **30**      **1645EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Trees down.

### **Dauphin County**

**Hershey**      **30**      **1645EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Trees blocked roads and winds downed powerlines in Hershey.

### **Lebanon County**

**Lebanon**      **30**      **1650EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Trees down in Lebanon and countywide. The county received 35 reports of trees and wires down, with no area spared.

### **Dauphin County**

**Middletown**      **30**      **1655EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Gusts to 60 mph at the airport in Middletown and trees down in Elizabethtown.

### **York County**

**Foustown**      **30**      **1705EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Trees down in Fairview Township near Frogtown.

### **Cumberland County**

**Shiremanstown**      **30**      **1710EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
Trees down. A large sale tent at the mall in Camp Hill was blown over by the storm.

### **Lancaster County**

**Lancaster**      **30**      **1730EST**      **0**      **0**      **Thunderstorm Wind (G51)**  
A number of trees were blown down in the area. A Manheim Township resident attempting to retrieve her trash cans that were blowing away was uninjured when winds blew the top out of a tree. A 20-foot section of the tree came crashing down as she tried to flee. Fortunately, one branch forming a "V" missed her head by just a couple of inches. Her husband found her dazed, covered, and surrounded by branches, but unharmed.

## PENNSYLVANIA, East

### **Montgomery County**

**Norristown to Abington**      **01**      **0001EST**  
**0015EST**      **0**      **0**      **Thunderstorm Wind (G56)**

A line of severe thunderstorms intensified as it moved through the southern half of Montgomery County and did drop a tornado over Upper and Lower Moreland Townships. But before that happened, the thunderstorms caused wind damage in and around Norristown. In eastern Norristown, trees were split on two blocks. In Plymouth Township, there was a two mile long path of wind damage, mainly downed trees and a couple of snapped utility poles. Trees toppled onto at least three homes and/or garages and damaged at least two vehicles. In Lower Merion Township, major tree damage was reported on four roads. Roof damage also occurred to a building within the Wynnewood Shopping Center. In Conshohocken, trees damaged one home. The wind damage intensified further near the Morelands. Wind damage was reported in the neighboring townships of Abington, Cheltenham, Springfield and Upper Dublin Townships. In Upper Dublin Township, emergency personnel responded to 15 to 20 calls of downed trees blocking driveways and streets. PECO Energy reported 60,000 customers in Montgomery County lost power. Power was not completely restored until the morning of June 4th. It was the worst non-winter storm in PECO Energy's 50 year history and the fourth worst overall. According to their lightning detection system, there were 7,000 cloud to ground lightning strikes in their service area as this line of thunderstorms moved through. More than 350 poles were damaged and they distributed 365,000 pounds of dry ice.

### **Delaware County**

**Countywide**      **01**      **0005EST**  
**0020EST**      **0**      **0**      **Thunderstorm Wind (G60)**

A squall line of severe thunderstorms caused wind damage in nearly every township in Delaware County and hit the western part of the county the hardest. The hardest hit townships were Aston, Bethel and Concord. About 30 homes suffered minor damage. The worst damage occurred to the cabins at Camp Sunshine in Thornbury Township. A few were either badly damaged or destroyed. Emergency personnel responded to over 250 calls during the first hour after the storm hit alone. There were over 230 calls for tree removals throughout the county. About 100,000 PECO Energy customers lost power throughout the county, second only to Chester County for this event. About 2,000 customers also lost use of their phones and 20,000 cable subscribers lost that service. U.S. Route 1 was closed due to downed trees as were Pennsylvania State Routes 320, 352 and 452. Many school districts cancelled classes on June 1st.

In Thornbury Township, Camp Sunshine was hit hard. Uprooted trees destroyed one cabin, badly damaged two others and caused roof damage to ten others. A trampoline was carried one mile away. Several major roads were closed. In Concord Township and Chester Heights Borough, nearly every road was closed. In Middletown Township rows of trees were knocked down. At the Hidden Hollow Swim Club alone about a dozen trees were knocked down including a 300-year-old beech tree. In Bethel Township, numerous trees were uprooted along Garnet Mine Road. In Chester City, a nine block stretch from Parkside through Chester Park had numerous downed trees and power lines. Some of the trees were more than 200 years old. Trees damaged homes

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## PENNSYLVANIA, East

in Springfield and Ridley Townships. In Marple Township, the Evergreen Club Apartments were described as a shamble with numerous trees and wires down. Some trees crashed into the building. Downed trees and road closures were also reported in the following municipalities: Aston, Brookhaven, Chichester, Haverford, Media, Nether Providence, Radnor, Ridley Park, Swarthmore and Yeadon.

PECO Energy reported 100,000 customers lost power in Delaware County. Fourteen thousand still did not have power the morning of June 2nd. Power was not completely restored until the morning of June 4th. It was the worst non-winter storm in PECO Energy's 50 year history and the fourth worst overall. According to their lightning detection system, there were 7,000 cloud to ground lightning strikes in their service area as this line of thunderstorms moved through. More than 350 poles were damaged and they distributed 365,000 pounds of dry ice.

### **Bucks County**

**4 S New Hope to  
Andalusia**

<b>01</b>	<b>0010EST 0025EST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G50)</b>
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A squall line of severe thunderstorms caused wind damage in Lower Bucks County. The worst damage occurred near the Philadelphia and Montgomery County lines with the severe thunderstorm that dropped the tornado on those two areas. Wind damage was reported from Upper Makefield to Bristol Township with Bensalem and Bristol Townships the hardest hit. Six school districts cancelled classes on June 1st because of power outages. In Bensalem Township, downed trees caused power outages on six major routes. The Village Square Apartment lost part of its roof because of a fallen tree. A fallen tree also caused minor damage to the Holy Ghost Preparatory School building. The Bensalem Golf Course lost a number of trees. About 20,000 homes and businesses lost power in Bucks County - the least of the five southeastern Pennsylvania counties served by PECO Energy. There were still 4,500 customers without power the night of the first.

### **Delaware County**

**Upper Darby**

<b>01</b>	<b>0010EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Lightning</b>
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Lightning struck the corner of a Catholic school building in Upper Darby Township and blew off some cinder blocks from the building.

### **Montgomery County**

**2 S Hatboro**

<b>01</b>	<b>0012EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Lightning</b>
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### **Montgomery County**

**2 NW Ambler**

<b>01</b>	<b>0020EST</b>			<b>0</b>	<b>1</b>	<b>100K</b>	<b>0</b>		<b>Lightning</b>
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In addition to the tornado, the line of thunderstorms were prolific lightning producers. Lightning started two building fires in Lower Montgomery County. In Upper Moreland Township, a barn burned to the ground on Terwood Road. No damage estimate was available. In Lower Gwynedd Township, the fire that started in a large three story home caused about \$100,000 in damages. One fire fighter suffered smoke inhalation battling the blaze.

### **Philadelphia County**

**Philadelphia**

<b>01</b>	<b>0017EST 0022EST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G62)</b>
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The same squall line that dropped the tornado in the extreme northeast part of the city also produced scattered pockets of wind damage throughout Philadelphia. The wind gusted to 71 mph at the Philadelphia International Airport and damaged a couple of planes. The wind also gusted to 62 mph at Northeast Philadelphia Airport. Trees were uprooted along a four block stretch in the Chestnut Hill Section. Trees and tree limbs were also knocked down in the Olney Section. At least one vehicle was damaged. PECO Energy reported 34,000 homes and businesses lost power during the height of the storm within the city, most along the path of the tornado. About 5,000 customers still had no power during the evening of the 1st.

### **Philadelphia County**

**2 N Bustleton to  
4 E Bustleton**

<b>01</b>	<b>0020EST 0028EST</b>	<b>5.6</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>1.8M</b>	<b>0</b>		<b>Tornado (F2)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## PENNSYLVANIA, East

A tornado ripped through Upper and Lower Moreland Townships as well as extreme northeast Philadelphia during the early morning of June 1st. The tornado was rated as an F1 (A weak tornado on the Fujita Scale) in Montgomery County and intensified into an F2 (or strong tornado on the Fujita Scale) within Philadelphia. The worst damage occurred within the unoccupied Byberry Industrial Park as the tornado reached its strongest intensity. Thirty-five commercial buildings were damaged, nine severely. Damage outside of the industrial park was mainly confined to downed trees. About ten homes were damaged by fallen trees. The damage within Philadelphia was discontinuous suggesting the tornado was not on the ground for its entire lifetime across the city. Damage was estimated at \$1.8 million dollars. Because the buildings were unoccupied, no injuries occurred.

The tornado moved into the city from Lower Moreland Township in the Bustleton/Lumar Park area around 120 a.m. EDT. Trees were split and knocked down. The tornado intensified into a strong one (F2 on the Fujita Scale) as it crossed into the Byberry Industrial Park. The worst damage was done in the area around Byberry Road, McNulty Road, Roosevelt Boulevard and Southampton Road. Five ton air conditioning units were tossed. Of the 35 commercial buildings damaged, nine were severely damaged and declared "imminently dangerous". Slabs of the roof were tossed 200 yards. Some buildings lost entire sides, had buckled steel beams, shattered windows and crushed equipment. The tornado plucked utility poles from the ground. About 20 poles were knocked over. Five teams of tree service personnel were overwhelmed. Damage south of the industrial park became sporadic as the tornado turned toward the southeast. It lifted just before the Bucks County border near Woodhaven Road just to the southeast of the Franklin Mills Mall. Its path length was about 5.6 miles and path width about 200 yards.

PECO Energy reported 34,000 customers in Philadelphia lost power. Five thousand still did not have power the evening of the 1st. It was the worst non-winter storm in PECO Energy's 50 year history and the fourth worst overall. According to their lightning detection system, there were 7,000 cloud to ground lightning strikes in their service area as this line of thunderstorms moved through.

### **Berks County Countywide**

<b>02</b>	<b>1750EST 1915EST</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Funnel Cloud</b>
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Three separate thunderstorms moved through Berks County the evening of June 2nd and produced numerous funnel clouds across the county from 650 p.m. until 815 p.m. EDT. None of them touched down. The first funnel cloud was sighted in Frystown in Bethel Township. The same thunderstorm produced numerous funnels from Bernville to Centerport around 7 p.m. EDT and then from Oley to Boyertown. An hour later, another funnel cloud was spotted over Bethel Township and Bernville again. Funnel clouds were also seen around Reading in Mount Penn and Laureldale. Other funnel cloud sightings occurred in Leesport, Lyons, Ruscombmanor, Upper Bern, Tilden and Womelsdorf.

### **Berks County 3 S Shartlesville to 3 W Centerport**

<b>02</b>	<b>1810EST</b>	<b>0</b>	<b>0</b>		<b>Hail (0.75)</b>
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Penny size hail fell in Upper Bern and Centre Townships. The hail damaged some police vehicles near Shartlesville.

### **Berks County Frystown**

<b>02</b>	<b>1833EST</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>
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Funnel clouds over Frystown did not touch down. Nevertheless, damaging straight-line wind gusts occurred and uprooted several trees and downed power lines. GPU reported several hundred homes lost power in Berks County.

### **Berks County Strausstown to Shartlesville**

<b>02</b>	<b>1850EST</b>	<b>0</b>	<b>0</b>		<b>Hail (0.88)</b>
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Large hail as well as the fog it produced forced the closure of Interstate 78 for 30 minutes between Strausstown and Shartlesville. The interstate had to be cleared of the hail.

### **Berks County Leesport**

<b>02</b>	<b>1900EST</b>	<b>0</b>	<b>0</b>		<b>Tstm Wind/Hail</b>
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Heavy pea size hail covered the ground in Leesport. Similar size hail also fell in Shoemakersville and Centerport with the same thunderstorm.

### **Berks County Pricetown**

<b>02</b>	<b>2007EST</b>	<b>0</b>	<b>0</b>		<b>Hail (1.00)</b>
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### **Berks County New Jerusalem**

<b>02</b>	<b>2018EST</b>	<b>0</b>	<b>0</b>		<b>Hail (1.00)</b>
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### **Montgomery County Harleysville**

<b>02</b>	<b>2057EST</b>	<b>0</b>	<b>0</b>		<b>Hail (1.00)</b>
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In addition to the quarter size hail in Harleysville, pea to marble size hail also fell in King of Prussia and Schwenksville. Mainly lightning caused about 20,000 PECO customers to lose power throughout Southeastern Pennsylvania.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, East</b>									
<b>Bucks County</b>									
Rushland	02	2120EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down a couple of trees in Rushland. The same thunderstorm dropped pea to marble size hail in Bensalem Township. Mainly lightning caused about 20,000 PECO customers to lose power throughout Southeastern Pennsylvania.								
<b>Philadelphia County</b>									
Philadelphia	02	2130EST			0	0			<b>Hail (0.88)</b>
	Nickel size hail fell in the Somerton section of Philadelphia. Mainly lightning caused about 20,000 PECO customers to lose power throughout Southeastern Pennsylvania.								
<b>Philadelphia County</b>									
Philadelphia	14	0100EST 0300EST			0	0	0		<b>Flash Flood</b>
	Heavy rain overnight on the 13th caused some minor flooding along Frankford Creek within Philadelphia. The gage at Castor Avenue briefly went above flood stage during the early morning of the 14th.								
<b>Berks County</b>									
Womelsdorf to Boyertown	16	1925EST 1955EST			0	0			<b>Thunderstorm Wind (G52)</b>
	A severe thunderstorm knocked down trees and wires in over a dozen places across the northern half of Berks County. Several roads were closed for a few hours as road crews cleared them of downed trees and wires. A tree fell on and caused minor damage to a house in Saint Lawrence. This was the only report of structural damage received. The utilities reported about 5,000 homes and businesses lost power throughout the county during the height of the storm.								
<b>Northampton County</b>									
Bethlehem	16	2030EST			0	0			<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down numerous trees in the southwestern part of Northampton County, centered around Bethlehem. Trees were reported knocked down in Bath, Bethlehem, Lower Saucon, Nazareth, Northampton and Raubsville.								
<b>Monroe County</b>									
Stroudsburg	16	2045EST			0	0			<b>Thunderstorm Wind (G55)</b>
	A severe thunderstorm uprooted several trees in Stroudsburg. Pea to marble size hail was also reported with the thunderstorm.								
<b>Lehigh County</b>									
2 S Bethlehem	16	2125EST			0	0	0		<b>Thunderstorm Wind (G50)</b>
	A severe thunderstorm knocked down several trees in Fountain Hill, one crushed a car.								
<b>Northampton County</b>									
Leithsville	17	1730EST			0	0			<b>Thunderstorm Wind (G57)</b>
	A severe thunderstorm knocked down four foot wide trees along Pennsylvania State Route 412 in Lower Saucon Township. Downed trees, limbs and wires were reported along a quarter mile stretch of the roadway. One truck was damaged by the downed trees and the roadway was closed for over an hour. The same thunderstorm also uprooted a couple of trees in Bethlehem, one damaged another vehicle.								
<b>PAZ071</b>									
		<b>Philadelphia</b>							
	20	0900EST			1	0	0		<b>Excessive Heat</b>
	21	1700EST							
	A hot weekend on June 20th and 21st caused the first heat related death within the City of Philadelphia as a 73-year-old man died. The windows of his home were completely shut with no air conditioning. The high temperatures on both the 20th and 21st reached 92 degrees and were the first two dates in the month of June to have high temperatures of 90 degrees or higher. M73PH								
<b>Carbon County</b>									
South Portion	21	1845EST 2100EST			0	0	0		<b>Flash Flood</b>
	Nearly stationary thunderstorms with torrential downpours caused flash flooding in the southern part of Carbon County as 5.50 inches of rain fell within a 90 minute period in Leighton from 7 p.m. EDT through 8:30 p.m. EDT. Doppler radar storm total estimates were as high as 7.3 inches just south of Jim Thorpe. Bowmanstown was hit the hardest with 30 basements flooded and several roads closed because of water and debris on roadways. Hardest hit was the newly remodeled basement of the Emmanuel United Church of Christ with two feet of water. In Parryville, three separate sections of Fireline Road were closed because of debris and flooding. Two roads were also closed in Franklin Township and one road was closed in Lower Towamensing Township.								
<b>Berks County</b>									
Northwest Portion	23 24	2200EST 0100EST			0	0			<b>Flash Flood</b>
	Thunderstorms with torrential downpours dropped rain at the rate of two inches per hour across northwest parts of Berks County and caused flash flooding of smaller streams in the area during the late evening of the 23rd. Doppler radar storm total estimates reached as high as 3.5 to 4.0 inches around Upper Tulpehocken Township. A cooperative observer in Hamburg received 2.63 inches of rain. No serious injuries were reported.								

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## **PENNSYLVANIA, East**

### **PAZ067>071**

#### **Chester - Montgomery - Bucks - Delaware - Philadelphia**

<b>25</b>	<b>0900EST</b>			<b>3</b>	<b>0</b>				<b>Excessive Heat</b>
<b>26</b>	<b>1700EST</b>								

Excessive heat for two days brought some of the highest temperatures of the summer and caused three heat related deaths in Southeast Pennsylvania. The hot weather ended abruptly with severe thunderstorms during the late afternoon of the 26th. In Philadelphia, two women died from the heat (a 65-year-old and an 80-year-old). In Montgomery County, a 75-year-old man was found dead in the room of a Pennsburg motel. There was no air conditioning in the room and the room temperature at the time of discovery was 110 degrees. The highest temperatures mainly occurred on the 26th and included 97 degrees in Crum Creek (Delaware County), 95 degrees in Neshaminy Falls (Bucks County) and at the Philadelphia International Airport (The highest temperature of the year.), 94 degrees in Valley Forge (Montgomery County), 93 degrees at the Northeast Philadelphia Airport and 92 degrees in Perkasio (Bucks County). M75PH, F65PH, F80OT

### **Berks County Oley**

<b>26</b>	<b>1115EST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G57)</b>
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A severe thunderstorm knocked down several trees in Oley Township. One tree fell on and damaged a house.

### **Berks County Countywide**

<b>26</b>	<b>1240EST</b>			<b>0</b>	<b>0</b>	<b>150K</b>			<b>Thunderstorm Wind (G59)</b>
	<b>1310EST</b>								

A second severe thunderstorm caused wind damage and power outages across most of Berks County. Only the northeast part of the county was spared any wind damage. Hardest hit were Amity and Oley Townships with about six homes damaged from falling trees. A 100 foot tree also crashed into the second floor of a Mount Penn home. A tree also crashed into a trailer in Bernville. The wind gust reached 68 mph at the Reading Airport at 155 p.m. EDT and reached 66 mph in Shillington at 158 p.m. EDT. In Muhlenberg Township, girders were twisted by the wind. About 12,000 homes and businesses lost power. Wind damage and/or power outages were reported from the following additional municipalities within the county: Bern Township, Bernville Borough, Birdsboro Borough, Brecknock Township, Caernarvon Township, Centre Township, Centre Township, Exeter Township, Fleetwood Borough, Jefferson Township, Leesport Borough, Perry Township, Reading, Robeson Township, Spring Township, Union Township, Upper Tulpehocken Township and Windsor Township. About an inch of rain fell and caused flooding within the Spring Street subway in Reading and submerged one car.

### **Montgomery County 2 SW Collegeville**

<b>26</b>	<b>1302EST</b>			<b>0</b>	<b>0</b>				<b>Hail (1.00)</b>
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### **Montgomery County Pottstown to Narberth**

<b>26</b>	<b>1305EST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G50)</b>
	<b>1335EST</b>								

A severe thunderstorm produced large hail and wind damage across southwestern Montgomery County, especially in townships near the Chester County border. The Rosemont area of Upper Merion Township was hit the hardest with around 50 trees down and twelve blocks closed within the township. Downed trees were also reported in Collegeville (as well as large hail), Narberth and Pottstown. In Pottstown, a 120-foot tree fell through the extension of one house. Fallen trees also crushed vehicles in both Narberth and Pottstown. Fallen trees on the tracks also forced the suspension of the SEPTA commuter rail Bala Cynwyd line. PECO energy reported about 140,000 customers lost power in their service area, but only 9,000 in Montgomery County. The last 1,500 were back on line on Sunday the 28th.

### **Berks County Rehlersburg**

<b>26</b>	<b>1315EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Lightning</b>
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Lightning struck an 80-foot tree and knocked it over into a Tulpehocken Township farmhouse and extensively damaged it.

### **Montgomery County Jeffersonville**

<b>26</b>	<b>1330EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Lightning</b>
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Lightning struck the chimney of a house in West Norriton Township. As pieces of the chimney fell, they made a small hole in the roof of the house.

### **Chester County Coatesville to Phoenixville**

<b>26</b>	<b>1330EST</b>			<b>0</b>	<b>0</b>				<b>Thunderstorm Wind (G57)</b>
	<b>1405EST</b>								

A severe thunderstorm knocked down trees and poles across a strip of central Chester County from Coatesville to Phoenixville. The worst damage occurred around the Coatesville area. Roads were closed in Birmingham, East Bradford (Pennsylvania State Route 842) and Westtown Townships. They were reopened that evening. PECO energy reported about 140,000 customers lost power in their service area, half of them in Chester County as 200 poles were knocked down. The last 1,500 were back on line on Sunday the 28th.

### **Montgomery County Ardmore**

<b>26</b>	<b>1335EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Lightning</b>
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Lightning struck a tree in Lower Merion Township and knocked it down onto and crushed a vehicle.

### **Philadelphia County Philadelphia**

<b>26</b>	<b>1340EST</b>			<b>0</b>	<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G56)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## PENNSYLVANIA, East

A severe thunderstorm caused a swath of wind damage across the city of Philadelphia from Roxborough to Fishtown and Port Richmond. About 50 trees were uprooted in Fairmount Park alone and at least one vehicle was crushed by fallen trees. In addition, the wind threw scaffolding through four glass plated windows at the Wyndham Franklin Plaza Hotel sending shards of glass into the lobby. Banners for the "Welcome America" celebration were blown away and police sawhorses in the area rolled around like tumbleweeds. PECO energy reported about 140,000 customers lost power in their service area, with 45,000 outages within Philadelphia. The last 1,500 were back on line on Sunday the 28th.

### **Delaware County Upper Darby**

**26 1340EST 0 0 0 Thunderstorm Wind (G56)**

A severe thunderstorm caused wind damage in Upper Darby and Radnor Townships. Radnor Township was hit hard with about 50 trees uprooted and numerous toads blocked by either trees or limbs. An uprooted tree also broke a gas line. Service was suspended on the SEPTA commuter rail lines between Paoli and Downingtown because of downed trees. PECO energy reported about 140,000 customers lost power in their service area, but only 15,000 in Delaware County. The last 1,500 were put back on line on Sunday the 28th.

### **Delaware County Darby**

**26 1340EST 0 0 0 Lightning**

Lightning struck a utility pole in Darby and downed a high voltage wire. The wire set a car on fire and destroyed it. But before the fire was extinguished, it spread into a couple of businesses along South Chester Pike. The electrical wiring was melted and destroyed in the three businesses.

### **Montgomery County Lansdale**

**30 0315EST 0 0 0 Thunderstorm Wind**

A severe thunderstorm knocked down numerous limbs and several trees as well as tore shingles from the roofs of homes in the southeast corner of the borough. The worst damage was along East Hancock Street as a couple of trees were on houses and vehicles.

### **Carbon County Albrightsville**

**30 1705EST 0 0 Thunderstorm Wind (G50)**

A severe thunderstorm took down trees and wires in Kidder Township. Pennsylvania Power and Light reported that 45,000 homes and businesses in their service area across Northeast Pennsylvania lost power.

### **Monroe County Countywide**

**30 1710EST 0 0 Thunderstorm Wind (G50)**  
**1740EST**

A severe thunderstorm knocked down several trees throughout the county. The worst damage was reported in Chestnut Hill Township. Two homes were also struck by lightning in the county in Stroud and Tunkhannock Townships. Pennsylvania Power and Light reported that 45,000 homes and businesses in their service area across Northeast Pennsylvania lost power.

### **Lehigh County Countywide**

**30 1716EST 0 0 Thunderstorm Wind (G50)**  
**1746EST**

A squall line of severe thunderstorms produced scattered pockets of wind damage (fallen trees and wires) throughout Lehigh County. The winds were strong enough to overturn a tractor trailer on Interstate 78 in Allentown. A fallen tree also crushed a pickup truck in Allentown. Pennsylvania Power and Light reported that 45,000 homes and businesses in their service area across Northeast Pennsylvania lost power. Lehigh County was one of the hardest hit with about 8,700 outages.

### **Berks County Countywide**

**30 1720EST 0 0 Thunderstorm Wind (G50)**  
**1740EST**

A squall line of severe thunderstorms produced widely scattered pockets of downed trees and power lines throughout the county. A tree fell on and damaged a house in Colebrookdale Township.

### **Northampton County Countywide**

**30 1725EST 0 0 Thunderstorm Wind (G52)**  
**1740EST**

A squall line of severe thunderstorms produced scattered pockets of wind damage (downed trees and wires) throughout Northampton County. A wind gust of 60 mph was reported in Nazareth. Fallen trees blocked U.S. Route 22 in Bethlehem and crushed one vehicle. Pennsylvania Power and Light reported that 45,000 homes and businesses in their service area across Northeast Pennsylvania lost power. A little more than one tenth of the outages occurred in Northampton County (5,400).

### **Montgomery County Countywide**

**30 1757EST 0 3 Thunderstorm Wind (G57)**  
**1815EST**

A squall line of severe thunderstorms hit Montgomery County the hardest in the local Philadelphia area. Numerous trees and power lines were knocked down and three persons driving in vehicles were injured by fallen trees. PECO energy reported about 185,000 homes and businesses in their service area lost power, 40,000 of them within and especially in Eastern Montgomery County. Power was restored to everyone midday on Thursday July 2nd. In Whippain Township a driver was injured when a large tree split about 20 feet above the ground and one of its limbs pierced a window. In Abington, two persons were injured when a large tree limb trapped

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## PENNSYLVANIA, East

them within their Blazer. Another driver in Horsham was uninjured, but trapped inside his vehicle. The hardest hit municipalities included Abington, Bryn Athyn, Lower Merion, Lower Moreland, Plymouth Meeting, Pottstown, Skippack, Springfield and Upper Salford Townships. For the second time within about a month, trees were down all over the place in Lower Moreland Township.

Trees fell onto houses in Abington, Bryn Athyn, Horsham, Perkiomenville and Upper Dublin Townships. Numerous vehicles were also damaged by fallen trees. Four streets were closed in Upper Moreland Township. Four streets were still blocked the next day in Lower Merion Township. Traffic was also slowed on the Schuylkill Expressway because of downed limbs. About a half dozen trees were also uprooted on the Meadowlands Country Club in Whitpain Township.

### **Bucks County Springtown**

**30 1800EST 0 0 Thunderstorm Wind (G57)**

A squall line of severe thunderstorms knocked down several large trees and wires in Springfield Township. Several homes were hit by fallen trees and about 900 homes lost power.

### **Chester County Coatesville to Malvern**

**30 1805EST 0 0 Thunderstorm Wind (G56)**  
**1820EST**

A squall line of severe thunderstorms produced scattered pockets of wind damage (downed wires and trees) in Chester County and hit the northeast quarter the hardest. There were dozens of calls of trees on roadways. Numerous roads were blocked in East Bradford and East Vincent Townships. One tree fell on and damaged a home in Downingtown. PECO energy reported about 185,000 homes and businesses in their service area lost power, nearly half in Chester County (80,000). Several elderly residents were rescued from a trapped elevator in Coatesville when the power went out. Power was restored to everyone midday on Thursday July 2nd.

### **Delaware County Countywide**

**30 1815EST 0 0 Thunderstorm Wind (G50)**  
**1825EST**

Although the thunderstorms dissipated, the gust front the squall line created farther west in Pennsylvania moved through Delaware County and produced scattered pockets of wind damage (downed trees and wires). The hardest hit municipalities were Aston, Upper Chichester and Upper Darby Townships. Trees fell on houses in both Radnor and Upper Darby Townships. In the western part of the county, most of the downed trees and limbs fell mostly on back streets and had minimal effect on travel. PECO energy reported about 185,000 homes and businesses in their service area lost power, 30,000 of them in Delaware County. Power was restored to everyone midday on Thursday July 2nd.

### **Bucks County Langhorne**

**30 1820EST 0 1 Thunderstorm Wind (G50)**

Although the thunderstorms dissipated, the gust front the squall line created farther west in Pennsylvania moved through extreme southern Bucks County and produced scattered pockets of wind damage (downed trees and wires) in Langhorne and Bristol and Middletown Townships. A Bristol Township man was injured when a tree fell on his car. In Langhorne, a fallen tree damaged a fence and in Middletown Township, a fallen tree flattened a shed and ripped the siding from a house. PECO energy reported about 185,000 homes and businesses in their service area lost power, 15,000 of them in Lower Bucks County. Power was restored to everyone midday on Thursday July 2nd.

### **Philadelphia County Philadelphia**

**30 1825EST 0 0 Thunderstorm Wind (G50)**

Although the thunderstorms dissipated, the gust front the squall line created farther west in Pennsylvania moved through and downed several trees throughout Philadelphia. Downed trees blocked Lincoln Drive. PECO Energy reported about 185,000 customers lost power throughout their service area; 20,000 in Philadelphia. All power was restored by midday on Thursday July 2nd. The peak wind gusts were 54 mph at the Northeast Philadelphia Airport and 52 mph at Philadelphia International Airport.

### **PAZ060>062-067>071**

**Berks - Lehigh - Northampton - Chester - Montgomery - Bucks - Delaware - Philadelphia**  
**30 2359EST 0 0 0 0 Snow Drought**

The snowfall accumulation season of 1997-98 (which ran from July 1, 1997 through June 30, 1998) was one of the least snowiest seasons on record at both the Lehigh Valley International and Philadelphia International Airports. In both locations it was the 2nd least snowiest season on record with only 0.8 inches falling at Philadelphia International Airport and 7.2 inches falling at the Lehigh Valley International Airport.

## PENNSYLVANIA, Northeast

### **Wyoming County Noxen**

**02 1744EST 0 0 Hail (0.75)**

A thunderstorm briefly reached severe levels over southern sections of the county early in the evening. Dime sized hail was observed in Noxen.

### **Bradford County Litchfield to Wyalusing**

**02 1923EST 0 0 10K Hail (0.75)**  
**1935EST**

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## **PENNSYLVANIA, Northeast**

A line of thunderstorms became severe across eastern portions of the county. Wind damage in the form of downed trees was reported first in and near Litchfield. Shortly thereafter, the southern portion of the squall line intensified and dime sized hail was observed in Wyalusing.

### **Susquehanna County Auburn Center to 4 E Springville**

<b>02</b>	<b>2005EST 2015EST</b>	<b>12</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>300K</b>	<b>Tornado (F1)</b>
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The same line of severe thunderstorms that produced sporadic damage in eastern Bradford county exhibited one intensifying supercell as it edged eastward into Susquehanna county. This storm ultimately became tornadic.

Ground and aerial damage surveys indicate the tornado first touched down in Auburn township in the southwestern corner of the county. A discontinuous damage path was evident in Auburn township, mainly along ridge top sections and east of route 267. Trees were cut down and twisted in a convergently rotating pattern. One mobile home was destroyed when several large trees fell upon it. Amazingly, the occupant inside the structure was unharmed. The twister then continued eastward into Springville township; skipping primarily along the higher elevations and shearing off tree tops. However, once the tornado crossed to the east of route 29, it appeared to briefly intensify as it ripped the roof off of a small brick storage building and completely leveled another mobile home along state route 3017 just east of Taylor Hill. Fortunately, the home was vacant at the time. Once the tornado began climbing the next set of ridges to the east, it lifted back into the cloud base as the pattern of damage was not seen further downstream.

In all, damage estimates were close to \$300,000, mainly from structural damage to the aforementioned structures and deforestation. The intensity was rated as F1 with a damage path of about 12 miles from Auburn township into Lathrop township. The width of damage was no greater than about 100 yards at any given time.

### **Wayne County Pleasant Mt**

<b>02</b>	<b>2035EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>	<b>Thunderstorm Wind</b>
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The same cell that produced tornadic damage earlier in the evening across southern Susquehanna county continued eastward into northern Wayne county and remained severe. Trees were blown down in Pleasant Mount just after 930 pm EDT.

### **Bradford County Terrytown to 3 E Wyalusing**

<b>02</b>	<b>2045EST 2100EST</b>	<b>6</b>	<b>400</b>	<b>0</b>	<b>0</b>	<b>400K</b>	<b>Tornado (F1)</b>
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A supercell thunderstorm became tornadic over southeastern portions of the county in Terry township. Eyewitness reports and damage surveys indicate that the twister first touched down just east of Robwood mountain and just west of State Route 2015 around 945 pm EDT. At this location, a mobile home was knocked off its foundation about 8 feet and sustained heavy damage on its front side. Fortunately for the two occupants who were inside the structure when the tornado struck, a farm vehicle, pickup truck, and storage shed all acted to stop the forward momentum of the trailer and prevent it from rolling down a fairly steep hill just ahead. Another storage building just north of the mobile home was severely damaged with its roof completely torn off and some metal beams removed from the siding. As the tornadic cell continued eastward, the funnel appeared to elevate for a time with sporadic damage at tree top level for about a mile downstream. Once the storm crossed just east of Billetts Pond, it descended to flatten a large barn. Debris was scattered in all directions from where the barn once stood with a large section of the roof thrown 200-300 yards downwind. Meanwhile, a newly built home with a large rear deck only 150 yards or so from the barn sustained relatively minor damage.

Further to the east through Wyalusing and Tuscarora townships, the damage path became somewhat discontinuous once again and was confined mainly to hilltop sections with trees sheared off. Structural damage was not seen in these areas as they were sparsely populated.

From the spot where the twister first touched down in Terry township eastward to the Wyoming county line, the length of the damage path was about 6 miles. The widths varied from 200 to 400 yards. Emergency management officials tallied total damages at just under a half million dollars.

### **Wyoming County Meshoppen to Factoryville**

<b>02</b>	<b>2100EST 2145EST</b>	<b>26</b>	<b>500</b>	<b>2</b>	<b>15</b>	<b>2.2M</b>	<b>Tornado (F3)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## PENNSYLVANIA, Northeast

The same tornadic supercell that affected southeastern Bradford county moved eastward into northern Wyoming county around 10 pm EDT. Aerial damage surveys indicate that intervals of tree damage occurred from Meshoppen eastward to near Valentine Hill on the border of Lemon township. This damage was primarily in the form of twisted off tree sections at canopy level and also some uprooted trees on hilltop areas.

Between 1010 and 1015 pm, the tornado lowered again down the east side of Valentine Hill, skipped across the far north end of Stevens Lake, and carved a path over a small hill just west of Lake Carey. Several residences along this path had heavy tree damage and minor siding and roof damage to their homes. The twister then seemed to temporarily turn towards the south and cross a portion of the long axis of Lake Carey. It was here within this small vacation community that the most severe damage occurred along with loss of life. Eyewitness accounts indicate that the tornado crossed State Route 1003 (a small causeway across the short axis of the lake in a west-east orientation) at about 1020 pm. Every structure located along this narrow strip of land crossing Lake Carey either sustained substantial damage or was completely leveled. It was here where two fatalities occurred as an elderly woman and her grandson were literally sucked out of the second floor of a house and thrown into an adjacent building. Every nearby tree was snapped off, uprooted, or otherwise toppled in chaotic patterns. At that point, the tornado made a jog to the left and resumed its eastward course. It crossed over State Route 1005, which parallels the eastern end of Lake Carey, then skipped up over a small hill. Again, heavy damage was inflicted upon homes in the path of the tornado both along the east end of the lake and also going up the hill. A dozen or more small boats which were anchored along the eastern end of the lake were thrown up out of the water and onto the shoreline. One home going up the hill towards the east was reduced to only its foundation and a portion of the back wall. Massive tree damage continued to be evident with a swath of trees cut down in a narrow path going over the hill and down its eastern side towards East Lemon township. A total of 42 homes in and around Lake Carey suffered considerable damage or were totally destroyed. The character of damage in this area indicates that the tornado strengthened and reached F3 intensity. The damage path was over a third of a mile wide at times.

As the tornado pushed further to the east through East Lemon township, it encountered more rugged terrain and less populated areas. Still, however, it did encounter three additional homes and heavily damaged all of them. One had its roof completely torn away and its garage flattened. Another had its back deck destroyed and all of the back windows blown out. Swaths of tree damage were interspersed amongst these houses. Fortunately, two of the homes were unoccupied at the time with only one other minor injury associated with the storm in East Lemon township. The tornado was rated as F2 intensity at this point with damage width varying from 250 to 400 yards.

As the cell approached Factoryville and the Lackawanna county line after 1035 pm EDT, it weakened a bit with the tornado skipping over hilltop sections for the most part. Mostly tree damage was evident from aerial surveys between Route 92 and Lake Sheridan. The tornado's intensity had decreased to F1 along this segment of its path with the width of damage narrowing to under 100 yards in spots.

In total, county emergency management officials estimated that in excess of 2 million dollars worth of damage was incurred with over 50 homes destroyed or heavily damaged. Fifteen injuries were directly tied to the tornado along with the two deaths mentioned earlier.

M35PH, F72PH

### **Lackawanna County Dalton**

<b>02</b>	<b>2105EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>	<b>Thunderstorm Wind</b>
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A thunderstorm intensified to severe levels late in the evening over northern portions of the county. Trees and wires were downed in Dalton shortly after 10 pm EDT.

### **Susquehanna County 2 E Springville**

<b>02</b>	<b>2108EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>	<b>Thunderstorm Wind</b>
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A thunderstorm briefly reached severe limits over southern portion of the county shortly after 10 pm EDT. Trees and wires were toppled in Lathrop township.

### **Lackawanna County La Plume to 4 SW Tompkinsville**

<b>02</b>	<b>2140EST 2150EST</b>	<b>3</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>300K</b>	<b>Tornado (F1)</b>
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The same tornadic cell that devastated parts of Wyoming county moved eastward and crossed into northern Lackawanna county. It remained tornadic as it affected La Plume township around 1040 pm EDT. Significant tree damage occurred on the campus of Keystone Junior College as a couple of classroom buildings also sustained minor damage in the form of blown out windows and twisted gutters.

The tornado pushed eastward from that point and crossed over Routes 6 and 11 before settling into southern portions of Lackawanna State Park in North Abington township. Large swaths of trees were either sheared off or cut down in sections of the park.

The twister appeared to lift back into the cloud base just west of Abington Road in North Abington township as little in the way of damage was seen downstream of this location.

The tornado's intensity was rated as F1 with a damage width of around 200 yards. Very fortunately, no injuries were sustained either on the college campus or within Lackawanna State Park.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **PENNSYLVANIA, Northeast**

### **Wayne County 4 NE Sterling**

<b>02</b>	<b>2155EST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
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A thunderstorm became severe late in the evening over extreme southern portions of the county. Trees and wires were toppled just before 11 pm EDT along and just east of Lake Wallenpaupack.

For the second time in three days, significant severe weather including tornadoes affected northeastern Pennsylvania. The primary focusing mechanisms were a strong mid level shortwave and surface cold front that approached the region during the evening of the 2nd. Strongly veering wind profiles that increased with height contributed significantly to the development of tornadic supercells.

Two long tracked supercells produced tornadic damage across northeastern Pennsylvania during this event. The first tornado touched down in southwestern Susquehanna county in Auburn township just after 9 pm EDT. This tornado tracked along a 12 mile path through Springville and Lathrop townships. Several mobile homes were damaged or destroyed and the roof of a small storage building was torn away. The twister also cut down scores of trees along the way. Its intensity was rated as F1. Fortunately, no injuries resulted.

The other twister tracked along approximately a 35 mile path from extreme southeastern Bradford county across the length of northern Wyoming county and into northwestern Lackawanna county before weakening. The most devastation occurred in the small vacation community of Lake Carey in Wyoming county. The tornado strengthened to F3 intensity at Lake Carey and killed two people and injured a total of fifteen. More than 40 homes immediately surrounding the lake were either heavily damaged or destroyed. Additional residences were damaged or leveled further to the east through East Lemon township in northern Wyoming county. Isolated structural damage and considerable tree damage was the rule from Terry township in Bradford county eastward to just west of Lake Carey and also from East Lemon township eastward to near Lackawanna State Park where the tornado finally dissipated. In all, over 50 homes were damaged or destroyed and total damage estimates in the three county area exceeded three million dollars.

Other smaller scale bow echo complexes produced widespread wind damage in the form of downed trees and power lines primarily across the northern tier counties and sections of the Poconos. Portions of Bradford, Susquehanna, and Wayne counties were without power for most of the night as electrical crews could not keep up with reports of downed wires.

The most severely damaged areas including the Lake Carey vicinity needed assistance from the National Guard to clean up excess debris and help with repairs. Much of northeastern Pennsylvania qualified for federal disaster assistance.

### **Susquehanna County Rushville**

<b>13</b>	<b>1715EST 2000EST</b>				<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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A slow moving complex of showers and thunderstorms produced very heavy rains across western portions of the county during the early evening hours. A spotter in Rushville measured nearly two and a half inches of rain in less than an hour's time. As additional showers and storms affected the area thereafter, roadways became flooded and the Wolf Creek left its banks. State routes 367 and 706 were closed for a time due to high water conditions.

After 900 pm EDT, roads were reopened and the Wolf Creek receded.

### **Bradford County Northeast Portion**

<b>13</b>	<b>2000EST 2200EST</b>				<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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Slow moving thunderstorms were again the culprit in producing downpours that led to flash flooding in the northeastern corner of the county. Both the Wappasening and Pendleton Creeks left their banks for a time late in the evening. Portions of both Carey Road and State route 1038 adjacent to these creeks were closed for about two hours as high water levels spilled across the roadways.

After 1100 pm EDT, rainfall intensity decreased and water levels receded.

### **Susquehanna County Rush**

<b>17</b>	<b>1610EST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
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A thunderstorm briefly intensified to severe levels across western sections of the county. A couple of trees and several large branches were toppled by the strong winds onto route 267. This road had to be closed for about two hours until crews were able to clear the debris.

### **Bradford County Athens to Canton**

<b>30</b>	<b>1510EST 1515EST</b>				<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
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A line of thunderstorms became severe over western and central portions of the county late in the afternoon. Trees and wires were downed in Athens around 410 pm EDT and in Canton about 415 pm.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **PENNSYLVANIA, Northeast**

### **Susquehanna County 5 NE Forest Lake to Clifford**

30	1610EST 1630EST	0	0	10K	<b>Thunderstorm Wind</b>
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The same line of thunderstorms that produced sporadic wind damage in Bradford county continued eastward into Susquehanna county. Isolated wind damage was again caused by these storms. Trees and wires were downed in Silver Lake around 510 pm EDT and near Clifford about 530 pm.

### **Wyoming County Nicholson**

30	1620EST	0	0	10K	<b>Thunderstorm Wind</b>
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A thunderstorm briefly pulsed to severe levels late in the afternoon over the northeastern corner of the county. Trees were blown over in the town of Nicholson around 520 pm EDT.

### **Wayne County Honesdale to 3 E Hamlin**

30	1630EST 1645EST	0	0	40K	<b>Thunderstorm Wind</b>
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The same complex of thunderstorms that produced wind damage upstream in Bradford and Susquehanna counties moved eastward across Wayne county and intensified. Wind damage was fairly widespread across southern sections of the county. Numerous trees and wires were downed in and just south of Honesdale. Power outages were quite common in this area and several local roadways were blocked from fallen trees, including portions of route 191. Many trees were also knocked down with blocked roads near Bethany and Hamlin. Routes 670 and 590 were closed for a time until crews were able to clear debris.

### **Luzerne County 3 NE East Berwick to Glen Summit**

30	1640EST 1705EST	0	0	150K	<b>Thunderstorm Wind</b>
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A complex of severe thunderstorms moved across southern sections of the county and produced widespread wind damage from late in the afternoon into the early evening. Trees and wires were first knocked down in Salem township around 545 pm EDT. Two houses also sustained siding and roof damage in Salem as trees fell upon them. The swath of wind damage continued eastward as numerous trees were uprooted or otherwise toppled throughout the towns of Union, Conyngham, Nanticoke, and Glen Summit. The most severe damage occurred in Conyngham where windows were blown out of several store front areas and power was knocked out to the majority of the town.

East of Glen Summit, the damage path became indiscernible as the cell apparently weakened shortly after 600 pm.

### **Lackawanna County 4 E Springbrook Corners**

30	1645EST	0	0	15K	<b>Hail (0.75)</b>
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A thunderstorm briefly reached severe limits over extreme southern portions of the county. Trees were toppled by strong wind gusts along portions of Interstate 380 near exit 6 in Covington township and also just to the east near route 307. Dime sized hail was also observed in this area.

### **Pike County Lackawaxen to 2 NE Milford**

30	1715EST 1745EST	0	0	50K	<b>Thunderstorm Wind</b>
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A band of severe thunderstorms produced widespread wind damage across the northern tier of the county during the early evening hours. Most of the damage was in the form of downed trees with the path of damage running almost parallel and just north of route 6. Power outages were widespread in the Shohola Falls and Milford areas as several utility poles were toppled. Portions of route 209 just south of Matamoras were also closed for a short time as fallen trees blocked the road.

A strong cold front encountered a warm, moist, and unstable environment across northeastern Pennsylvania on the evening of the 30th. The end result was widespread severe thunderstorm development.

Strong vertical speed shear in the atmosphere led to the formation of several bow echoes that produced significant wind damage. The most substantial damage occurred in southern Luzerne county in the town of Conyngham. As the storm passed through this town around 555 pm EDT, many store front windows were blown out and some buildings sustained damage from falling trees and flying debris. Post storm surveys in this area indicate that maximum gusts likely approached 90 mph. Across northern Pike county, damage was also widespread in the form of downed trees and power lines from the Lackawaxen area all the way to the Delaware River near Matamoras. Several roads were closed in this region for up to 3 hours as crews worked to clear fallen trees and live wires. Power outages were common.

Further to the north, severe thunderstorms were more of the pulse type with brief and sporadic occurrences of wind damage and large hail.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
Beaver County Shippingport	02	1642EST			0	0			Hail (0.75)
Beaver County Monaca	02	1642EST			0	0	1K		Thunderstorm Wind
Thunderstorm winds blew a large tree down.									
Allegheny County Ingomar	02	1647EST			0	0			Hail (1.00)
Allegheny County Wexford	02	1650EST			0	0			Hail (1.00)
Allegheny County Wildwood	02	1655EST			0	0			Hail (0.75)
Allegheny County 5 NW Carnegie to 2 SE East Mc Keesport	02	1655EST 1720EST	26	800	0	50	13M		Tornado (F1)
Westmoreland County 3 NW Irwin to 3 SE Manor	02	1720EST 1728EST	6	300	0	0			Tornado (F1)
An F1 tornado touched down 5 miles northwest of Carnegie in Allegheny County and moved east-southeast across the southern and eastern suburbs of Pittsburgh into Westmoreland County. The total path length of this tornado was estimated to be 32 miles, and damage was reported in Mount Washington, Hazelwood, and Rankin in Allegheny County. As the tornado passed over a concrete railroad overpass about 2 miles north of Baldwin, it blew several railroad cars onto their sides. The tornado continued into Westmoreland county, moving through the towns of Irwin and Manor. The Mount Washington area, located just south of downtown Pittsburgh, sustained the majority of damage, along with all of the minor injuries. Property damage in the Mount Washington area included roofs blown off buildings, brick walls torn down, and other major structural damage. Over 1000 structures, mostly in the immediate Pittsburgh area, reported some sort of damage. Other than the damage on Mount Wahington, most of the damage was minor, produced as the result of tree damage from falling trees or tree limbs.									
Allegheny County Etna	02	1656EST			0	0			Hail (0.75)
Washington County Cecil	02	1700EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds blew down large trees and power lines.									
Washington County Candor	02	1700EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds blew down large trees.									
Allegheny County 2 W Wilksburg to East Carnegie	02	1705EST			0	0			Hail (0.75)
Westmoreland County Irwin	02	1710EST			0	0			Hail (0.75)
Allegheny County Verona	02	1710EST			0	0			Hail (0.75)
Allegheny County Turtle Creek	02	1715EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds blew down several large trees.									
Allegheny County Pleasant Hills	02	1715EST			0	0			Hail (0.75)
Westmoreland County Arona	02	1720EST			0	0			Hail (1.00)
Mercer County Charleston	02	1730EST			0	0			Hail (0.75)
Fayette County Champion	02	1740EST			0	0			Hail (2.00)
Jefferson County Worthville	02	1740EST			0	0			Hail (0.75)
Lawrence County Bessemer	02	1740EST			0	0			Hail (2.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Lawrence County</b> 4 SW New Castle	02	1740EST			0	0			Hail (2.00)
<b>Westmoreland County</b> Trafford	02	1740EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down several large trees.									
<b>Westmoreland County</b> Mt Pleasant	02	1742EST			0	0			Hail (1.75)
<b>Westmoreland County</b> Norvelt	02	1742EST			0	0			Hail (1.75)
<b>Jefferson County</b> 2 W Ringgold to .7 W Ringgold	02	1745EST 1750EST	1.3	100	0	0	250K		Tornado (F1)
An F1 tornado touched down briefly over a farming community just west of the town of Ringgold. As this tornado moved to the east it totally destroyed one barn and damaged three others. Several silos were also damaged. As the tornado moved over one farm, it completely drained the water out of a small pond. Several roofs to surrounding houses also sustained minor damage.									
<b>Lawrence County</b> Hillsville	02	1745EST			0	0			Hail (0.75)
<b>Westmoreland County</b> New Stanton	02	1745EST			0	0			Hail (0.75)
<b>Westmoreland County</b> Irwin	02	1746EST			0	0			Hail (1.00)
<b>Westmoreland County</b> 1 NW Donegal to 8 E Donegal	02	1750EST 1810EST	8	200	0	1	200K		Tornado (F1)
An F1 tornado crossed over the Pennsylvania Turnpike one mile west of Exit 9 at Donegal. As it crossed the Turnpike, it tipped over an eastbound tractor trailer, injuring the driver. One mobile home was overturned. Otherwise, only minor structural damage was noted, mainly limited to shingles blown off of roofs or siding damaged as tree limbs fell against houses. The majority of damage in this heavily wooded area was in the form of uprooted/sheared-off trees.									
<b>Westmoreland County</b> Pleasant Vly	02	1750EST			0	0			Hail (1.75)
<b>Westmoreland County</b> Donegal	02	1752EST			0	0			Hail (1.00)
<b>Fayette County</b> Champion	02	1754EST			0	0			Hail (1.75)
<b>Allegheny County</b> Perrysville	02	1755EST			0	0			Hail (0.75)
<b>Jefferson County</b> Coulter	02	1755EST			0	0			Hail (0.75)
<b>Jefferson County</b> Brookville	02	1800EST			0	0			Hail (1.00)
<b>Allegheny County</b> Verona	02	1815EST 2015EST			0	0	150K		Flash Flood
Water from torrential thunderstorm rains backed up onto Allegheny River Boulevard near Verona. Two people needed to be rescued from their van. Fifteen other vehicles were submerged on Washington Boulevard.									
<b>Butler County</b> Zelienople	02	1820EST			0	0			Hail (0.75)
<b>Allegheny County</b> Wilksburg	02	1830EST 1930EST			0	0	100K		Flash Flood
Street flooding on West Street swamped a police patrol car. Mud and debris filled the basement of an apartment complex.									
<b>Beaver County</b> 1 S Shippingport	02	1830EST	0.2	25	0	0	10K	40K	Tornado (F0)
A weak F0 tornado briefly touched down just south of Shippingport, toppling between 50 and 100 cherry trees and damaging a home.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Beaver County</b> Green Garden	02	1830EST 1930EST			0	0			Flash Flood
Thunderstorm rains flooded Green Garden Road and State Route 18 in Raccoon Township.									
<b>Beaver County</b> Monaca	02	1830EST			0	0			Hail (1.75)
<b>Beaver County</b> Aliquippa	02	1840EST 1940EST			0	0			Flash Flood
Mudslides and minor street flooding reported in Aliquippa.									
<b>Beaver County</b> Green Garden	02	1845EST			0	0			Hail (1.00)
<b>Beaver County</b> Aliquippa	02	1848EST			0	0			Hail (1.00)
<b>Allegheny County</b> Russelton	02	1850EST			0	0			Hail (1.00)
<b>Allegheny County</b> Penn Hills	02	1901EST			0	0			Hail (0.75)
<b>Washington County</b> Washington	02	1920EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew large trees and power lines down.									
<b>Westmoreland County</b> Delmont	02	1920EST			0	0			Hail (0.75)
<b>Westmoreland County</b> Harrison City	02	1930EST 2030EST			0	0			Flash Flood
Minor flooding on several roads in Penn Township near Harrison City.									
<b>Allegheny County</b> Greenock to .3 NW Greenock	02	1920EST 1922EST	0.3	50	0	0	5K		Tornado (F0)
<b>Westmoreland County</b> 3 SW Irwin to 2.5 SW Irwin	02	1922EST 1925EST	0.7	50	0	0	15K		Tornado (F0)
A weak F0 tornado briefly touched down for approximately 5 minutes over extreme eastern Allegheny/western Westmoreland counties. One roof was blown off a structure. Otherwise, damage from this tornado was limited to downed trees and occurred over a relatively small area.									
<b>Westmoreland County</b> Irwin	02	1930EST			0	0			Hail (1.25)
<b>Washington County</b> Van Voorhis	02	1945EST			0	0	15K		Thunderstorm Wind
Thunderstorm winds blew a large tree onto an unoccupied house.									
<b>Washington County</b> Denbo	02	2000EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down several large trees.									
<b>Fayette County</b> 4 SE Indian Head to 4.3 SE Indian Head	02	2000EST 2002EST	0.3	50	0	0	10K		Tornado (F0)
A weak F0 tornado touched down in extreme eastern Fayette County. Damage was confined to sheared/uprooted trees.									
<b>Westmoreland County</b> Lower Burrell	02	2006EST 2100EST			0	0	20K		Flash Flood
Street and basement flooding reported in Lower Burrell.									
<b>Fayette County</b> Wharton Furnace	02	2030EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down several large trees and power lines.									
<b>Fayette County</b> 1 SW Elliottsville to Five Forks	02	2035EST 2045EST	5	300	0	0	3M	2M	Tornado (F2)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
An F2 tornado passed southeast through southern Fayette County PA, the northeast tip of Preston County WV, and into northwest Garrett County MD. The total length of the tornado as it passed across these three counties was 12 miles. Damage included a completely destroyed dairy barn, two completely destroyed house trailers, and at least 21 other structures heavily damaged, many with roofs partially or completely peeled off. Several cows were killed, with one cow thrown through the air over 100 yards. A clearly visible 300-yard wide, 1-mile long swath of trees which were completely sheared/uprooted was present near the Pennsylvania/West Virginia state border. One Fayette County official estimated at least two million dollars damage in lost timber alone in that county. Despite the damage, interviews with law enforcement officials, paramedics and local residents revealed no injuries occurred.									
<b>Lawrence County</b> New Castle	12	2145EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees down.
<b>Mercer County</b> Mercer	12	2145EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down.
<b>Beaver County</b> Patterson Hgts	12	2146EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew a few large trees and several limbs down.
<b>Venango County</b> Cooperstown	12	2213EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew a few large trees down.
<b>Beaver County</b> New Brighton	12	2215EST			0	0	30K		Thunderstorm Wind
									Thunderstorm winds blew a large tree onto three parked vehicles.
<b>Venango County</b> Oil City	12	2215EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down.
<b>Allegheny County</b> Sewickley	12	2220EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down onto Ohio River Boulevard.
<b>Mercer County</b> Greenville to Greenfield	13	1235EST			0	0			Hail (0.88)
<b>Beaver County</b> Beaver Falls	13	1247EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down.
<b>Allegheny County</b> Warrendale	13	1335EST			0	0			Hail (0.75)
<b>Allegheny County</b> Gibsonia	13	1340EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down in the North Park area.
<b>Butler County</b> Cooperstown	13	1340EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees down.
<b>Allegheny County</b> West Elizabeth	13	1400EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew several large tree limbs down onto power lines.
<b>Fayette County</b> Vanderbilt	15	1330EST			0	0	20K		Thunderstorm Wind
									Thunderstorm winds blew a house porch and several trees down.
<b>Westmoreland County</b> Latrobe	15	1810EST 1910EST			0	0	20K		Flash Flood
									2.2 inches of rain in one hour caused minor stream flooding which closed Eaton Road and Hillview Avenue in Latrobe. Several basements also flooded in this area. A mudslide was reported on Beatty Road just southwest of Latrobe.
<b>Washington County</b> Canonsburg	16	1520EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew down a large tree.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Greene County</b> Oak Forest	16	1540EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Beaver County</b> Countywide	16	1545EST 1615EST			0	0	25K		Thunderstorm Wind
									Numerous trees and powerlines down across the county.
<b>Fayette County</b> Brownsville	16	1545EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees and power lines.
<b>Greene County</b> Waynesburg	16	1548EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Greene County</b> Graysville	16	1550EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees.
<b>Fayette County</b> 3 SW Smithfield	16	1555EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees and power lines.
<b>Allegheny County</b> Bethel Park	16	1556EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew down several large tree limbs.
<b>Allegheny County</b> Pittsburgh	16	1559EST			0	0			Thunderstorm Wind (G57)
									Carnegie Science Center recorded a wind gust to 66 MPH.
<b>Fayette County</b> Republic	16	1600EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees and power lines.
<b>Fayette County</b> Uniontown	16	1600EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees and power lines.
<b>Greene County</b> Carmichaels	16	1600EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees and power lines.
<b>Greene County</b> 2 W Waynesburg	16	1600EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew several large tree limbs down.
<b>Washington County</b> Canonsburg	16	1600EST			0	1			Lightning
									An 8-year-old boy was slightly injured when the tree he was playing under was struck by lightning.
<b>Washington County</b> Monongahela	16	1600EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees. One tree fell onto SR 481, closing it off to traffic.
<b>Washington County</b> South Strabane	16	1600EST			0	1	15K		Thunderstorm Wind
									A man was slightly injured when thunderstorm winds blew over a tree onto his pickup truck on Old Trails Road by US Route 40.
<b>Westmoreland County</b> West Newton	16	1607EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees down.
<b>Greene County</b> Waynesburg	16	1608EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees down.
<b>Westmoreland County</b> Herminie	16	1609EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees down.
<b>Allegheny County</b> Churchill	16	1610EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew a large tree down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Allegheny County</b> Wall	16	1610EST			0	0	50K		Thunderstorm Wind
									Thunderstorm winds blew down/uprooted at least two dozen trees. A few of these trees fell onto houses, causing minor damage. Upper boxes on five railroad piggyback cars tipped over.
<b>Greene County</b> Lippincott	16	1610EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Washington County</b> Fredericktown	16	1610EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Allegheny County</b> Oakmont to Oak Hill	16	1612EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Allegheny County</b> Crafton	16	1614EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Fayette County</b> Connellsville	16	1615EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Allegheny County</b> Pittsburgh	16	1618EST			0	0	2K		Thunderstorm Wind
									A large tree was blown down by thunderstorm winds.
<b>Fayette County</b> Edenborn	16	1620EST			0	0	4K		Thunderstorm Wind
									Thunderstorm winds blew down two large trees.
<b>Westmoreland County</b> Jeanette	16	1620EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Westmoreland County</b> Greensburg	16	1621EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Westmoreland County</b> Harrison City	16	1621EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Westmoreland County</b> New Kensington	16	1623EST			0	0			Thunderstorm Wind (G54)
									A private citizen recorded a 62 MPH thunderstorm gust.
<b>Butler County</b> Evans City	16	1625EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Westmoreland County</b> Greensburg	16	1626EST 1628EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Westmoreland County</b> Manor	16	1627EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several large trees.
<b>Allegheny County</b> Wilkinsburg	16	1628EST			0	0	1K		Thunderstorm Wind
									Several power lines were blown down by thunderstorm winds.
<b>Westmoreland County</b> 2 NW Bagdad	16	1628EST	0.2	50	0	0	10K	30K	Tornado (F0)
									A weak F0 tornado damaged shingles on one house and snapped/uprooted 30 to 40 trees.
<b>Allegheny County</b> Pittsburgh	16	1630EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew down several trees and power lines.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Armstrong County</b>									
<b>Apollo</b>	16	1630EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew down a few trees.						
<b>Allegheny County</b>									
<b>Munhall</b>	16	1635EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew down a large tree.						
<b>Indiana County</b>									
<b>Countywide</b>	16	1636EST 1700EST			0	0	25K		Thunderstorm Wind
			Thunderstorm winds blew down numerous trees and power lines across the county.						
<b>Westmoreland County</b>									
<b>Stahlstown</b>	16	1638EST			0	0	30K		Thunderstorm Wind
			Thunderstorm winds blew the roof and porch off of a house. Several trees were also blown down.						
<b>Allegheny County</b>									
<b>Glenfield</b>	16	1640EST			0	0	25K		Thunderstorm Wind
			Several buildings received minor damage from thunderstorm winds.						
<b>Allegheny County</b>									
<b>Turtle Creek</b>	16	1640EST			0	0	25K		Thunderstorm Wind
			Thunderstorm winds blew the roof off of a house.						
<b>Indiana County</b>									
<b>Blairsville</b>	16	1640EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds uprooted several trees.						
<b>Allegheny County</b>									
<b>Pittsburgh</b>	16	1641EST			0	0			Thunderstorm Wind (G52)
			Carnegie Science Center recorded a wind gust to 60 MPH.						
<b>Indiana County</b>									
<b>Blairsville</b>	16	1642EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew down several large trees.						
<b>Butler County</b>									
<b>7 SW Butler</b>	16	1645EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Butler County</b>									
<b>Butler</b>	16	1645EST			0	0			Thunderstorm Wind (G52)
			A private citizen reported a 60 MPH wind gust from a thunderstorm.						
<b>Westmoreland County</b>									
<b>Latrobe</b>	16	1645EST			0	2	20K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down. One tree fell onto a car, with the passengers sustaining only minor injuries.						
<b>Westmoreland County</b>									
<b>Rector</b>	16	1645EST			0	0	20K		Thunderstorm Wind
			Thunderstorm winds uprooted/downed numerous trees in and around the Rector area in Ligonier Township.						
<b>Indiana County</b>									
<b>5 NE Blairsville</b>	16	1650EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew several large tree limbs down.						
<b>Allegheny County</b>									
<b>Harmerville</b>	16	1653EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Indiana County</b>									
<b>Blairsville</b>	16	1653EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Indiana County</b>									
<b>Indiana</b>	16	1700EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Westmoreland County</b>									
<b>Jones Mills</b>	19	0235EST			0	0			Hail (0.75)
<b>Fayette County</b>									
<b>Champion</b>	19	0245EST			0	0			Hail (0.88)
<b>Beaver County</b>									
<b>Beaver Falls</b>	19	0345EST			0	0	30K		Thunderstorm Wind (G70)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
A microburst with a width of 350 yards and length of 700 yards occurred in Beaver Falls. Many trees were topped or snapped. One porch was blown off of a house. Maximum wind gust was estimated at 80 MPH.									
<b>Beaver County</b>									
Beaver Falls to Beaver	19	0520EST			0	0			Hail (1.00)
<b>Westmoreland County</b>									
Latrobe	19	0750EST 1030EST			0	0	50K		Flash Flood
Many flooded basements were reported across the area. Several roads were closed due to localized flooding, including State Highway 711 and Church Hollow Road. A mudslide occurred just east of Latrobe that forced the closing of US Route 30.									
<b>Westmoreland County</b>									
Ligonier	19	1040EST 1300EST			0	0	50K		Flash Flood
Several small creeks, including Mill Creek, flooded from thunderstorm rains. Many basements were flooded across the area. State Highway 711 and Clark Hollow Road were closed due to flooding.									
<b>Washington County</b>									
2 S Midway	26	1715EST			0	0			Hail (0.75)
Severe thunderstorms bringing damaging winds and torrential rains affected much of east-central Ohio, western Pennsylvania and northern West Virginia during the period of June 26-30. These storms caused eight deaths and several injuries, along with millions of dollars of damage across the region. High pressure anchored over the Tennessee Valley contributed to the northward transport of a tropical airmass into eastern Ohio by the afternoon of June 26th. Explosive thunderstorm development on the afternoon of June 26th over northeast Ohio and western Pennsylvania formed a Mesoscale Convective System (MCS) by late afternoon. As this MCS propagated slowly to the southeast during the evening, it left behind a northwest-to-southeast oriented outflow boundary. This boundary remained nearly stationary for over 36 hours and served to focus waves of thunderstorms from the evening of June 26th through the early morning hours of June 28th across eastern Ohio and into western Pennsylvania.									
Across western Pennsylvania, although severe thunderstorms passed across the area every day during this period except the 29th, the thunderstorms on the afternoon of the 30th proved to be the most damaging. One microburst over the Pittsburgh area brought 85 MPH winds to the city, causing an estimated \$41 million in damage to the area. Numerous trees were snapped or felled by the winds across the remainder of southwest Pennsylvania. One township in Allegheny County just north of Pittsburgh estimated it would take up to 30 days to clear all of the downed trees. Power was lost to over 100,000 people in the Pittsburgh area alone. Thousands of people across the region remained without power for days after the storms.									
<b>Washington County</b>									
Lawrence Hills	26	1716EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew several trees and power lines down.									
<b>Washington County</b>									
Mc Murray	26	1720EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew several trees and power lines down.									
<b>Washington County</b>									
1 E Canonsburg	26	1730EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew several trees and power lines down.									
<b>Washington County</b>									
4 NW Amity	26	1855EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds blew two large trees down.									
<b>Washington County</b>									
Scenery Hill	26	1855EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds blew down a few large trees.									
<b>Washington County</b>									
8 SE Washington	26	1930EST 2030EST			0	0	20K		Flash Flood
Thunderstorm rains caused a small creek to overflow onto S. Main Extension. This creek eventually rose to waist-high levels and flooded a parked pickup truck, moving it over 20 feet and lodging it in a creek bed.									
<b>Fayette County</b>									
Connellsville	27	1254EST			0	0			Flash Flood
Minor street flooding reported in Connellsville.									
<b>Fayette County</b>									
Brownsville to Brownfield	27	1300EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several large trees.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Washington County</b> Finleyville	27	1300EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several large trees.
<b>Washington County</b> North Portion	27	1300EST 1400EST			0	0	100K		Flash Flood
									Torrential thunderstorm rains flooded roads and basements across northern portions of the county. Areas most affected include Canonsburg and Finleyville.
<b>Allegheny County</b> Carnegie	27	1310EST 1400EST			0	0			Flash Flood
									Thunderstorm rains forced Cambells Run Creek out of its banks.
<b>Allegheny County</b> 2 NE Imperial	27	1320EST 1400EST			0	0			Flash Flood
									Thunderstorm rains caused minor flooding on McClaren Run Road.
<b>Allegheny County</b> Mt Lebanon	27	1330EST 1400EST			0	0			Flash Flood
									Thunderstorm rains caused minor flooding on McNeilly Road.
<b>Beaver County</b> 1 SE Shippingport	27	1915EST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed two trees.
<b>Greene County</b> Crabapple	27	1920EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds blew the windows out of a mobile home.
<b>Greene County</b> Graysville	27	1935EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Greene County</b> Countywide	27	1945EST 2000EST			0	0	15K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees and powerlines throughout the county.
<b>Greene County</b> 1 S Waynesburg	27 28	2000EST 0500EST			0	0			Flash Flood
									Thunderstorm rains produced flooding on SR 218.
<b>Greene County</b> Nineveh	27	2215EST			0	0	10K		Flash Flood
									Basement flooding was reported.
<b>Washington County</b> Centerville	28	2020EST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds downed a large tree.
<b>Greene County</b> Countywide	28	2030EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees and power lines across the county.
<b>Washington County</b> Fredericktown	28	2037EST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds downed a large tree.
<b>Fayette County</b> Smithfield	28	2051EST			0	0	2K		Thunderstorm Wind (G52)
									Thunderstorm winds estimated at 60 MPH downed a few trees.
<b>Beaver County</b> Beaver Falls	30	1337EST			0	0	50K		Thunderstorm Wind
									Thunderstorm winds blew down numerous trees across the area, downing power lines and causing minor damage to homes. Widespread power outages were reported, with power not restored to some area residents for several days.
<b>Beaver County</b> Shippingport	30	1345EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Beaver County</b>									
Hookstown	30	1348EST			0	0			Hail (1.00)
<b>Beaver County</b>									
Hookstown	30	1348EST			0	0	3K		Thunderstorm Wind
Thunderstorm winds downed a few trees.									
<b>Allegheny County</b>									
Countywide	30	1354EST 1420EST			0	10	41M		Thunderstorm Wind (G74)
A microburst with winds up to 85 MPH moved diagonally from northwest to southeast across Allegheny County, leaving a wide swath of damage in its wake. These winds produced an estimated \$41 million in damage across the county. Over 125,000 people across the county had their power knocked out by this storm. Across the city of Pittsburgh, the North Hills area reported numerous trees, branches, and power lines down across an area one to two miles wide and nearly five miles in length. Many homes were damaged by falling trees and branches. The Larouche College area was especially hard hit with significant roof and window damage. The roof was torn from a McCandless convent, injuring three nuns.									
<b>Allegheny County</b>									
Pittsburgh Intl Arpt	30	1354EST			0	0			Thunderstorm Wind (G54)
Thunderstorm winds gusting to 62 MPH caused some minor damage at the Pittsburgh International Airport.									
<b>Allegheny County</b>									
Imperial	30	1358EST			0	0			Hail (1.75)
<b>Allegheny County</b>									
Imperial	30	1358EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed several trees and caused minor damage to a few homes.									
<b>Allegheny County</b>									
Pittsburgh	30	1405EST			0	0			Hail (0.75)
<b>Allegheny County</b>									
Pittsburgh	30	1408EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds caused some minor damage in the Shadyside area.									
<b>Butler County</b>									
Butler	30	1408EST			0	0	1K		Thunderstorm Wind
Thunderstorm winds blew a large tree down onto SR 68.									
<b>Allegheny County</b>									
Fox Chapel	30	1410EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed several trees.									
<b>Allegheny County</b>									
Monroeville	30	1410EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew the roof off of a house, damaged several other homes, and downed numerous trees.									
<b>Westmoreland County</b>									
Lower Burrell	30	1410EST			0	0	10K		Thunderstorm Wind
Numerous trees and power lines down.									
<b>Westmoreland County</b>									
New Kensington	30	1410EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew several trees and power lines down onto SR 66.									
<b>Allegheny County</b>									
Oakmont	30	1413EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed several trees.									
<b>Butler County</b>									
Sarver	30	1413EST			0	0	2K		Thunderstorm Wind (G57)
Thunderstorm winds estimated at 65 MPH downed several large tree limbs.									
<b>Allegheny County</b>									
Pittsburgh	30	1415EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew a tree down onto a car, crushing it.									
<b>Allegheny County</b>									
Allison Park	30	1418EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds blew a large tree down onto a house.									
<b>Allegheny County</b>									
Penn Hills	30	1420EST			0	0			Thunderstorm Wind (G50)
Thunderstorm winds downed an estimated 50 trees.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PENNSYLVANIA, West</b>									
<b>Washington County</b> Bentleyville	30	1420EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several trees and power lines down.
<b>Washington County</b> Burgettstown	30	1420EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds blew several large trees and power lines down.
<b>Westmoreland County</b> Murrysville	30	1425EST			0	0	1M		Thunderstorm Wind
									Thunderstorm winds downed numerous trees and power lines. Major damage was reported to around ten homes, with numerous other homes in the area receiving minor damage. A new concrete block was at a car dealership was knocked over.
<b>Butler County</b> Sarver	30	1426EST			0	0	50K		Thunderstorm Wind
									Thunderstorm winds downed several trees. Two houses sustained damage. One car was damaged by a falling tree.
<b>Armstrong County</b> Kittanning	30	1430EST			0	0	10K		Thunderstorm Wind
									Thunderstorm winds downed numerous trees.
<b>Westmoreland County</b> New Kensington	30	1430EST			0	0	50K		Thunderstorm Wind
									Thunderstorm winds downed many trees, snapped off several telephone poles and wires. Part of a building's brick wall collapsed.
<b>Allegheny County</b> Verona	30	1430EST			0	0			Hail (0.88)
<b>Beaver County</b> Beaver	30	1438EST			0	0			Hail (0.75)
<b>Beaver County</b> Beaver	30	1438EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds produced minor damage to several homes.
<b>Indiana County</b> Indiana	30	1438EST			0	0	20K		Thunderstorm Wind
									Thunderstorm winds blew a large tree onto a house.
<b>Westmoreland County</b> Latrobe	30	1442EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees. A few trees fell onto US Route 30, closing it for a short time.
<b>Indiana County</b> Indiana	30	1445EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Westmoreland County</b> Greensburg	30	1445EST			0	0	20K		Thunderstorm Wind
									Thunderstorm winds blew the roof off of a house.
<b>Westmoreland County</b> West Newton	30	1449EST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed several trees.
<b>Westmoreland County</b> Bolivar	30	1450EST			0	0	5K		Thunderstorm Wind (G65)
									Thunderstorm winds estimated at 75 MPH downed several trees.
<b>Indiana County</b> Blairsville	30	1454EST			0	0	15K		Thunderstorm Wind
									Thunderstorm winds blew a tree onto a car.
<b>Fayette County</b> Perryopolis	30	1518EST			0	0			Hail (0.75)
<b>Washington County</b> Claysville	30	1530EST 1900EST			0	0	25K		Flash Flood
									Thunderstorm rains produced basement flooding in several homes.
<b>Fayette County</b> Hopwood	30	1542EST			0	0			Hail (0.75)
<b>Fayette County</b> Farmington	30	1550EST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>PUERTO RICO</b>									
<b>San Juan</b> Naranjito	02	1210AST 1410AST			0	0			Heavy Rain
									Civil Defense reported heavy rains during the past 2 hours.
<b>San Juan</b> Bayamon	03	1250AST 1450AST			0	0			Heavy Rain
									Civil Defense reported heavy rains, flooding of several neighbourhoods and along road 167 from Bayamon to Comerio
<b>PRZ127</b> <b>San Juan</b>	03	1355AST 1800AST			0	0	20K		Flood
									Mechanical failure of gate number 3 at the Carraizo water dam in Trujillo Alto caused the release of a large amount of water into the Loiza River. Several communities adjacent to the river and close to the mouth of the river experienced flooding. The Trujillo Alto police headquarters parking lot was reported flooded. In Loiza three houses were reported flooded at Barrio Las Cuevas. Road 951 from Loiza to Canovanas, and road 188 at the El Chorro Sector and streets adjacent to the Ancon were also reported flooded.
<b>Mayaguez</b> Hormigueros	05	1430AST 1800AST			0	0			Urban/Sml Stream Fld
									Widespread thunderstorms developed across the west-interior section. Civil Defense reported flooding in Hormigueros where a few homes had to be evacuated. At the Rosario sector streets were flooded, as well as roads 109, 114, and 319.
<b>Arecibo</b> Utado	05	1440AST 1800AST			0	0			Heavy Rain
									Heavy rains caused landslides, fallen trees, creeks to overflow, and rivers to be at or near bankfull. Civil Defense reported that rivers Adjuntas and Caonillas levels rose.
<b>Mayaguez</b> Mayaguez	09	1350AST 1800AST			0	0			Urban/Sml Stream Fld
									Skywarn spotter reported flooding of Roosevelt St. at the San Jose sector, also the police and Judicial Center buildings along road 2 and Post St. were reported flooded. Around 2.50 inches of rain were recorded during a period of one hour and a half.
<b>Humacao</b> Fajardo	13	1820AST 1840AST			0	0			Funnel Cloud
									A funnel cloud was reported near the Fajardo airport.
<b>Mayaguez</b> Guanica	16	1900AST 2100AST			0	0			Urban/Sml Stream Fld
									Civil Defense indicated minor flooding due to the heavy rains over the town of Guanica.
<b>Mayaguez</b> Cabo Rojo	17	1200AST 1400AST			0	0			Urban/Sml Stream Fld
									A spotter indicated street flooding due to heavy rains in Cabo Rojo.
<b>Aguadilla</b> Countywide	21 22	1000AST 0200AST			0	0	10K		Thunderstorm Wind
<b>Arecibo</b> Countywide	21 22	1000AST 0200AST			0	0	10K		Thunderstorm Wind
<b>Guayama</b> Countywide	21 22	1000AST 0200AST			0	0	10K		Thunderstorm Wind
<b>Humacao</b> Countywide	21 22	1000AST 0200AST			0	0	10K		Thunderstorm Wind
<b>Mayaguez</b> Countywide	21 22	1000AST 0200AST			0	0	10K		Thunderstorm Wind



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>PUERTO RICO</u></b>									
<b>Ponce</b>									
Countywide	21	1000AST			0	0	10K		Thunderstorm Wind
	22	0200AST							
<b>San Juan</b>									
Countywide	21	1000AST			0	0	10K		Thunderstorm Wind
	22	0200AST							
Strong winds downed trees and power lines across most of Puerto Rico closing temporarily some highways and causing scattered power outages. These high winds were part of a squall line associated with a tropical wave. Two periods of strong winds were observed, the first on June 21 around noon, and the second around midnight on June 22. About 38,000 customers in San Juan, Bayamon, Carolina, Arecibo, Caguas, Ponce, and Mayaguez were without power after the strong winds downed power lines and caused short circuits.									
<b>San Juan</b>									
San Juan	29	0000AST			0	0			Seiche
	30	2359AST							
A thick layer of Saharan dust covered the region and reduced visibilities to less than three miles in some sections.									
<b><u>RHODE ISLAND</u></b>									
<b>Bristol County</b>									
Countywide	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Kent County</b>									
Countywide	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Newport County</b>									
Countywide	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Providence County</b>									
Countywide	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Washington County</b>									
Countywide	13	0000EST			0	0			Heavy Rain
	14	1200EST							
<b>Providence County</b>									
Glocester	13	1425EST			0	0			Flood
		Ponaganset Pond							
<b>Providence County</b>									
South Foster	13	1845EST			0	0			Flood
	14	0300EST							
		Ponaganset River							
<b>Providence County</b>									
Woonsocket	13	2345EST			0	0			Flood
	14	1600EST							
		Case Pond							
<b>Providence County</b>									
South Foster	14	0700EST			0	0			Flood
		1800EST							
		Ponaganset River							
<b>Kent County</b>									
Warwick	14	0739EST			0	0			Flood
	16	0700EST							
		Pawtuxet River							
<b>Providence County</b>									
North Providence	14	0830EST			0	0			Flood
	15	0700EST							
		Woonasquatucket River							
<b>Providence County</b>									
Cranston	14	0900EST			0	0			Flood
	16	1100EST							
		Pawtuxet River							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## RHODE ISLAND

**RIZ001**

**Northwest Providence**

<b>14</b>	<b>2000EST</b>	<b>0</b>	<b>0</b>	<b>Flood</b>
<b>15</b>	<b>1000EST</b>			

On June 12th through June 14th, a very slow moving complex storm system moved through southeast New England. The combination of its slow movement and the presence of tropical moisture across the region produced rainfall of 6 to 8 inches over much of Rhode Island. The heaviest rainfall amounts of 7 to 8 inches occurred in the northeast corner of the state in Providence County. Numerous small streams flooded over their banks. The following is a list of those reported to have flooded:

On June 13th, in Glocester, in Providence County, the Ponaganset Pond flooded over at 3:25 PM; the Ponaganset River in South Foster reached flood stage of 5 feet at 7:45 PM, crested at 5.3 feet at 10 PM, then fell below flood stage at 4 AM on June 14th. Then, it flooded again at 8 AM on the 14th, crested at 5.3 feet at 1 PM, then fell below flood stage at 7 PM -- all on June 14th. Case Pond in Woonsocket flooded from 12:45 AM on the 14th till 5 PM the same day. The Woonasquatucket River in North Providence was in flood from 9:30 AM on the 14th until 8 AM on the 15th. The Pawtuxet River was above flood stage at Warwick in Kent County from 8:39 AM on June 14th until 8 AM on the 16th. Only minor flooding occurred along one major river -- the Blackstone. The Blackstone River reached flood stage of 9 feet at Woonsocket at 9 PM on the 14th, crested at 9.17 feet at 6 AM on the 15th, then fell below flood stage at 11 AM later that same morning.

**Washington County**

<b>North Kingstown</b>	<b>19 1354EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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**Providence County**

<b>Scituate</b>	<b>19 1420EST</b>	<b>0</b>	<b>0</b>	<b>Thunderstorm Wind (G50)</b>
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**Kent County**

<b>Coventry</b>	<b>19 1605EST</b>	<b>0</b>	<b>0</b>	<b>Flood</b>
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**Kent County**

<b>West Greenwich</b>	<b>19 1645EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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Severe thunderstorms produced large hail and damaging winds in a few towns in Washington, Kent, and Providence Counties. Dime to nickel size hail was reported from North Kingstown in Washington County. Two trees were blown down in Scituate in Providence County and dime size hail fell in West Greenwich in Kent County. In addition, flooding occurred in coventry in Kent County, when streams flowing into Johnston Pond overflowed their banks.

**RIZ004>007**

**Eastern Kent - Bristol - Washington - Newport**

<b>27</b>	<b>1400EST</b>	<b>0</b>	<b>0</b>	<b>Strong Winds</b>
	<b>1900EST</b>			

A "back-door" cold front moving south across Narragansett Bay and the coastal waters raised havoc with many small craft. A sudden wind shift to the north occurred with the passage of the front and winds gusted to 35 to 45 mph for many hours after the frontal passage. This resulted in the capsizing of numerous small boats in Narragansett Bay. The Coast Guard responded to many distress calls. At Point Judith, it was the fastest change in wind direction/speed in recent memory. Sailboats capsized in Great Salt Pond on Block Island. No injuries were reported.

**Providence County**

<b>Providence</b>	<b>30 1330EST</b>	<b>0</b>	<b>0</b>	<b>Flood</b>
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**Providence County**

<b>North Providence</b>	<b>30 1910EST</b>	<b>0</b>	<b>0</b>	<b>Flood</b>
	<b>2359EST</b>			

**Washington County**

<b>Richmond</b>	<b>30 2019EST</b>	<b>0</b>	<b>0</b>	<b>Hail (2.75)</b>
	<b>2020EST</b>			

**Washington County**

<b>North Kingstown</b>	<b>30 2035EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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**Bristol County**

<b>Barrington</b>	<b>30 2045EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.88)</b>
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A slow moving warm front with an abundance of tropical moisture produced several hours of torrential rain with amounts totaling 3 to 6 inches during the morning and early afternoon. Showers and thunderstorms produced the torrential rainfall across northern Rhode Island. The Louisquisset River in Providence came out of its banks at 2:30 PM. During the evening, more thunderstorm activity produced flooding in Smithfield and North Providence when the Woonasquatucket River overflowed its banks flooding low-lying sections. A severe thunderstorm (supercell) brought large hail during the evening. Baseball size hail was reported in Richmond, while dime size hail fell in Exeter and North Kingstown. The same storm also produced nickel size hail in Barrington. Two telephone poles were reported down in Ashaway, although there were no other reports of strong winds.

## SOUTH CAROLINA, Central

**Lexington County**

<b>Irmo to Lexington</b>	<b>02 0815EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Central</b>									
									Public and police reported 3/4 inch hail from Irmo to Lexington along highway 6.
<b>Lexington County</b> Irmo to Lexington	02	0815EST 0820EST			0	0	0	0	Thunderstorm Wind (G65)
									Strong straightline winds took down trees and powerlines between Irmo and Lexington.
<b>Lexington County</b> 3 W Lexington to Lexington	02	0820EST			0	0			Hail (0.75)
									SKYWARN spotter reported 3/4 inch hail on highway 378.
<b>Lexington County</b> 3 W Lexington to Lexington	02	0820EST			0	0	0	0	Thunderstorm Wind (G65)
									SKYWARN spotters reported trees down...some on houses.
<b>Lexington County</b> Lexington	02	0825EST			0	0			Hail (1.00)
									SKYWARN spotters reported 1 inch hail.
<b>Lexington County</b> 3 S Gilbert	02	0828EST			0	0	0	0	Thunderstorm Wind (G65)
									Two large steel bilboards torn apart by intense winds along I-20.
<b>Orangeburg County</b> North	02	0845EST			0	0	0	0	Thunderstorm Wind (G55)
									Police reported trees and powerlines down.
<b>Orangeburg County</b> 3 E North	02	0850EST			0	0	0	0	Thunderstorm Wind (G50)
									SKYWARN spotter reported trees down on highway 178.
<b>Orangeburg County</b> Norway	02	0907EST			0	0	0	0	Thunderstorm Wind (G50)
									County EPD reported trees and powerlines down along highway 321.
<b>Saluda County</b> 5 SE Saluda to 5.3 SE Saluda	02	1028EST 1031EST	0.3	40	0	0	0	0	Tornado (F0)
									A small F0 briefly touched down in a cluster of trees on highway 432. Well defined convergent path.
<b>Lexington County</b> 15 W Lexington to Lexington	02	0815EST			0	0	0		Hail (0.75)
									Sheriff reported dime size hail.
<b>Orangeburg County</b> Norway	02	0916EST			0	0	0	0	Lightning
									EPD reported lightning started a fire that destroyed the Highway 321 Truck and Auto Service Center.
<b>Edgefield County</b> Edgefield	04	1300EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down.
<b>Lexington County</b> 2 E Lexington	04	1350EST			0	0	0	0	Thunderstorm Wind (G50)
									SKYWARN spotter reported large limbs down on highway 378.
<b>Lexington County</b> 5 WNW Lexington	04	1430EST			0	0	0	0	Thunderstorm Wind (G50)
									SKYWARN spotter reported large limbs down on highway 378.
<b>Edgefield County</b> 1 E Trenton to 1.2 E Trenton	04	1443EST	0.2	50	0	0	0	0	Tornado (F0)
									SKYWARN spotter reported touchdown in field behind his house.
<b>Lancaster County</b> Lancaster	04	1650EST			0	0	0	0	Hail (0.75)
									SKYWARN spotter reported 3/4 inch hail on highway 9.
<b>Barnwell County</b> 5 W Williston	04	1730EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down on highways 78 and 781.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Central</b>									
<b>Bamberg County</b> Denmark	04	1745EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down.
<b>Saluda County</b> Saluda	04	1800EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported large branches down on highway 378.
<b>Lexington County</b> Lexington	04	1815EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down on highway 378.
<b>Aiken County</b> 5 N Aiken	04	1840EST			0	0	0	0	Thunderstorm Wind (G50)
									NWS employee reported large branches down along I-20.
<b>Barnwell County</b> 13 NW Barnwell	04	1900EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported large branches down on highways 78 and 781.
<b>Richland County</b> Dentsville	04	1900EST			0	0			Hail (1.75)
									Sheriff reported golf ball size hail.
<b>Sumter County</b> Sumter	04	1900EST			0	0	0	0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down on Pinewood St.
<b>Aiken County</b> Windsor to 13 SE Windsor	04	1930EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down.
<b>Lancaster County</b> 6 N Lancaster	05	2010EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported trees down on highway 200.
<b>Fairfield County</b> 12 NW Winnsboro	06	1642EST			0	0	0	0	Thunderstorm Wind (G50)
									Highway Patrol reported trees down.
<b>Fairfield County</b> 5 NW Winnsboro	06	1657EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported trees down on highways 215 and 34.
<b>Kershaw County</b> Elgin	06	1800EST			0	0	0	0	Thunderstorm Wind (G50)
									EPD reported trees down.
<b>Kershaw County</b> Lugoff	06	1810EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported trees down.
<b>Sumter County</b> 4 S Rembert	06	1810EST 1811EST	0.3	150	0	0	2K	0	Tornado (F0)
									A strong F0 took down trees and powerlines. Minor damage was done to two mobile homes and moderate damage was done to two sheds.
<b>Kershaw County</b> 10 W Camden	06	1855EST			0	0	0	0	Thunderstorm Wind (G60)
									EPD reported trees down on mobile home on highway 34.
<b>Mccormick County</b> Mc Cormick	09	1730EST			0	0			Hail (1.75)
									TV 10 reported golf ball size hail.
<b>Edgefield County</b> 10 SW Edgefield	09	1818EST			0	0	0		Hail (0.75)
									Sheriff reported 3/4 inch hail.
<b>Aiken County</b> 3 SW Aiken	09	1853EST			0	0	0	0	Thunderstorm Wind (G60)
									SKYWARN spotter reported trees down on U.S. 1.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Central</b>									
<b>Aiken County</b> 3 S Graniteville	09	1900EST			0	0	0	0	Thunderstorm Wind (G52)
									SKYWARN spotter reported measured wind gust of 60 mph.
<b>Aiken County</b> 1 W Graniteville	09	1927EST			0	0		0	Thunderstorm Wind (G50)
									SKYWARN spotter reported trees down on highway 191.
<b>Fairfield County</b> Winnsboro	10	0620EST			0	0		0	Thunderstorm Wind (G50)
									Sheriff reported trees down on homes.
<b>Clarendon County</b> 5 S Jordan	10	0900EST			0	0		0	Thunderstorm Wind (G60)
									EPD reported trees down on garage.
<b>Clarendon County</b> 9 ESE Summerton	10	0900EST			0	0		0	Thunderstorm Wind (G60)
									EPD reported pontoon boat destroyed and one blown across bay at Camp Bob Cooper.
<b>Calhoun County</b> Cameron	10	1215EST			0	0		0	Thunderstorm Wind (G50)
									Fire Dept. reported trees down on highway 176.
<b>Edgefield County</b> 9 SW Edgefield	10	1315EST			0	0			Hail (1.00)
									SKYWARN spotter reported quarter size hail.
<b>Calhoun County</b> 10 E St Matthews	10	1320EST			0	0		0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down in Lonestar.
<b>Edgefield County</b> 10 S Edgefield	10	1325EST			0	0	0		Hail (0.75)
									SKYWARN spotter reported dime size hail.
<b>Lexington County</b> Batesburg to Leesville	10	1332EST 1336EST			0	0	0		Hail (0.75)
									SKYWARN spotter reported 3/4 inch hail.
<b>Mccormick County</b> 5 N Mc Cormick	10	1525EST			0	0		0	Thunderstorm Wind (G50)
									Highway Patrol reported trees down on highway 221.
<b>Aiken County</b> 4 N Aiken	10	1530EST			0	0			Hail (0.88)
									SKYWARN spotter reported nickel size hail at U.S. 1 and highway 78.
<b>Edgefield County</b> Edgefield	10	1530EST			0	0		0	Thunderstorm Wind (G50)
									Highway Patrol reported trees down in North Edgefield on U.S. 25.
<b>Mccormick County</b> 1 N Mc Cormick	10	1545EST			0	1		0	Thunderstorm Wind (G60)
									EPD reported trees down on home. An elderly woman had minor injuries.
<b>Lexington County</b> 2 E Leesville	10	1556EST			0	0	0	0	Thunderstorm Wind (G50)
									SKYWARN spotter reported large limbs down on U.S. 1.
<b>Lexington County</b> Batesburg to Leesville	10	1600EST 1605EST			0	0		0	Thunderstorm Wind (G60)
									SKYWARN spotter reported trees down.
<b>Saluda County</b> 13 E Saluda	10	1605EST			0	0		0	Thunderstorm Wind (G60)
									SKYWARN spotter reported trees down at highways 378 and 391.
<b>Aiken County</b> New Ellenton	14	1630EST			0	0		0	Thunderstorm Wind (G50)
									Utility company reported trees and powerlines down.
<b>Newberry County</b> 11 SE Prosperity	14	1750EST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Central</b>									
COOP observer reported nickel size hail at Dreher Is. State Park.									
<b>Lexington County</b> 4 E Lexington	14	1815EST			0	0	0		Hail (0.75)
NWS employee reported 3/4 inch hail on highway 378.									
<b>Richland County</b> Eastover	14	1830EST			0	0	0		Thunderstorm Wind (G50)
Sheriff reported powerlines down.									
<b>Calhoun County</b> St Matthews	14	1900EST			0	0			Hail (1.75)
SKYWARN spotter reported golf ball size hail.									
<b>Calhoun County</b> St Matthews	14	1905EST			0	0	0		Thunderstorm Wind (G60)
Sheriff reported trees down.									
<b>Calhoun County</b> Cameron	14	1910EST			0	0			Hail (1.75)
Sheriff reported golf ball size hail on highway 176.									
<b>Orangeburg County</b> Eutawville	14	1928EST			0	0			Hail (1.00)
Post Office reported 1 inch hail.									
<b>Orangeburg County</b> Holly Hill	14	1933EST			0	0			Hail (1.00)
Post Office reported 1 inch hail.									
<b>Newberry County</b> Newberry to Prosperity	16	0255EST 0310EST			0	0			Thunderstorm Wind (G60)
Sheriff reported many trees and powerlines down.									
<b>Saluda County</b> 2 N Saluda	16	0255EST			0	0	0		Thunderstorm Wind (G50)
Sheriff reported several trees down along highway 121.									
<b>Richland County</b> 11 NW Columbia	16	0310EST			0	0	0		Thunderstorm Wind (G50)
Sheriff reported large limbs down in Friars Gate.									
<b>Lexington County</b> Batesburg	16	0315EST			0	0	0		Thunderstorm Wind (G50)
Sheriff reported powerlines down.									
<b>Clarendon County</b> Summerton	16	1530EST			0	0	0		Hail (0.75)
Sheriff reported 3/4 inch hail.									
<b>Clarendon County</b> Alcolu	16	1545EST			0	0	0		Hail (0.75)
Sheriff reported 3/4 inch hail.									
<b>Edgefield County</b> 10 SW Edgefield	16	1610EST			0	0	0		Hail (0.75)
Sheriff reported 3/4 inch hail at highways 230 and 143.									
<b>Aiken County</b> 1 NE North Augusta	16	1612EST			0	0			Hail (1.75)
SKYWARN spotter reported golf ball size hail.									
<b>Aiken County</b> North Augusta	16	1620EST			0	0			Hail (0.75)
Spotter reported 3/4 inch hail.									
<b>Aiken County</b> Aiken	16	1645EST			0	0			Hail (1.00)
Sheriff reported 1 inch hail.									
<b>Barnwell County</b> 2 N Williston	16	1712EST			0	0	0		Thunderstorm Wind (G55)
Sheriff reported trees down on highway 13.									
<b>Mccormick County</b> Mt Carmel	19	1303EST			0	0	0		Thunderstorm Wind (G60)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Central</b>									
			Sheriff reported trees and powerlines down.						
<b>Aiken County</b>									
New Ellenton	19	1317EST			0	0			Hail (0.88)
			EPD reported nickel size hail.						
<b>Edgefield County</b>									
8 W Edgefield	19	1325EST			0	0	0		Thunderstorm Wind (G60)
			Sheriff reported trees down at highways 378 and 283.						
<b>Mccormick County</b>									
Mc Cormick to Modoc	19	1330EST 1340EST			0	0	0		Thunderstorm Wind (G65)
			Sheriff reported trees down throughout county.						
<b>Newberry County</b>									
Whitmire to Prosperity	19	1340EST 1400EST			0	0	0		Thunderstorm Wind (G65)
			Sheriff reported trees down throughout county.						
<b>Saluda County</b>									
Mayson to Monetta	19	1347EST 1410EST			0	0	0		Thunderstorm Wind (G65)
			Sheriff reported trees down throughout county.						
<b>Barnwell County</b>									
Blackville	19	1355EST			0	0	0		Thunderstorm Wind (G70)
			EPD reported trees on houses all around Blackville. Roofs torn off two mobile homes.						
<b>Fairfield County</b>									
10 NW Winnsboro to Ridgeway	19	1355EST 1415EST			0	0	0		Thunderstorm Wind (G60)
			Sheriff reported trees down throughout county including the communities of Ridgeway, Longtown, and Midville.						
<b>Barnwell County</b>									
Blackville	19	1400EST			0	0			Hail (0.88)
			EDP reported nickel size hail.						
<b>Aiken County</b>									
Aiken	19	1415EST 1445EST			0	0	0		Thunderstorm Wind (G65)
			Sheriff reported trees down throughout county.						
<b>Lancaster County</b>									
Heath Spgs	19	1415EST			0	0	0		Thunderstorm Wind (G55)
			Sheriff reported trees and powerlines down.						
<b>Bamberg County</b>									
Denmark	19	1422EST			0	0	0		Thunderstorm Wind (G60)
			Sheriff reported trees down in Denmark area.						
<b>Orangeburg County</b>									
Norway	19	1428EST			0	0	0		Thunderstorm Wind (G60)
			EPD reported trees down on highway 321.						
<b>Lancaster County</b>									
Kershaw	19	1430EST			0	0	0		Thunderstorm Wind (G55)
			Sheriff reported trees down.						
<b>Orangeburg County</b>									
8 W Orangeburg	19	1430EST			0	0	0		Thunderstorm Wind (G70)
			EPD reported shed destroyed.						
<b>Richland County</b>									
Pontiac	19	1430EST			0	0			Hail (0.88)
			EPD reported nickel size hail.						
<b>Kershaw County</b>									
Lugoff	19	1432EST			0	0	0		Thunderstorm Wind (G55)
			Sheriff reported trees down.						
<b>Richland County</b>									
Ballentine to Eastover	19	1440EST 1455EST			0	0	0		Thunderstorm Wind (G60)
			EPD reported trees down throughout county.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>SOUTH CAROLINA, Central</u></b>									
<b>Chesterfield County</b> Mc Bee	19	1442EST			0	0	0	0	Thunderstorm Wind (G50)
									Post Office reported large branches down around town.
<b>Lexington County</b> Lexington	19	1445EST			0	0	0	0	Thunderstorm Wind (G60)
									Police reported trees down around High School.
<b>Calhoun County</b> 15 NW St Matthews to Lone Star	19	1453EST 1540EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down throughout county.
<b>Kershaw County</b> Camden	19	1500EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down.
<b>Sumter County</b> Pinewood	19	1505EST			0	0	0	0	Thunderstorm Wind (G70)
									SKYWARN spotter reported gustnado took down trees in Pinewood.
<b>Sumter County</b> Shaw Afb	19	1506EST			0	0	0	0	Thunderstorm Wind (G54)
									SAO recorded gust to 54kts.
<b>Kershaw County</b> Bethune	19	1520EST			0	2	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down...some on cars with two minor injuries.
<b>Lee County</b> 3 SSW Bishopville to 3 SSE Bishopville	19	1520EST			0	0	0	0	Thunderstorm Wind (G55)
									Highway Patrol reported some trees down along I-20.
<b>Orangeburg County</b> Santee	19	1524EST			0	0	0	0	Hail (0.75)
									Sheriff reported 3/4 inch hail.
<b>Clarendon County</b> Paxville to Summerton	19	1525EST 1550EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down.
<b>Orangeburg County</b> Eutawville	19	1535EST			0	0	0	0	Thunderstorm Wind (G55)
									EPD reported trees down.
<b>Newberry County</b> 12 N Newberry	21	1600EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees down on house near McCollough Church just south of Whitmire.
<b>Fairfield County</b> Jenkinsville	21	1630EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported couple of trees down.
<b>Fairfield County</b> 10 NE Winnsboro	21	1645EST			0	0	0	0	Thunderstorm Wind (G55)
									Spotter reported powerlines down.
<b>Chesterfield County</b> Cash	23	0040EST			0	0	0	0	Thunderstorm Wind (G50)
									EPD reported trees down.
<b>Newberry County</b> Newberry	24	1756EST			0	0	0	0	Hail (0.75)
									Sheriff reported 3/4 inch hail.
<b>Newberry County</b> 2 N Newberry	24	1800EST			0	0	0	0	Thunderstorm Wind (G70)
									Highway Patrol reported numerous planes damaged at airport...some turned over. Also trees and powerlines down.
<b>Lancaster County</b> 3 E Lancaster	24	1825EST			0	0	0	0	Thunderstorm Wind (G60)
									Sheriff reported trees and powerlines down.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>SOUTH CAROLINA, Central</u></b>									
<b>Orangeburg County North</b>	24	1947EST			0	0	0	0	Thunderstorm Wind (G70)
									Utility company reported couple of poles and powerlines down.
<b>Barnwell County 1 E Elko to 4 S Elko</b>	24	2008EST 2018EST			0	0	0	0	Thunderstorm Wind (G60)
									Post Office reported trees down.
<b>Kershaw County 1 NW Elgin</b>	24	2022EST			0	0	0	0	Thunderstorm Wind (G50)
									Fire Dept. reported couple of trees down on highway 48.
<b>Fairfield County 4 W Winnsboro</b>	27	1651EST			0	0	0	0	Thunderstorm Wind (G50)
									SLED reported trees down on highway 61 at highway 213.
<b>Richland County Columbia</b>	27	1730EST			0	0	0	0	Thunderstorm Wind (G50)
									TV19 reported trees and powerlines down in Forest Acres subdivision.
<b>Aiken County 15 SE Aiken</b>	28	1614EST			0	0	0	0	Thunderstorm Wind (G65)
									Savannah River Site reported trees and traffic lights down.
<b>Barnwell County 13 W Barnwell</b>	28	1614EST			0	0	0	0	Thunderstorm Wind (G55)
									Savannah River Site reported trees down and tin roof blown off building.
<b>Calhoun County Lone Star</b>	29	1530EST			0	0	0	0	Hail (0.75)
									Sheriff reported dime size hail.
<b>Orangeburg County Orangeburg</b>	29	1645EST			0	0	0	0	Thunderstorm Wind (G50)
									Sheriff reported a few scattered trees and powerlines down around Orangeburg area.
<b>Kershaw County 3 N Bethune</b>	29	1842EST			0	0	0	0	Thunderstorm Wind (G50)
									Post Office reported a few trees down.
<b><u>SOUTH CAROLINA, North Coastal</u></b>									
<b>Williamsburg County Hemingway</b>	01	1755EST 1800EST			0	0			Hail (1.00)
									TV meteorologist relayed report.
<b>Georgetown County Pleasant Hill</b>	01	1800EST 1815EST			0	0			Hail (0.75)
									911 center relayed report of hail and a wind gust that briefly lifted a vehicle.
<b>Horry County Conway to North Myrtle Beach</b>	01	1810EST 1845EST			0	0			Hail (1.00)
									Along with hail, wind gust was measured 50 mph.
<b>Williamsburg County Trio to Hemingway</b>	04	1600EST 1605EST			0	0	10K		Thunderstorm Wind (G65)
									Trees were downed on power lines.
<b>Florence County Florence</b>	05	1915EST			0	0	2K		Lightning
									Lightning strike caused one hour power outage at a K-Mart.
<b>Williamsburg County Cades</b>	06	1910EST 1915EST			0	0			Thunderstorm Wind (G65)
									NWS Co-op observer reported large tree limbs downed during thunderstorm.
<b>Florence County Florence to Lake City</b>	10	1010EST 1025EST			0	1	40K		Thunderstorm Wind (G70)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, North Coastal</b>									
There were scattered reports of dime-size hail, and a tree fell on a moving car, injuring the driver. A mobile home was damaged in Coward, and in Florence a wheelchair ramp was thrown through a house wall. There were many minor car accidents and power outages.									
<b>Darlington County</b> 5 N Darlington	10	1030EST			0	0	30K		<b>Lightning</b>
									Lightning caused a fire that destroyed a home on Society Hill Road.
<b>Florence County</b> 5 SE Lake City to 7 SE Lake City	10	1045EST 1055EST	2	20	0	0	10K		<b>Tornado (F0)</b>
									Tornado did spotty damage as it passed through woods, crossed SC341, and crossed the county line. Power lines were downed, as reported by Santee Cooper Electric.
<b>Williamsburg County</b> 6 NE Cades to 6 NE Trio	10	1055EST 1120EST	20	25	0	0	72K	100K	<b>Tornado (F1)</b>
									Downing power lines and doing spotty tree damage as it moved south, structural damage occurred east of Kingstree and on SC527. Two homes were badly damaged, and 5 had minor damage. There was also damage to farm equipment and tobacco and corn crops.
<b>Georgetown County</b> Andrews	10	1132EST 1140EST			0	0	300K		<b>Thunderstorm Wind (G75)</b>
									Six homes were rendered unlivable, power lines littered roadways, trees blocked trees and smashed through homes.
<b>Florence County</b> Coward	16	1620EST 1625EST			0	0			<b>Hail (1.50)</b>
<b>Marion County</b> 2 W Marion	16	1658EST 1703EST			0	0			<b>Hail (1.00)</b>
<b>Darlington County</b> Hartsville	19	1526EST 1535EST			0	0	10K		<b>Thunderstorm Wind (G60)</b>
									Thunderstorm gusts downed trees in the Ashelyn Community. Hartsville Fire Dept doused a lightning-caused fire to a storage building.
<b>Williamsburg County</b> Cades to Hemingway	19	1546EST 1630EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
									Trees were downed in Cades, and a spotter reported wind gust in Hemingway.
<b>Dillon County</b> Oak Grove	19	1550EST 1555EST			0	0	5K		<b>Thunderstorm Wind (G60)</b>
									Thunderstorm gust downed a chain link fence.
<b>Florence County</b> 4 W Scranton to 4 E Scranton	19	1555EST 1605EST	8	25	0	0	80K		<b>Tornado (F0)</b>
									Along a spotty damage path, trees were downed in the Camp Branch Community, the roof of the Lake City-Scranton Convalescent center was damaged, and a mobile home was overturned on Old Georgetown Rd.
<b>Florence County</b> 5 W Lake City to Johnsonville	19	1555EST 1611EST			0	0	70K		<b>Thunderstorm Wind (G65)</b>
									Reports described trees snapped, landing on vehicles and buildings. Power lost to 5000 customers.
<b>Georgetown County</b> Andrews	19	1624EST 1640EST			0	0	10K		<b>Thunderstorm Wind (G60)</b>
									Power lines were downed in the vicinity of Andrews, and a roof was damaged in the Union Hill area.
<b>Horry County</b> Conway to Garden City	19	1640EST 1705EST			0	0	50K		<b>Thunderstorm Wind (G65)</b>
									There were reports of trees downed in 11 locations around the county, and a tree landed on a mobile home at Garden City.
<b>Marion County</b> Centenary to Mullins	19	1642EST 1652EST			0	0	20K		<b>Thunderstorm Wind (G60)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, North Coastal</b>									
Trees were downed, blocking highway SC 41A, then blocking the crossroads of 41 and 501. Thunderstorm gusts then moved a mobile home off its foundation in Mullins..									
<b>Georgetown County</b> 1 E Murrells Inlet	19	1705EST 1707EST			0	0			<b>Waterspout</b>
<b>Darlington County</b> Society Hill	23	0100EST 0105EST			0	0			<b>Thunderstorm Wind (G60)</b>
Fire Station #11 reported thunderstorm gust downed trees..									
<b>Horry County</b> Loris	28	2003EST 2010EST			0	0			<b>Hail (1.00)</b>
<b>Horry County</b> Surfside Beach to Garden City	29	1330EST 1355EST			0	0	50K		<b>Hail (1.50)</b>
Golfball size hail was reported at Surfside Beach, along with strong outflow winds that damaged roofs at Garden City.									
<b>Georgetown County</b> Murrells Inlet	29	1400EST			0	3			<b>Lightning</b>
Three women were crossing a road when they were struck by lightning. Two were hospitalized.									
<b>SOUTH CAROLINA, Northwest</b>									
<b>Oconee County</b> 6 N Salem	02	0836EST			0	0			<b>Hail (1.75)</b>
<b>Anderson County</b> 5 NW Anderson	02	0844EST			0	0			<b>Hail (1.50)</b>
<b>Oconee County</b> Tamassee	02	0850EST			0	0			<b>Hail (1.75)</b>
<b>Anderson County</b> (And)Anderson Co Arp	02	0855EST			0	0			<b>Hail (1.00)</b>
<b>Anderson County</b> Anderson	02	0855EST			0	0			<b>Hail (2.50)</b>
<b>Anderson County</b> Anderson	02	0855EST			0	0			<b>Thunderstorm Wind (G50)</b>
A multi-cell cluster of severe thunderstorms moved southeast across the far northwestern tip of the Upstate during the mid-morning. Hail ranged in size from quarters to tennis balls and combined with severe straight line winds to cause widespread damage on the west side of Anderson. Windshields were broken, cars were dented and boats were damaged on Lake Hartwell. There were reports of funnel clouds with this storm and an unconfirmed report of a tornado touchdown south of Anderson on Hwy 81.									
<b>Oconee County</b> Westminster	04	1515EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Anderson County</b> 6 N Anderson	04	1557EST			0	0			<b>Hail (1.00)</b>
<b>Abbeville County</b> Antreville to 5 N Abbeville	04	1700EST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Chester County</b> 5 NW Chester	04	1730EST	0.1	50	0	0			<b>Tornado (F0)</b>
<b>Greenwood County</b> Countywide	04	1730EST			0	0			<b>Thunderstorm Wind (G50)</b>
Scattered thunderstorms during the late afternoon and early evening developed across the Upstate. A few became severe and one even produced a tornado. Quarter size hail occurred north of Anderson. Trees and power lines were downed in Westminster and north of Keowee. Trees and power lines were downed countywide in Abbeville and Greenwood counties. Trees fell across a car and a trailer, and a barn was blown apart along Hwy 28 in Abbeville county. Police officers observed twin tornadoes touch down briefly in a field northwest of Chester, but produce no damage.									
<b>York County</b> Rock Hill	05	1955EST			0	0			<b>Hail (0.88)</b>
<b>York County</b> Rock Hill	05	1955EST			0	0			<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Northwest</b>									
<b>York County</b>									
Catawba	05	2000EST			0	0			Hail (1.00)
									An isolated severe thunderstorm blew down numerous trees (some on houses) and power lines in the Rock Hill and Leslie areas, leaving 2200 people without power. Large hail was observed up to quarter size.
<b>Spartanburg County</b>									
Pacolet Mills	06	1600EST			0	0			Hail (1.75)
<b>Spartanburg County</b>									
Pacolet Mills	06	1600EST	1	10	0	0			Tornado (F0)
<b>Union County</b>									
3 NW Jonesville	06	1605EST			0	0			Hail (1.75)
<b>Cherokee County</b>									
8 SSW Gaffney	06	1610EST			0	0			Hail (1.75)
<b>Union County</b>									
Carlisle	06	1610EST 1615EST			0	0			Hail (2.75)
<b>Union County</b>									
Carlisle	06	1610EST 1615EST	2	50	0	0			Tornado (F1)
									A large severe and tornadic thunderstorm brought two tornadoes, baseball hail, and damaging straight-line winds to a small portion of the Upstate during the late afternoon. A mile long swath of tree damage in a wooded area occurred as the result of a weak tornado near Pacolet Mills. There was also a swath of damage, 2 miles long in the vicinity of Carlisle as the result of another weak tornado. Trees fell on 4 or 5 houses, across several roads, and some railroad tracks.
<b>Anderson County</b>									
9 SW Anderson	09	1620EST			0	0			Hail (0.75)
<b>Anderson County</b>									
Iva	09	1648EST			0	0			Hail (1.75)
<b>Abbeville County</b>									
1 W Calhoun Falls	09	1650EST			0	0			Hail (1.00)
									A severe thunderstorm produced dime to golf ball size hail from southern Anderson county to Calhoun Falls State Park.
<b>Oconee County</b>									
Seneca	10	1350EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b>									
10 W Anderson	10	1400EST			0	0			Hail (0.75)
<b>Laurens County</b>									
Cross Hill	10	1430EST			0	0			Lightning
									A severe thunderstorm produced damaging winds that downed a large tree onto a house in Seneca. Motorist on Interstate 85 reported a lot of dime size hail from the same thunderstorm. Lightning strikes combined with gusty winds knocked power out to 1200 people in the Cross Hill/Mountville areas of Laurens county.
<b>SCZ001&gt;014-019</b>									
									<b>Northern Oconee - Northern Pickens - Northern Greenville - Southern Oconee - Southern Pickens - Southern Greenville - Spartanburg - Cherokee - York - Anderson - Abbeville - Laurens - Union - Chester - Greenwood</b>
	15	0000EST			0	0			Dry Weather
	30	2300EST							
									Thunderstorms, despite their intensity, became few in coverage and by the end of the month crops were badly in need of rainfall. Many crops began to appear damaged.
<b>Oconee County</b>									
10 S Walhalla	16	0140EST			0	0			Hail (1.75)
<b>Anderson County</b>									
Starr to Iva	16	0150EST 0205EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b>									
Townville to Sandy Spgs	16	0150EST 0205EST			0	0	10K		Thunderstorm Wind (G50)
<b>Oconee County</b>									
Seneca	16	0150EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b>									
Clemson	16	0155EST			0	0			Thunderstorm Wind (G57)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Northwest</b>									
<b>Anderson County</b>									
Anderson to Belton	16	0210EST 0225EST			0	0			Thunderstorm Wind (G50)
<b>Greenwood County</b>									
Coronaco	16	0210EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b>									
Easley	16	0215EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b>									
Easley	16	0215EST 0300EST			0	0			Urban/Sml Stream Fld
<b>Greenville County</b>									
5 W Greenville	16	0220EST			0	0			Thunderstorm Wind (G50)
<b>Laurens County</b>									
Cross Hill	16	0230EST 0245EST			0	0			Thunderstorm Wind (G50)
<b>Laurens County</b>									
Hickory Tavern	16	0230EST			0	0			Thunderstorm Wind (G52)
<b>Union County</b>									
Union	16	0240EST 0255EST			0	1	14K		Thunderstorm Wind (G50)
<b>Spartanburg County</b>									
3 W Spartanburg	16	0245EST 0300EST			0	0			Thunderstorm Wind (G50)
<b>Chester County</b>									
5 NW Chester	16	0310EST			0	0			Thunderstorm Wind (G50)
<b>York County</b>									
York	16	0315EST			0	0			Thunderstorm Wind (G50)
<b>York County</b>									
Rock Hill to Ft Mill	16	0340EST 0350EST			0	0			Thunderstorm Wind (G65)
<p>A line of severe thunderstorms bowed east across the Upstate during the wee hours of the morning, causing wind damage in just about every county. In addition to numerous downed trees and power lines which occurred in each county hit by the storms, there were accounts of structural damage. A roof was blown off a barn near Sandy Springs. Trees fell on structures and cars in southern Anderson county. A car was crushed by a tree west of Belton. Siding was blown off a mobile home and a gas pump blown over in Easley. Numerous trees were downed in a subdivision near the Saluda River, west of Greenville, blocking residents from leaving. One large tree fell through a house and a roof was blown off a mobile home in Cross Hill. In the city of Union, downed trees blocked 30 roads, others fell on houses, and one man was trapped and injured in his car when a tree fell on him. On the west side of Spartanburg, 2700 people were left without power. Trees fell on cars and houses in the Rock Hill and Fort Mill areas as well and 7000 people were left without power. One report of golf ball size hail occurred in the Shiloh community of Oconee county.</p>									
<b>Abbeville County</b>									
5 S Antreville	16	1805EST			0	0			Thunderstorm Wind (G50)
<b>Abbeville County</b>									
8 N Abbeville to 7 SE Abbeville	16	1810EST			0	0			Thunderstorm Wind (G50)
<b>Greenwood County</b>									
Hodges	16	1820EST			0	0			Hail (2.00)
<p>An isolated severe thunderstorm downed trees and caused some power outages in Abbeville county, then produced hen egg size hail in northern Greenwood county.</p>									
<b>Oconee County</b>									
Walhalla	19	1110EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b>									
Pendleton to Anderson	19	1150EST 1205EST			0	0			Thunderstorm Wind (G55)
<b>Pickens County</b>									
Central	19	1150EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b>									
1 W Greenville	19	1205EST			0	0			Thunderstorm Wind (G53)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Northwest</b>									
<b>Oconee County</b>									
Seneca	19	1206EST			0	0			Thunderstorm Wind (G55)
<b>Pickens County</b>									
Pickens to Easley	19	1206EST 1210EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b>									
Pelzer to Williamston	19	1210EST 1215EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b>									
Greenville	19	1218EST			0	0			Lightning
<b>Greenville County</b>									
Greenville	19	1218EST			0	0			Thunderstorm Wind (G55)
<b>Greenville County</b>									
Simpsonville to 5 E Simpsonville	19	1220EST			0	0	20K		Thunderstorm Wind (G55)
<b>Greenville County</b>									
Mauldin	19	1223EST 1230EST			0	0			Thunderstorm Wind (G55)
<b>Greenville County</b>									
6 E Simpsonville	19	1225EST			0	0			Thunderstorm Wind (G52)
<b>Spartanburg County</b>									
Campobello to Inman	19	1225EST 1240EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b>									
Greer to (Gsp)Grvl-SpnbG Apt	19	1225EST 1235EST			0	0			Thunderstorm Wind (G65)
<b>Spartanburg County</b>									
Reidville	19	1238EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b>									
Spartanburg	19	1240EST			0	0			Thunderstorm Wind (G52)
<b>Laurens County</b>									
Gray Court	19	1242EST			0	0			Thunderstorm Wind (G55)
<b>Spartanburg County</b>									
Enoree	19	1245EST			0	0			Thunderstorm Wind (G55)
<b>Spartanburg County</b>									
3 S Spartanburg to Pacolet	19	1253EST 1305EST			0	0			Hail (1.75)
<b>Spartanburg County</b>									
3 S Spartanburg to Pacolet	19	1253EST 1305EST			0	0			Thunderstorm Wind (G75)
<b>Abbeville County</b>									
Calhoun Falls	19	1257EST			0	0			Thunderstorm Wind (G55)
<b>Greenwood County</b>									
Greenwood to Ninety Six	19	1300EST 1330EST			0	0			Thunderstorm Wind (G50)
<b>Greenwood County</b>									
Ware Shoals	19	1300EST 1310EST			0	0			Thunderstorm Wind (G50)
<b>Laurens County</b>									
Laurens to Clinton	19	1300EST 1315EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b>									
Jonesville	19	1310EST			0	0			Thunderstorm Wind (G60)
<b>Spartanburg County</b>									
Glenn Spgs to Glendale	19	1312EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Northwest</b>									
<b>Abbeville County</b> Countywide	19	1315EST			0	0			Thunderstorm Wind (G55)
<b>Laurens County</b> Clinton	19	1315EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> Union to Santuc	19	1322EST 1330EST			0	0	20K		Thunderstorm Wind (G60)
<b>York County</b> Sharon	19	1330EST			0	0			Thunderstorm Wind (G55)
<b>Chester County</b> 10 SW Chester	19	1345EST			0	0			Thunderstorm Wind (G55)
			Another large and damaging line of severe thunderstorms moved east and south across the Upstate, this time during the early afternoon. Again, almost every county in the Upstate reported numerous trees and power lines down, many blocking roads. Power was out for 1500 people in Walhalla. A roof was blown off a house in Williamston. Trees and power lines were downed in downtown Greenville with 23,000 people experiencing loss of power. A lightning strike knocked the facade off the front of a hotel on the east side of Greenville. A barn was destroyed east of Simpsonville. Spartanburg county was especially hard hit as the path of wind damage crossed almost the entire county, including the city of Spartanburg. Much damage was reported from just south of Spartanburg to Pacolet as 90 mph winds and golf ball size hail raked the area. Traffic lights and awnings were blown down and power was lost to 14,400 people. A FedEx plane was damaged at the GSP Airport when a rolling staircase slammed into it. Some trees also fell on houses in the vicinity of Union.						
<b>Pickens County</b> Liberty	21	1340EST 1350EST			0	0			Thunderstorm Wind (G60)
<b>Oconee County</b> Westminster	21	1342EST			0	0			Thunderstorm Wind (G60)
<b>Oconee County</b> 12 NE Walhalla	21	1345EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b> 12 W Pickens	21	1345EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b> 10 NW Anderson	21	1415EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b> Greer	21	1420EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b> Williamston	21	1445EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b> Spartanburg	21	1449EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b> Mayo	21	1505EST			0	0			Thunderstorm Wind (G50)
<b>Cherokee County</b> Gaffney	21	1530EST			0	0			Thunderstorm Wind (G50)
<b>Laurens County</b> 3 W Cross Hill	21	1550EST			0	0			Thunderstorm Wind (G60)
<b>Chester County</b> Great Falls	21	1705EST			0	0			Thunderstorm Wind (G60)
			A cluster of severe thunderstorms moved east across the Upstate causing a considerable amount of wind damage for the 3rd time in one week. Trees and power lines were again reported downed, some across roads and on structures, in every county that had wind damage. A mobile home was damaged, a roof was blown off a nightclub, a tin roof was blown off a building, and 3 cars and the front of a store were damaged by flying debris in Liberty. Trees and power lines were downed in a swath from Highway 11 to Richland in Oconee county. A mobile home was damaged in Westminster. Highway signs were twisted on Interstate 26 near Spartanburg. Underpinning was blown out from under a trailer and a pool was blown into an adjacent yard in western Laurens county. A trailer sustained damage and a porch was blown off a house, in addition to numerous power and phone line outages in Great Falls.						
<b>Greenville County</b> Cleveland to Marietta	22	1524EST			0	0			Thunderstorm Wind (G50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, Northwest</b>									
<b>Pickens County</b> Pumpkintown	22	1600EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b> Marietta	22	1605EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b> Greenville	22	1615EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b> Simpsonville	22	1648EST			0	0			Hail (0.75)
<b>Spartanburg County</b> Woodruff	22	1715EST			0	0			Thunderstorm Wind (G50)
<b>Laurens County</b> 1 N Clinton	22	1743EST			0	0			Thunderstorm Wind (G50)
<b>Greenville County</b> 4 NE Tigerville	22	2115EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b> Inman	22	2230EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b> Spartanburg	22	2230EST			0	0			Thunderstorm Wind (G50)
<b>Union County</b> Union	22	2325EST			0	0			Thunderstorm Wind (G50)
<p>Scattered severe thunderstorms developed in the late afternoon in a hot and humid airmass. They moved slowly south and created outflows for other thunderstorms to develop on throughout the evening. A tree fell on a house in Cleveland and on a house and van in Marietta in northern Greenville county. The same storm moved south through the city of Greenville county, blowing down trees, power lines, traffic lights and power poles. Otherwise, wind damage during the evening was confined to mainly downed trees and power lines, with scattered power outages occurring.</p>									
<b>Spartanburg County</b> 5 NE Spartanburg	24	1603EST			0	0			Thunderstorm Wind (G50)
<b>Spartanburg County</b> 2 SE Spartanburg	24	1616EST			0	0			Hail (1.00)
<b>Spartanburg County</b> Pacolet	24	1628EST			0	0			Hail (1.00)
<b>Union County</b> 4 NW Jonesville	24	1629EST			0	0			Hail (1.00)
<b>Union County</b> West Spgs	24	1640EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b> 5 NW Easley	24	1942EST			0	0			Thunderstorm Wind (G50)
<b>Pickens County</b> Liberty to Easley	24	1950EST 2010EST			0	0			Thunderstorm Wind (G50)
<b>Anderson County</b> 12 NW Anderson to 12 SW Anderson	24	2015EST 2030EST			0	0			Thunderstorm Wind (G50)
<p>Widely scattered thunderstorms developed across the northern part of the Upstate late in the afternoon. One became severe and produced damaging winds and quarter size hail. Trees and power lines fell across Hwy 29 northeast of Spartanburg. One of those trees fell on a car. Trees fell on a deck and pool in West Springs. Scattered thunderstorms continued into the evening and two more became severe. Trees and power lines were downed from Liberty to Easley. A severe thunderstorm in western Anderson county blew down trees along and across Highway 187.</p>									
<b>Spartanburg County</b> (Gsp)Grvl-Spnbng Apt	29	1631EST			0	0			Thunderstorm Wind (G54)
<p>An isolated severe thunderstorm pulsed over the GSP Airport and produced a downburst wind measured at 62 mph by National Weather Service wind equipment. Trees were blown down at the northern end of the airport and the side of the Air Traffic Control Tower was damaged.</p>									
<b>Greenwood County</b> 15 SE Greenwood	30	2105EST			0	0			Thunderstorm Wind (G50)
<p>Trees were downed along U.S. Hwy 178 by an isolated severe thunderstorm.</p>									



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, South Coastal</b>									
<b>SCZ040-042&gt;045-047&gt;050</b>			<b>Allendale - Hampton - Northern Colleton - Dorchester - Berkeley - Jasper - Beaufort - Southern Colleton - Charleston</b>						
	01	0000EST			1	0			<b>Excessive Heat</b>
	30	2359EST							
	Temperatures for most of the month were well into the 90s and occasionally exceeded 100 degrees. Heat indices were frequently near 110 degrees. Rainfall was well below normal as the CWA was approaching the incipient stage of a drought. F83PH								
<b>Colleton County</b>									
<b>Smoaks</b>	02	1005EST 1010EST			0	0			<b>Thunderstorm Wind (G50)</b>
	Trees and powerlines down.								
<b>Colleton County</b>									
<b>5 N Jacksonboro</b>	02	1036EST 1040EST			0	0			<b>Hail (0.75)</b>
<b>Charleston County</b>									
<b>4 W (Chs)Charleston Afb to 3 W (Chs)Charleston Afb</b>	02	1045EST 1048EST			0	0			<b>Thunderstorm Wind (G50)</b>
	Trees down.								
<b>Beaufort County</b>									
<b>Bluffton</b>	02	1155EST 1200EST			0	2			<b>Thunderstorm Wind (G50)</b>
	Trees down. A couple suffered minor injuries when a tree fell on their car.								
<b>Beaufort County</b>									
<b>Bluffton</b>	02	1225EST			0	1			<b>Lightning</b>
	A 62 year old man was struck by lightning while standing under a tree.								
<b>Beaufort County</b>									
<b>Hilton Head Is to 1 E Hilton Head Is</b>	02	1230EST 1235EST			0	0			<b>Waterspout</b>
<b>Beaufort County</b>									
<b>Hilton Head Is</b>	02	1245EST 1248EST			0	0			<b>Hail (0.75)</b>
<b>Beaufort County</b>									
<b>Bluffton</b>	04	2249EST 2253EST			0	0			<b>Hail (0.88)</b>
<b>Beaufort County</b>									
<b>Hilton Head Is</b>	04	2305EST 2310EST			0	0			<b>Hail (0.88)</b>
<b>Beaufort County</b>									
<b>Bluffton to Hilton Head Is</b>	05	1230EST 1300EST			0	0			<b>Thunderstorm Wind (G55)</b>
	Numerous trees down countywide. A metal canopy fell on a car and a truck and a tree crushed a Toyota Camry.								
<b>Charleston County</b>									
<b>Mc Clellanville</b>	10	1200EST 1205EST			0	0			<b>Hail (0.75)</b>
<b>Charleston County</b>									
<b>Charleston to 2 E Charleston</b>	10	1300EST 1310EST			0	0			<b>Waterspout</b>
	Several waterspouts reported by Harbor Pilot and public in Charleston Harbor.								
<b>Colleton County</b>									
<b>Cottageville</b>	10	1320EST 1323EST			0	0			<b>Thunderstorm Wind (G50)</b>
	Trees down.								
<b>Colleton County</b>									
<b>3 NE Walterboro</b>	10	1407EST 1410EST			0	0			<b>Hail (0.75)</b>
<b>Hampton County</b>									
<b>Hampton</b>	10	1510EST 1514EST			0	0			<b>Thunderstorm Wind (G50)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH CAROLINA, South Coastal</b>									
			Trees and powerlines down.						
<b>Beaufort County</b> Sheldon to 4 E Beaufort	10	1530EST 1538EST			0	0			Thunderstorm Wind (G50)
			Powerlines down.						
<b>Allendale County</b> Allendale	10	1540EST 1544EST			0	0			Thunderstorm Wind (G50)
			Trees down.						
<b>Colleton County</b> 9 NW Edisto Beach	14	1820EST 1825EST			0	0			Hail (1.00)
<b>Colleton County</b> 9 NW Edisto Beach	14	1820EST 1825EST			0	0			Thunderstorm Wind (G50)
			Several trees and large limbs down.						
<b>Charleston County</b> 4 N Edisto Is	14	1845EST 1850EST			0	0			Hail (1.75)
<b>Berkeley County</b> 2 S Cross	14	2020EST 2023EST			0	0			Hail (0.88)
<b>Colleton County</b> 3 NE Walterboro to 4 ENE Walterboro	16	2030EST 2033EST			0	0			Thunderstorm Wind (G50)
			Powerlines down.						
<b>Colleton County</b> Cottageville	16	2055EST 2058EST			0	0			Thunderstorm Wind (G50)
			Powerlines down.						
<b>Beaufort County</b> Hilton Head Is	19	1440EST 1445EST			0	0			Thunderstorm Wind (G50)
<b>Colleton County</b> Walterboro	19	1440EST 1444EST			0	0			Thunderstorm Wind (G50)
<b>Beaufort County</b> Hilton Head Is	19	1500EST 1505EST			0	0			Thunderstorm Wind (G50)
			Tree crushed a Chevy Blazer.						
<b>Dorchester County</b> Summerville	19	1550EST 1552EST			0	0			Thunderstorm Wind (G55)
<b>Berkeley County</b> Goose Creek	19	1600EST 1603EST			0	0			Thunderstorm Wind (G50)
<b>Dorchester County</b> Harleyville	19	1600EST 1603EST			0	0			Thunderstorm Wind (G52)
<b>Colleton County</b> Jacksonboro	19	1615EST 1617EST			0	0			Thunderstorm Wind (G50)
<b>Beaufort County</b> Beaufort	19	1620EST 1622EST			0	0			Thunderstorm Wind (G50)
<b>Charleston County</b> Charleston	19	1630EST 1633EST			0	0			Thunderstorm Wind (G50)

Intense and well defined squall line of thunderstorms that extended northeast-southwest across CWA produced numerous reports of

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b><u>SOUTH CAROLINA, South Coastal</u></b>									
									wind damage where trees, large limbs, and powerlines were downed.
<b>Jasper County</b> Ridgeland to Hardeeville	19	1520EST 1530EST			0	0			Thunderstorm Wind (G50)
									Trees and powerlines down.
<b>Berkeley County</b> Shulerville	29	1330EST 1333EST			0	0			Thunderstorm Wind (G50)
									Large tree limbs down.
<b>Charleston County</b> Mc Clellanville	29	1345EST 1347EST			0	0			Thunderstorm Wind (G50)
<b>Colleton County</b> Cottageville	29	1715EST 1717EST			0	0			Hail (1.00)
<b>Dorchester County</b> 2 W Summerville	29	1729EST 1731EST			0	1			Thunderstorm Wind (G50)
									Camper trailer overturned. One minor injury.
<b>Dorchester County</b> Summerville	29	1730EST 1733EST			0	0			Thunderstorm Wind (G55)
<b>Charleston County</b> North Charleston	29	1830EST			0	0			Lightning
									Lightning struck a church.
<b><u>SOUTH DAKOTA, Central and North</u></b>									
<b>Lyman County</b> Reliance	10	1300CST			0	0			Hail (0.75)
<b>Buffalo County</b> 15 SW Gann Vly to 5 S Gann Vly	10	1330CST 1600CST			0	0			Flash Flood
									Two to 3 inches of rain falling in a short time period caused flash flooding on the crow creek southwest through south of Gann Valley. As a result, some dams and roads were washed out.
<b>Buffalo County</b> 6 SW Gann Vly	10	1345CST			0	0			Hail (0.75)
<b>Buffalo County</b> 6 SW Gann Vly	10	1430CST			0	0			Hail (1.75)
									Hail from marble up to golfball size combined with strong winds to damage thousands of acres of winter and spring wheat along with oats and corn southwest through south of Gann Valley. At a farmhouse southwest of Gann Valley, fifteen windows were knocked out by golfball size hail.
<b>Brown County</b> 1 W Aberdeen	10	1738CST			0	0			Hail (0.88)
<b>Brown County</b> Aberdeen	10	1742CST			0	0			Hail (0.75)
<b>Deuel County</b> 4.5 NW Tunerville	11	1500CST			0	0			Hail (1.00)
<b>Day County</b> 3 S Butler	11	1530CST			0	0			Hail (0.88)
<b>Day County</b> 3 S Butler	11	1530CST			0	0			Thunderstorm Wind (G52)
									Dime to nickel size hail combined with wind gusts to 60 mph destroyed 900 acres of oats, wheat, and corn south of Butler.
<b>Clark County</b> 4 E Willow Lake	11	1600CST			0	0			Hail (0.75)
<b>Edmunds County</b> 1 W Mina	11	1630CST			0	0			Hail (0.88)
<b>Codington County</b> 3 W Watertown to 2.5 W Watertown	14	1708CST 1712CST	0.5	10	0	0			Tornado (F0)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA, Central and North</b>									
A small tornado touched down west of Watertown in an open field damaging a tree. Path length and width were estimated.									
<b>Corson County</b> 15 SW Bullhead	16	1825CST			0	0			Hail (0.75)
<b>Dewey County</b> 2 W Isabel to Isabel	16	1900CST 1905CST			0	0			Hail (1.75)
Hail up to the size of golfballs hit areas west of Isabel to Isabel. To the west of Isabel, golfball size hail broke many windows and also went through the screens on several houses. The hail drifted in several places around Isabel.									
<b>Lyman County</b> Kennebec	17	2015CST			0	0			Hail (0.88)
<b>Hyde County</b> 6 E Highmore	17	2043CST			0	0			Thunderstorm Wind (G52)
<b>Hand County</b> 4 W Ree Hgts	17	2046CST			0	0			Thunderstorm Wind (G52)
<b>Hand County</b> 1 N Miller	17	2115CST			0	0			Thunderstorm Wind (G70)
Winds gusting to 80 mph at a farm north of Miller caused a barn to collapse, blew apart a granary, tore the shingles off one side of chicken coop, moved it off of its foundation, and blew the windows out of the top. The high winds also downed a dozen or so big tree limbs.									
<b>Hand County</b> 9 NE Polo	17	2130CST 2132CST	0.2	10	0	0			Tornado (F0)
A small tornado touched down briefly northeast of Polo damaging a tree. Path length and width were estimated.									
<b>Hand County</b> 8 NE Polo	17	2131CST			0	0			Thunderstorm Wind (G61)
Winds gusting to around 70 mph brought many large tree branches down.									
<b>Faulk County</b> Rockham	17	2150CST			0	0			Thunderstorm Wind (G61)
Winds gusting to 70 mph ripped off the garage doors at a farmhouse near Rockham and also ripped off a barn door.									
<b>Faulk County</b> 13 W Faulkton	17	2153CST			0	0			Thunderstorm Wind (G70)
<b>Faulk County</b> 5 NE Cresbard	17	2219CST			0	0			Hail (0.75)
<b>Edmunds County</b> 5 S Mina	17	2235CST			0	0			Thunderstorm Wind (G52)
Winds gusting to 60mph brought down many large tree branches.									
<b>Brown County</b> Aberdeen	17	2250CST 2300CST			0	0			Thunderstorm Wind (G61)
Several trees were downed in Aberdeen along with a lot of branches. As a result, four streets were blocked for a time and three cars were damaged. Also, a tree fell on a house causing some damage.									
<b>SDZ017</b>									
<b>Faulk</b>									
	17	2300CST			0	0			Flood
	18	1200CST							
Heavy rain of 3 to 4 inches fell during the late evening and early morning hours across part of eastern Faulk county in the Faulkton, Miranda, Orient, and Cresbard area. Several roads were flooded with some being closed.									
<b>Stanley County</b> 26 W Ft Pierre	24	2100CST			0	0			Hail (0.88)
<b>Stanley County</b> 26 W Ft Pierre	24	2100CST			0	0			Thunderstorm Wind (G61)
<b>Deuel County</b> Clear Lake	24	2130CST			0	0			Hail (0.75)
<b>Hamlin County</b> 3 E Castlewood	24	2135CST			0	0			Hail (0.75)
<b>Deuel County</b> Toronto	24	2140CST			0	0			Thunderstorm Wind (G52)
Winds gusting to 60 mph brought many tree branches down in Toronto.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA, Central and North</b>									
<b>Corson County</b> 7 S Wakpala	26	1105CST			0	0			Hail (1.75)
<b>Campbell County</b> 6 SE Herreid	26	1130CST 1200CST			0	0			Hail (1.75)
Golfball size hail combined with strong winds of over 50 miles an hour lasted for nearly one half hour. One hundred percent of the crops in the area were destroyed. Some paint was stripped off a farmhouse along with a lot of structural damage to outbuildings. According to the reporter, it seemed like a blizzard.									
<b>Campbell County</b> 3 SE Herreid	26	1200CST			0	0			Hail (0.75)
<b>Mepherson County</b> Leola	26	1415CST			0	0			Thunderstorm Wind (G61)
Winds gusting to around 70 mph downed several trees in Leola along with many large tree branches. The high winds also snapped a wooden street sign off.									
<b>Edmunds County</b> 5 NE Ipswich	26	1430CST			0	0			Hail (1.75)
<b>Brown County</b> 1 SE Groton	26	1500CST	0.2	10	0	0			Tornado (F0)
A tornado touched down briefly southeast of Groton with no damage reported. Path length and width were estimated.									
<b>Brown County</b> Frederick	26	1505CST			0	0			Thunderstorm Wind (G61)
Winds gusting to around 70 mph brought some trees down in Frederick.									
<b>Brown County</b> Columbia	26	1525CST			0	0			Hail (0.88)
<b>Brown County</b> Columbia	26	1525CST			0	0			Thunderstorm Wind (G52)
Winds gusting to 60 mph brought some trees and tree branches down in Columbia.									
<b>Brown County</b> Aberdeen	26	1545CST			0	0			Hail (0.88)
<b>Brown County</b> Aberdeen	26	1545CST			0	0			Thunderstorm Wind (G52)
Winds gusting to 60 mph partially removed the roof off a business in Aberdeen.									
<b>Brown County</b> Bath	26	1555CST			0	0			Hail (1.75)
<b>Brown County</b> 1 S Tacoma Park	26	1600CST			0	0			Hail (2.50)
<b>Brown County</b> 1 S Tacoma Park	26	1600CST			0	0			Thunderstorm Wind (G61)
Winds gusting to 70 mph brought many large tree branches down south of Tacoma Park.									
<b>Walworth County</b> Java	26	1600CST			0	0			Thunderstorm Wind (G61)
Winds gusting to 70 mph brought many large branches down across Java.									
<b>Edmunds County</b> Hosmer	26	1630CST			0	0			Thunderstorm Wind (G61)
<b>Sully County</b> 18 NE Agar	26	1630CST			0	0			Hail (0.75)
<b>Brown County</b> Groton	26	1634CST			0	0			Hail (1.75)
<b>Day County</b> 3 NW Pierpont	26	1700CST			0	0			Hail (1.00)
<b>Day County</b> 3 NW Pierpont	26	1700CST			0	0			Thunderstorm Wind (G52)
Winds gusting to 60 mph knocked down several trees in Pierpont.									
<b>SDZ006-010</b>	26	<b>Brown - Edmunds</b> 1700CST 2000CST			0	0			High Wind (G51)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **SOUTH DAKOTA, Central and North**

High winds gusting to near 60 mph lasted for several hours across eastern Edmunds and all of Brown as the result of a wake low behind severe thunderstorms. The high winds caused a lot of tree damage and also brought several trees down.

### **Spink County**

<b>Turton</b>	26	1720CST			0	0			<b>Thunderstorm Wind (G52)</b>
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### **Marshall County**

<b>Britton</b>	26	1800CST			0	0			<b>Thunderstorm Wind (G61)</b>
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Winds to 70 mph downed many large trees and tree branches from Britton and north. Also, many power lines were brought down.

### **Marshall County**

7 N Britton	26	1800CST			0	0			<b>Thunderstorm Wind (G61)</b>
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### **Day County**

2 N Roslyn	26	1825CST			0	0			<b>Thunderstorm Wind (G61)</b>
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Winds to 70 mph brought down many tree limbs.

### **Day County**

4 SE Webster	26	1845CST			0	0			<b>Hail (0.75)</b>
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### **Stanley County**

8 NW Hayes	26	1850CST			0	0			<b>Hail (2.75)</b>
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### **Codington County**

2 NW Watertown	26	1900CST			0	0			<b>Thunderstorm Wind (G56)</b>
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### **Grant County**

14 W Marvin	26	1920CST 1923CST	0.4	10	0	0			<b>Tornado (F0)</b>
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A tornado touched down briefly in a pasture west of Marvin. The observer said it was a black and white spinning column that sucked up water from a slough. No damage was reported. Path length and width were estimated.

### **Stanley County**

10 SW Ft Pierre	26	1930CST			0	0			<b>Hail (1.00)</b>
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### **Deuel County**

9 W Clear Lake	26	1945CST			0	0			<b>Hail (1.00)</b>
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### **Grant County**

3 N Marvin	26	1955CST 1957CST	0.2	10	0	0			<b>Tornado (F0)</b>
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A tornado touched down briefly north of Marvin with no damage reported. Path length and width were estimated.

### **SDZ006>007-011**

#### **Brown - Marshall - Day**

26	1700CST				0	0			<b>Flood</b>
27	1700CST								

Heavy rains of 2 to 4 inches fell across much of northern and eastern Brown, western and northern Day and all of Marshall counties during the afternoon and evening of the 26th. The additional heavy rain only exacerbated the flooding which had been occurring over much of this area for years. Kidder, in northern Marshall county, received up to 5 inches of rain on the 26th after receiving around 2 inches on the 25th. The heavy rain on the 26th flooded the whole town, filling nearly every basement. One resident had the basement walls cave in. Areas of Britton were also flooded with water in basements.

The heavy rains added to the already thousands of acres of crop and pastureland under water. Near Frederick, a farmer lost nearly 2000 acres of crops to the hail, wind, and flooding. One farmer in Day county near Webster had documented over one-half million dollars in damage to fences, buildings, land, and income from the prolonged flooding. On his farm, he had 15 buildings under water. This farmer said the highest he had measured the water before from flooding was 9 feet, but for this year it had gone up to 21 feet. As a result of this and past heavy rains and also many years of above normal precipitation, about 22 percent of the total farm and pastureland acres in the three counties were flooded or too wet to farm. Many more township and county roads along with some highways were added to the flooded list across the three counties. Some rainfall amounts included, 2.30 inches at Sand Lake NWR, 2.7 inches at Langford, 2.95 inches at Groton, 3.5 inches northwest of Bristol, and 5.10 inches 9N 9W of Britton.

## **SOUTH DAKOTA, Southeast**

### **Jerauld County**

Crow Lake to 8 S Wessington Spgs	10	1440CST 1510CST			0	0	50K		<b>Hail (1.75)</b>
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Large hail caused widespread damage to wheat, soybean, corn, and sunflower crops; broke windows, and damaged vehicles and buildings. The hail accumulated 6 inches in places. Over 20 thousand acres of crops were affected. Damage was not total. Over 2 months later some crops were still recovering according to the extension office, so damage estimates were not available.

### **Aurora County**

10 N White Lake to 10 N Plankinton	10	1450CST 1510CST			0	0			<b>Hail (1.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA, Southeast</b>									
Large hail caused crop damage.									
<b>Sanborn County</b> Cuthbert to 3 E Artesian	10	1510CST 1550CST			0	0			Hail (1.75)
Large hail caused widespread damage to corn, soybean, and other crops with over 50 thousand acres affected. However, over 2 months later many crops were recovering according to the extension office, so no damage estimates were available.									
<b>Miner County</b> Fedora to Howard	10	1620CST 1655CST			0	0			Hail (0.75)
Wind driven large hail caused crop damage.									
<b>Miner County</b> 8 SW Howard	10	1628CST	0.1	50	0	0			Tornado (F0)
A brief tornado caused no reported damage.									
<b>Miner County</b> Howard	10	1640CST 1650CST			0	0	10K		Thunderstorm Wind (G52)
Thunderstorm winds blew off part of a church roof and caused tree damage.									
<b>Hutchinson County</b> 1 W Tripp to 4 N Kaylor	11	1605CST 1620CST			0	0	10K		Hail (1.00)
Large hail damaged corn and soybean crops, and damaged siding and trees.									
<b>Minnehaha County</b> Hartford	11	1755CST			0	0			Hail (1.00)
<b>Hutchinson County</b> 4 N Tripp	17	2025CST 2035CST			0	0	20K		Thunderstorm Wind (G52)
Thunderstorm winds damaged a machine shed. A tractor inside the shed was also damaged.									
<b>Hutchinson County</b> Dimock	17	2044CST			0	0			Hail (1.00)
<b>Bon Homme County</b> 2 N Running Water	17	2100CST			0	0	20K		Lightning
Lightning started a fire which destroyed a barn.									
<b>Union County</b> Elk Pt	23	2043CST			0	0			Hail (1.75)
<b>Aurora County</b> White Lake	24	1913CST			0	0			Hail (1.00)
<b>Hutchinson County</b> 5 W Tripp	24	1925CST			0	0			Thunderstorm Wind (G52)
<b>Yankton County</b> Yankton to 8 W Yankton	24	1950CST 1958CST			0	0			Hail (0.75)
<b>Davison County</b> Mitchell	24	2000CST			0	0			Thunderstorm Wind (G57)
Thunderstorm winds damaged power lines and trees, with 4 inch diameter limbs snapped off.									
<b>Lake County</b> Madison to 3 E Wentworth	24	2015CST 2030CST			0	0	200K		Thunderstorm Wind (G65)
Thunderstorm winds caused widespread tree damage and damage to buildings, especially roofs, some of which resulted from blowing tree debris. The winds also damaged several farm buildings, overturned 2 empty boxcars, and damaged a grain elevator.									
<b>Moody County</b> 4 NW Colman to 3 E Flandreau	24	2037CST 2100CST			0	0	300K		Thunderstorm Wind (G70)
Thunderstorm winds caused widespread tree and power line damage in Moody County. The winds also destroyed a feed mill and a mobile home.									
<b>Minnehaha County</b> 3 NW Hartford to Sioux Falls	24	2043CST 2105CST			0	1	200K		Thunderstorm Wind (G61)
Thunderstorm winds caused widespread tree damage, destroyed several farm buildings, and tore the roof off a house. The winds									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA, Southeast</b>									
			also caused damages to vehicles and homes from flying debris, and blew a camper and semi trailer off the road, injuring the semi driver.						
<b>Lincoln County</b> 6 S Sioux Falls	24	2105CST			0	0			<b>Thunderstorm Wind (G51)</b>
<b>Beadle County</b> 1 W Huron	26	1835CST			0	0			<b>Hail (1.75)</b>
<b>Beadle County</b> (Hon)Huron Arpt	26	1837CST			0	0			<b>Thunderstorm Wind (G50)</b>
<b>Beadle County</b> 1 NE Iroquois	26	1910CST			0	0			<b>Hail (0.75)</b>
<b>SOUTH DAKOTA, West</b>									
<b>SDZ024-028</b>	<b>Northern Black Hills - Central Black Hills</b>								
	02	2100MST			0	0			<b>Heavy Snow</b>
	03	0700MST							
	A late season snow event covered the northern and central Black Hills under 5 to 10 inches of snow. The surrounding plains also received snow, amounts were much less, however, in the 1 to 3 inch range. A new record low of 32 degrees was also set in Rapid City.								
<b>Ziebach County</b> 2 W Glad Vly	16	1630MST			0	0			<b>Hail (1.75)</b>
	windows broken								
<b>Todd County</b> Rosebud	17	1726MST			0	0			<b>Hail (1.00)</b>
<b>Mellette County</b> Wood	17	1812MST			0	0			<b>Hail (0.75)</b>
<b>Meade County</b> 5 NW Sturgis to 10 NW Sturgis	18	0600MST 1600MST			0	0			<b>Urban/Sml Stream Fld</b>
<b>Pennington County</b> 35 E Rapid City to 15 E Rapid City	18	0600MST 1600MST			0	0			<b>Urban/Sml Stream Fld</b>
<b>SDZ001-013&gt;014-026-031&gt;032-043</b>	<b>Harding - Meade Co. Plains - Ziebach - Central Foot Hills - Pennington Plains - Haakon - Jackson</b>								
	18	0730MST 1615MST			0	0			<b>High Wind (G78)</b>
<b>Lawrence County</b> Deadwood	18	0800MST 1600MST			0	0			<b>Urban/Sml Stream Fld</b>
<b>Butte County</b> Belle Fourche to 30 E Belle Fourche	18	1000MST 1600MST			0	0			<b>Urban/Sml Stream Fld</b>
	Heavy rain over the northern and central Black Hills, and the northern and central foothills caused some area creeks to rise out of their banks and resulted in some low land flooding. Some roads were closed in the Deadwood area. Strong winds were also associated with the precipitation in Northwest and Western South Dakota.								
<b>SDZ002-012</b>	<b>Perkins - Butte</b>								
	18	2100MST			0	0			<b>Flood</b>
	21	1800MST							
	Heavy rain during the overnight and afternoon hours of the 17th and 18th resulted in low land flooding along the south fork of the Moreau river in northern Butte county and later along the mainstream of the Moreau river in southern Perkins county. The heavy rains also caused some low land flooding along the Cheyenne river, downstream of the confluence with the Belle Fourche river in southern Perkins county. No injuries or damage were reported with the flooding along either river.								
<b>Pennington County</b> 10 E Scenic	19	1800MST			0	0			<b>Hail (1.50)</b>
<b>Pennington County</b> Wall	19	1810MST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Jackson County</b> Wanblee	19	1835MST	0.1	1	0	0			<b>Tornado (F0)</b>
	20	1835MST							



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA, West</b>									
<b>Mellette County</b> 3 E Norris	19	1910MST			0	0	0.50K		Hail (2.75)
									Broken windows and some crop damage.
<b>Lawrence County</b> 19 NW Deadwood	22	1849MST	0	0	0	0			Tornado (F0)
<b>Meade County</b> 12 SW Hereford	23	1625MST			0	0			Hail (0.88)
<b>Meade County</b> 12 SW Hereford	23	1640MST			0	0			Hail (1.75)
<b>Meade County</b> 10 NW Ellsworth Afb	23	1703MST 1715MST	5	200	0	0			Tornado (F0)
<b>Mellette County</b> 1 W White River	23	1721MST			0	0			Hail (1.75)
<b>Meade County</b> 10 NNW Ellsworth Afb	23	1730MST	0.1	150	0	0	1K		Tornado (F0)
									A corral was damaged and some fences were taken out by the tornado.
<b>Meade County</b> 6 N Ellsworth Afb	23	1750MST 1755MST	3	150	0	0			Tornado (F0)
<b>Todd County</b> 5 N Olsonville	23	1803MST	0.1	150	0	0			Tornado (F0)
<b>Pennington County</b> 11 N Wall	23	1936MST			0	0			Hail (1.75)
<b>Fall River County</b> 3 W Hot Spgs	24	1620MST 1625MST	0.3	66	0	1	166K		Tornado (F1)
									A roof was blown off a house, and two campers and a boat trailer were damaged. A mobile home was also destroyed with a young man on the porch of the house thrown.
<b>Custer County</b> Fairburn	24	1724MST			0	0	50K		Thunderstorm Wind (G52)
									A vacant mobile home was destroyed, a roof was torn off a shed and two twelve inch diameter trees were blown down.
<b>Custer County</b> Hermosa	24	1734MST			0	0			Thunderstorm Wind (G54)
<b>Pennington County</b> 7 SW Rapid City	24	1740MST			0	0			Hail (0.75)
<b>Meade County</b> Black Hawk	24	1747MST			0	0			Hail (0.75)
<b>Pennington County</b> 8 E Rapid City	24	1747MST			0	0			Thunderstorm Wind (G50)
<b>Pennington County</b> Caputa	24	1755MST			0	0			Thunderstorm Wind (G52)
									Some tree damage.
<b>Pennington County</b> 10 S Wall	24	1800MST			0	0			Thunderstorm Wind (G51)
<b>Meade County</b> Elm Spgs	24	1822MST			0	0			Thunderstorm Wind (G61)
									Large tree blown over
									As thunderstorms passed over the southwest corner of South Dakota, a brief tornado touched down in the Hot Springs area. One person was injured when the porch of the mobile home he was standing on was destroyed. The mobile home was also destroyed. The roof of a nearby home was torn off by the same tornado as well as damaging two campers and a boat trailer. This same storm later resulted in high winds of 55 to 70 mph which raced across west central South Dakota, east of the Black Hills. A vacant mobile home was destroyed along with a roof being torn off a shed in the Fairburn area.
<b>Lawrence County</b> Spearfish	26	1420MST			0	0			Hail (0.88)
<b>Meade County</b> 7 N Howes	26	1615MST			0	1			Hail (4.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>SOUTH DAKOTA, West</u></b>									
A motorist was injured by broken glass and hail.									
<b>Haakon County</b> 2 SW Kirley	26	1735MST			0	0			Hail (2.75)
Numerous broken windows.									
<b>Haakon County</b> 15 E Milesville	26	1745MST			0	0			Hail (2.75)
Barn damaged along with some broken skylights.									
<b><u>TENNESSEE, Central</u></b>									
<b>Coffee County</b> South Portion	01	0045CST			0	0			Thunderstorm Wind (G50)
Chattanooga THP reported trees down in the southern part of the county.									
<b>Lincoln County</b> Countywide	01	0115CST 0130CST			0	0			Thunderstorm Wind (G50)
Lincoln county EMA reported trees down countywide.									
<b>Coffee County</b> South Portion	01	0045CST			0	0			Thunderstorm Wind (G50)
Chattanooga THP reported trees down in the southern part of the county.									
<b>Lincoln County</b> Countywide	01	0115CST 0130CST			0	0			Thunderstorm Wind (G50)
Lincoln county EMA reported trees down countywide.									
<b>Williamson County</b> Franklin	02	0159CST			0	0	30K		Lightning
News article states that lightning struck a home on 1221 Temple Ridge Dr. and started a fire on the roof. The fire on the roof then spread to the attic and walls of the house.									
<b>Williamson County</b> 9 NE Franklin	02	0200CST			0	0			Thunderstorm Wind (G50)
Newspaper reported a tree a large walnut tree was blown down in the Brentwood Community Playground.									
<b>Cannon County</b> 9 SSW Woodbury	02	0215CST 0216CST			0	0			Thunderstorm Wind (G50)
Trees were blown down along Hollow Springs Rd.									
<b>Rutherford County</b> 3 SE Smyrna to 4 SE Smyrna	02	0215CST 0217CST	1	200	0	0	1.6M		Tornado (F1)
2 buildings were destroyed by the tornado. The tornado destroyed Grand Slam USA, which was a metal building with an indoor sports facility. Metal beams were ripped up and slammed back down onto the back of the facility. Grand Slam USA was located on Stroop Lane. The tornado also blew out the wall of another business in the area.									
<b>Dickson County</b> Countywide	02	1230CST 1231CST			0	0			Thunderstorm Wind (G50)
A few trees were blown down around the county.									
<b>Clay County</b> 4 SE Celina	02	2334CST 2335CST			0	0			Hail (1.75)
SKYWARN Spotter reported golf ball size hail.									
<b>Overton County</b> Livingston	02	2345CST 2346CST			0	0			Hail (1.50)
SKYWARN Spotter reported walnut size hail.									
<b>Overton County</b> Allons	02	2350CST 2352CST			0	0	50K		Hail (4.50)
SKYWARN Spotter reported soft ball size hail which damaged his truck and nearby structures.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Overton County</b> Livingston	02	2350CST 2355CST			0	0	50K		<b>Thunderstorm Wind (G50)</b>
									EMA Director reported widespread structural damage with numerous roofs blown off buildings. Roads were blocked by trees and downed power lines. About 15 to 20 homes were affected by the storm.
<b>Overton County</b> 2 N Livingston	02	2352CST 2353CST			0	0	50K		<b>Hail (2.75)</b>
									SKYWARN Spotter reported baseball size hail that damaged the windshield to his car and truck. Newspaper article reported other damages to cars and homes in the area.
<b>Rutherford County</b> Smyrna	02	2355CST			0	0			<b>Hail (1.00)</b>
									Sheriff's office reported quarter size hail.
<b>Davidson County</b> Inglewood	04	0620CST			0	0			<b>Thunderstorm Wind (G50)</b>
									8 inch diameter wide branch snapped off a tree.
<b>Davidson County</b> Nashville	04	0900CST			0	0	250K		<b>Lightning</b>
									Lightning struck the 108-year-old St. Patrick Catholic Church on Second Ave. So. The fire had done serious structural damage to the roof and steeple.
<b>Davidson County</b> South Portion	04	0900CST 1145CST			0	0			<b>Flash Flood</b>
									Water covered the roads in the southern half of Davidson county. Water threatened the Harding Mall and other structures in south and west Nashville.
<b>Williamson County</b> Countywide	04	0930CST 1145CST			0	0			<b>Flash Flood</b>
									21 roads were covered with water, and there were 7 areas where water was in or close to structures...mainly in the north half.
<b>Rutherford County</b> Northwest Portion	04	0945CST 1215CST			0	0			<b>Flash Flood</b>
									A neighborhood between La Vergne and Smyrna was evacuated, and 2 families were placed in a shelter.
<b>Stewart County</b> Dover	05	0025CST 0500CST			0	0			<b>Flash Flood</b>
									Local law enforcement reported flash flooding in a home at Dover.
<b>Stewart County</b> Carlisle	05	0030CST			0	0			<b>Thunderstorm Wind (G50)</b>
									Several trees were blown down.
<b>Stewart County</b> Cumberland City	05	0030CST 0430CST			0	0			<b>Flash Flood</b>
									Water was covering Highway 233. 2 homes were evacuated.
<b>Houston County</b> 3 SE Erin	05	0035CST 0330CST			0	0			<b>Flash Flood</b>
									Local law enforcement reported water over Highway 49.
<b>Houston County</b> 3 NE Erin	05	0035CST 0330CST			0	0			<b>Flash Flood</b>
									Local law enforcement reported water over Highway 231.
<b>Dickson County</b> Cumberland Furnace	05	0043CST			0	0			<b>Thunderstorm Wind (G52)</b>
									Local law enforcement reported 60 mph wind gusts.
<b>Davidson County</b> Nashville	05	0135CST 0730CST			0	0			<b>Flash Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
Spotter reported flash flooding in the western part of the city.									
<b>Williamson County</b> 9 NE Franklin	05	0135CST 0730CST			0	0	50K		Flash Flood
News article reported 30 homes sustained water damage from flash flooding in Brentwood.									
<b>Wilson County</b> Mt Juliet	05	0153CST 0730CST			0	0			Flash Flood
Flash flooding was reported by the police department.									
<b>Sumner County</b> Gallatin	05	0211CST 0730CST			0	0			Flash Flood
3 feet of water were covering the roads in portions of the city.									
<b>Lawrence County</b> South Portion	05	0345CST 0350CST			0	0	2K		Thunderstorm Wind (G50)
Widespread downed trees in the southern part of the county. Roof damage occurred to a home in St. Joseph.									
<b>Giles County</b> Minor Hill	05	0400CST			0	0			Thunderstorm Wind (G50)
Trees were blown down in town.									
<b>Sequatchie County</b> Cagle	09	1604CST 1605CST			0	0			Thunderstorm Wind (G50)
Trees and power lines were down in the Cagle Mountain area.									
<b>Wayne County</b> Waynesboro	09	1726CST			0	0			Hail (0.75)
Dime size hail was reported.									
<b>Lawrence County</b> Brace	09	1735CST			0	0			Hail (0.75)
Dime size hail was reported.									
<b>Bedford County</b> Shelbyville	09	1855CST			0	0			Hail (1.75)
Golf ball size hail was reported.									
<b>Dekalb County</b> Smithville	09	2045CST			0	0	750K		Hail (1.75)
Golf ball size hail was reported. News article mentioned 70 cars and 17 homes were damaged by the hailstorm. The wind driven hailstones caused holes in the siding of homes.									
<b>Dekalb County</b> Smithville	09	2045CST			0	0			Thunderstorm Wind (G50)
Newspaper account of a large tree uprooted in Smithville.									
<b>Davidson County</b> Goodlettsville	10	0830CST			0	0			Thunderstorm Wind (G50)
Trees were blown down.									
<b>Sumner County</b> 3.5 SW Shackle Is	10	0830CST			0	0			Hail (0.88)
Nickel size hail was reported.									
<b>Davidson County</b> Goodlettsville	10	0840CST			0	0			Hail (1.75)
Golf ball size hail was reported.									
<b>Putnam County</b> Ditty	10	0945CST			0	0			Thunderstorm Wind (G50)
A tree was blown down.									
<b>Putnam County</b> Northwest Portion	10	0945CST 1230CST			0	0			Flash Flood
Martin's Creek overflowed its banks trapping residents in several homes.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Putnam County</b> Northwest Portion	10	0945CST 0946CST			0	0			Thunderstorm Wind (G50)
			Trees were blown down along Martin's Creek Rd.						
<b>Davidson County</b> Nashville	10	0946CST 0950CST			0	0			Thunderstorm Wind (G50)
			EMA reported trees and power lines down.						
<b>Davidson County</b> Nashville	10	1002CST			0	0	5K		Thunderstorm Wind
			Tree fell on a house.						
<b>Montgomery County</b> Clarksville	10	1010CST 1100CST			0	0			Flash Flood
			Flooding was occurring on roads in Clarksville especially in the northeast part of town.						
<b>Montgomery County</b> Port Royal	10	1010CST 1100CST			0	0			Flash Flood
			News article reported that a covered bridge at Port Royal State park received damage to the high water.						
<b>Robertson County</b> Countywide	10	1018CST 1230CST			0	0			Flash Flood
			EMA reported roads covered with water around the county.						
<b>Sumner County</b> Portland	10	1023CST 1100CST			0	0			Flash Flood
			Roads were under water at Portland. Also, there were scattered reports of flooding in the northwest part of the county.						
<b>Cheatham County</b> Pleasant View	10	1030CST 1230CST			0	0			Flash Flood
			Roads were covered with water, especially at the intersection of Pleasantview Road and Old Clarksville Pike.						
<b>Davidson County</b> Goodlettsville	10	1030CST 1230CST			0	0			Flash Flood
			Street flooding was reported by the local EMA.						
<b>Putnam County</b> Southeast Portion	10	1030CST 1035CST			0	0			Thunderstorm Wind (G50)
			Sheriff's office reported trees were blown down.						
<b>Macon County</b> Countywide	10	1045CST 1230CST			0	0			Flash Flood
			Sheriff's office reported several roads flooded around the county due to flooded creeks.						
<b>Putnam County</b> Countywide	10	1047CST 1235CST			0	0			Flash Flood
			Sheriff's office reported some county roads were under water.						
<b>Smith County</b> Countywide	10	1055CST 1235CST			0	0			Flash Flood
			Sheriff's office reported many roads throughout the county were flooded, especially in the northern part of the county.						
<b>Trousdale County</b> Countywide	10	1059CST 1235CST			0	0			Flash Flood
			Sheriff reported a few roads have high water on them.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Grundy County</b> Tracy City	10	1230CST 1330CST			0	0			Flash Flood
									Standing water in front of several homes.
<b>Maury County</b> Countywide	10	1400CST 1405CST			0	0			Thunderstorm Wind (G50)
									Trees were down around the county, including Columbia.
<b>Marshall County</b> Lewisburg	10	1430CST			0	0			Thunderstorm Wind (G50)
									Trees and telephone poles were blown down from Lewisburg to Farmington.
<b>Lewis County</b> Hohenwald	10	1515CST			0	0	5K		Thunderstorm Wind
									Trees were blown down and a trailer was tipped over from strong thunderstorm winds.
<b>Davidson County</b> Nashville	10	1610CST 1611CST			0	0			Thunderstorm Wind (G50)
									EMA reported scattered areas of trees and power lines were blown down in the western part of the city.
<b>Lincoln County</b> Northeast Portion	10	1656CST 1701CST			0	0			Thunderstorm Wind (G50)
									Sheriff's office reported a tree was down on Highway 50 and also on U.S. Highway 231.
<b>Robertson County</b> Cross Plains	10	1825CST			0	0			Thunderstorm Wind (G50)
									A tree was blown down.
<b>Macon County</b> Countywide	10	1830CST 1835CST			0	0			Thunderstorm Wind (G50)
									Sheriff's office reported trees were blown down countywide.
<b>Macon County</b> 9 NW Lafayette	10	1830CST 2030CST			0	0			Flash Flood
									Sheriff's office reported several roads were impassable and a bridge was washed out in the western part of the county on Trammel Creek Rd.
<b>Wilson County</b> 5 E Lebanon	10	1845CST 1846CST			0	0			Hail (0.75)
									Spotter reported dime size hail.
<b>Smith County</b> Countywide	10	2004CST 2130CST			0	0			Flash Flood
									Sheriff's office reported many roads were under water.
<b>Dekalb County</b> Liberty	10	2030CST 2200CST			0	0			Flash Flood
									Report of high water in Liberty.
<b>Stewart County</b> 8 NE Dover	12 13	2315CST 2315CST			0	0			Thunderstorm Wind (G50)
									Sheriff's office reported a few trees were blown down on Big A Road.
<b>Houston County</b> Tennessee Ridge	12	2340CST			0	0			Thunderstorm Wind (G50)
									Sheriff's office reported a tree down on telephone line.
<b>Dickson County</b> Countywide	13	0000CST			0	0			Thunderstorm Wind (G50)
									Electric company reported trees and power lines down around the county.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Humphreys County</b> 6 N Mc Ewen	13	0000CST			0	0			<b>Thunderstorm Wind (G50)</b> Electric company reported a couple of trees were blown down on Highway 231 and White Oak Creek.
<b>Dickson County</b> Dickson	13	0020CST			0	0			<b>Thunderstorm Wind (G50)</b> Sheriff's department reported a tree down on a telephone line.
<b>Wayne County</b> Lutts	13	0140CST			0	0	0.15K		<b>Thunderstorm Wind</b> Electric company reported 4 power poles were down in Lutts.
<b>White County</b> Northwest Portion	13	2315CST			0	0			<b>Thunderstorm Wind (G50)</b> Caney Fork Electric reported a few trees down across power lines.
<b>Humphreys County</b> Countywide	14	0200CST			0	0			<b>Thunderstorm Wind (G50)</b> Electric company reported trees down on power lines around the county.
<b>Hickman County</b> North Portion	14	0225CST			0	0			<b>Thunderstorm Wind (G50)</b> Electric company reported trees down in the Bucksnot and Only areas in northern Hickman county.
<b>Maury County</b> Countywide	14	0300CST			0	0			<b>Thunderstorm Wind (G50)</b> Columbia electric reported trees and power lines down around the county.
<b>Marshall County</b> 5 SW Chapel Hill	14	0345CST			0	0			<b>Thunderstorm Wind (G50)</b> Trees down on power lines along Powell Lane.
<b>Macon County</b> Countywide	14	0940CST			0	0			<b>Thunderstorm Wind (G50)</b> Electric company reported trees and power lines were down around the county. The reports were scattered.
<b>Clay County</b> Celina	14	1015CST			0	0			<b>Thunderstorm Wind (G50)</b> The electric company reported numerous trees and power lines were down in Celina.
<b>Jackson County</b> North Portion	14	1015CST			0	0			<b>Thunderstorm Wind (G50)</b> The electric company reported downed power lines at scattered locations across the northern part of the county.
<b>Smith County</b> North Portion	14	1020CST			0	0			<b>Thunderstorm Wind (G50)</b> Electric company reported trees and power lines down in the northern part of the county in the Dixon springs area and Difficult.
<b>Putnam County</b> 5 N Cookeville	14	1051CST			0	0			<b>Thunderstorm Wind (G50)</b> Cookeville Police Department reported trees were down.
<b>Humphreys County</b> North Portion	14	2000CST			0	0			<b>Thunderstorm Wind (G50)</b> Meriwether Lewis Electric Coop reported trees and power lines down across the northern part of the county especially north of Waverly.
<b>Humphreys County</b> South Portion	14	2100CST			0	0			<b>Thunderstorm Wind (G50)</b> Meriwether Lewis Electric Coop reported numerous trees and power lines were down in the southern part of the county, especially south of McEwen.
<b>Dickson County</b> Tidwell	14	2120CST			0	0			<b>Hail (1.75)</b> Golf ball size hail reported near intersection of I-40 and Highway 46.
<b>Davidson County</b> Hermitage	14	2125CST			0	2	10K		<b>Thunderstorm Wind (G50)</b> A tree fell on a car which injured 2 people.
<b>Wilson County</b> Mt Juliet	14	2130CST			0	0			<b>Thunderstorm Wind (G50)</b> Sheriff's department reported trees down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Wilson County</b> 5 W Lebanon	14	2140CST			0	0			Hail (0.75)
									Spotter reported dime size hail.
<b>Smith County</b> Countywide	14	2200CST			0	0			Thunderstorm Wind (G50)
									Electric company reported trees and power lines down at numerous locations throughout the county.
<b>Smith County</b> Pleasant Shade	14	2200CST			0	0	20K		Thunderstorm Wind
									The Carthage Courier reported several large trees were uprooted. One tree fell on a car shed, damaging 2 vehicles.
<b>Williamson County</b> Leipers Fork	14	2200CST			0	0			Thunderstorm Wind (G50)
									Middle Tennessee Electric reported several trees and power lines were down near the intersection of Garrison Rd. and Natchez Trace as well as along Hillsboro Rd.
<b>Jackson County</b> Countywide	14	2215CST			0	0			Thunderstorm Wind (G50)
									Electric company reported widespread trees and power lines down throughout the county.
<b>Overton County</b> Countywide	14	2240CST			0	0			Thunderstorm Wind (G50)
									Electric company reported extensive damage to power lines by falling trees throughout the county.
<b>Putnam County</b> Baxter	14	2245CST			0	0			Hail (0.75)
									Ham radio operator reported dime size hail.
<b>Putnam County</b> Baxter	14	2245CST			0	0			Thunderstorm Wind (G50)
									Ham radio operator reported trees down.
<b>Pickett County</b> Countywide	14	2300CST			0	0			Thunderstorm Wind (G50)
									Sheriff's office reported numerous trees and power lines down around the county.
<b>Sumner County</b> Countywide	14	0935CST			0	0			Thunderstorm Wind (G50)
									Sheriff's department reported trees down around the county.
<b>Trousdale County</b> Hartsville	14	1012CST			0	0			Thunderstorm Wind (G50)
									Sheriff's department reported trees blown down.
<b>Putnam County</b> Cookeville	14	1051CST			0	0			Thunderstorm Wind (G50)
									Trees blown down in northwest part of town.
<b>Benton County</b> Big Sandy to 1 E Big Sandy	14	1953CST 1955CST	1	100	0	0	10K		Tornado (F1)
									Tornado lifted a roof off a grocery store and strewn debris in the parking lot.
<b>Benton County</b> Big Sandy	14	1959CST 2000CST			0	0			Hail (1.00)
									Quarter size hail was reported by a SKYWARN Spotter.
<b>Smith County</b> Countywide	17	0900CST 1100CST			0	0			Flash Flood
									News article account of roads being washed out as streams and creeks came out of their banks countywide. Communities affected were Dixon Springs, Defeated, Riddleton, Pleasant Shade, south Carthage, Watervale, Hiwassee, Elmwood, Hogan's Creek, Maggart and Enigma. No homes were flooded.
<b>Smith County</b> South Portion	20	1140CST 1141CST			0	0			Thunderstorm Wind (G50)
									Sheriff reported trees down and a barn was damaged from strong thunderstorm winds.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Jackson County</b> Northwest Portion	20	1235CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Sheriff reported trees down along Highway 95 northwest of Gainesboro.						
<b>Lawrence County</b> Lawrenceburg	20	1255CST			0	0			<b>Hail (0.75)</b>
			Lawrence county EMA reported dime size hail just south of the city.						
<b>Dekalb County</b> Center Hill Lake	20	1259CST 1300CST			0	0			<b>Thunderstorm Wind (G50)</b>
			A concert was scheduled at Center Hill Lake at 5 PM by Alan Jackson. By noon that day, there were about 1000 houseboats, ski boats and pontoons sat facing the boat ramp for the concert. Center Hill Lake was pelted by a severe thunderstorm at 159 PM CDT. Winds were estimated at 50 to 60 mph. Seven boats sank and many more were damaged as boats slammed into each other. The strong winds damaged the stage so the concert was canceled. Trees were blown down near the lake as well.						
<b>Maury County</b> East Portion	20	1600CST			0	0			<b>Hail (1.00)</b>
			SKYWARN Spotter reported quarter size hail along I-65 at mile marker 39 in eastern Maury county.						
<b>Robertson County</b> Southeast Portion	20	1730CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Trees were down on Greer Road in southeast part of the county.						
<b>Sumner County</b> Hendersonville	20	1757CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Hendersonville Police Department reported numerous trees and power lines were down. Some homes were also damaged.						
<b>Davidson County</b> Nashville Metro Arpt	20	1800CST			0	0			<b>Thunderstorm Wind (G85)</b>
			98 mph wind gust was recorded in a thunderstorm at the control tower at Metro Airport. Rotating wall cloud was also observed by tower personnel.						
<b>Wilson County</b> West Portion	20	1800CST 1801CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Public reported numerous trees down in the western part of the county.						
<b>Wilson County</b> West Portion	20	1820CST 1821CST			0	1			<b>Thunderstorm Wind (G50)</b>
			Off duty NWS employee reported trees blocking a westbound lane of I-40 between Highway 109 and Mt. Juliet. A newspaper article reported that the strong thunderstorm winds overturned campers at a campground near I-40 and Highway 109. One man suffered a broken leg after the camper he was in overturned.						
<b>Rutherford County</b> La Vergne	20	1845CST 1846CST			0	0			<b>Funnel Cloud</b>
			SKYWARN Spotter reported a wall cloud and funnel cloud near La Vergne. Funnel cloud retreated back into the clouds.						
<b>Sumner County</b> West Central Portion	21	0545CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Off duty NWS employee reported large tree limbs down in White House.						
<b>Smith County</b> Elmwood	21	0830CST 1030CST			0	0			<b>Flash Flood</b>
			Sheriff's department reported a portion of Caney Fork Road was washed out near Elmwood.						
<b>Pickett County</b> Countywide	23	0345CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Sheriff's department reported scattered areas of trees and power lines down around the county.						
<b>Bledsoe County</b> Lees Station	25	1450CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Sheriff reported numerous trees down.						
<b>Bledsoe County</b> Southwest Portion	25	1450CST			0	0			<b>Thunderstorm Wind (G50)</b>
			Sheriff's office reported trees down near Bledsoe and Sequatchie county line.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>TENNESSEE, Central</b>									
<b>Bledsoe County</b> Pikeville	25	1530CST 1700CST			0	0			Flash Flood
			Several streets in Pikeville had over 2 feet of water.						
<b>Davidson County</b> .5 W Oglesby to .1 S Oglesby	30	0209CST 0210CST	1.2	100	0	0	20K		Tornado (F1)
			The tornado hit south Nashville, in the Oglesby section of town. The tornado began on Hill Road and ended near the intersection of Edmonson Pk and Old Hickory Boulevard. The tornado damaged 2 roofs and snapped trees at the Brentwood Downs Apartments. A lady at the apartment complex saw the tornado.						
<b>TENNESSEE, East</b>									
<b>Scott County</b> Oneida	01	0010EST			0	0			Urban/Sml Stream Fld
			Water reported in yards, water covered roads and a mudslide in Oneida.						
<b>Knox County</b> Knoxville	01	0015EST			0	0	6K		Thunderstorm Wind
			Huge tree down behind WATE-TV6 station.						
<b>Hamblen County</b> Morristown	01	0039EST			0	0	0.50K		Thunderstorm Wind
			A tree down at Redwood and Sycamore Streets.						
<b>Knox County</b> Knoxville	01	0057EST			0	0			Urban/Sml Stream Fld
			Alcoa Highway near the Navy/Marine Corps Reserve Center was impassable due to water across the road.						
<b>Anderson County</b> Clinton	01	0105EST			0	0			Urban/Sml Stream Fld
			Rockslide reported by Sheriff's office. Minor flooding on Clinton Highway, East Valley Road, Highway 61 and Buffalo Road.						
<b>Blount County</b> Maryville	01	0145EST			0	0			Urban/Sml Stream Fld
			3 to 6 inches of water over roads near Blount Memorial Hospital.						
<b>Sevier County</b> Seymour	01	0202EST			0	0			Urban/Sml Stream Fld
			Street flooding in Seymour. 2 to 3 inches of water across roads near Cherokee Hills.						
<b>Blount County</b> Maryville	01	0213EST			0	0	5K		Thunderstorm Wind
			Trees down along Wildwood Road.						
<b>Blount County</b> Maryville	01	0225EST			0	0			Urban/Sml Stream Fld
			Rockslide on Sevierville Road.						
<b>Knox County</b> Knoxville to Concord	01	0442EST			0	0			Urban/Sml Stream Fld
			Several roads still flooded and impassable.						
<b>Blount County</b> Maryville	01	0444EST			0	0			Urban/Sml Stream Fld
			Flooding receding in Maryville.						
<b>Fentress County</b> Grimsley	02	0007CST			0	0			Hail (1.75)
<b>Fentress County</b> Pall Mall	02	0328CST			0	0	5K		Thunderstorm Wind
			Trees down.						
<b>Knox County</b> Knoxville	02	0440EST			0	0	15K		Thunderstorm Wind
			Numerous trees down throughout the Knoxville metro area as well as countywide.						
<b>Blount County</b> Louisville	02	0515EST			0	0	15K		Thunderstorm Wind
			Numerous trees down along Highway North and in the Louisville area.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, East</b>									
<b>Anderson County</b> Lake City	02	0520EST			0	0	0.50K		Urban/Sml Stream Fld
									Highway 25W flooded near Lake City. Car washed off road.
<b>Sevier County</b> Pigeon Forge	02	0530EST			0	0	20K		Thunderstorm Wind
									Numerous trees down in Pigeon Forge as well as throughout the county.
<b>Bradley County</b> Cleveland	02	0530EST			0	0	1K		Thunderstorm Wind
									Tree down at Spring Place and Ladd Springs Road.
<b>Knox County</b> Knoxville	02	0540EST			0	0			Urban/Sml Stream Fld
									Numerous streets closed due to flooding.
<b>Knox County</b> Knoxville	02	0550EST			0	0	4K		Thunderstorm Wind
									Trees down on Cherokee Trail.
<b>Blount County</b> Townsend	02	0550EST			0	0	10K		Thunderstorm Wind
									Numerous trees down.
<b>Sevier County</b> 8 SW Gatlinburg	02	0550EST			0	0	15K		Thunderstorm Wind
									Backpackers reported seeing a possible tornado in National Park near Jones Creek Trail. Horse riders reported trees with twisted trunks down across Panther Creek Trail.
<b>Knox County</b> Knoxville	02	0555EST			0	0			Urban/Sml Stream Fld
									Apartment building evacuated due to flooding at Knox Lane and Fair Drive.
<b>Johnson County</b> Neva	02	0610EST			0	0			Hail (1.00)
									Quarter size hail covering the ground. Reported by National Weather Service snow observer.
<b>Anderson County</b> Oak Ridge	02	0620EST			0	0			Hail (0.75)
<b>Knox County</b> Powell	02	0630EST			0	0			Hail (0.75)
<b>Monroe County</b> 3 S Sweetwater	02	0635EST			0	0	7K		Thunderstorm Wind
									Trees down on Old Mine Road off Highway 68.
<b>Greene County</b> Baileyton	02	0635EST			0	0	8K		Thunderstorm Wind
									Trees down.
<b>Washington County</b> 10 SW Jonesboro	02	0700EST			0	0	10K		Thunderstorm Wind
									Trees down in southwest part of county on Highway 107 near Greene County line.
<b>Blount County</b> Maryville to Marble Hill	02	0700EST			0	0	20K		Thunderstorm Wind
									Numerous trees down in Maryville as well as throughout the county.
<b>Knox County</b> Knoxville	02	0705EST			0	0	5K		Thunderstorm Wind
									Trees down at Blue Grass Road and Crestline.
<b>Claiborne County</b> Speedwell	03	0415EST			0	0			Hail (0.75)
<b>Carter County</b> 1 NE Buladeen to 1.5 E Buladeen	03	0715EST 0720EST	1	75	0	0	75K 50K		Tornado (F0)

The tornadoes short path in the county was intermittent. In the community of Holly Springs, the NWS survey team observed numerous trees uprooted or broken off, all lying in the same direction implying straight-line winds. Power lines were also either blown down or taken down by falling trees. Minor structural damage occurred to Holly Springs Baptist Church, including hail damage. One garage attached to a house was destroyed. A hickory tree, about two feet in diameter, fell on a barn destroying the barn and a tractor. The nearby house was also damaged by the wind. In Stony Creek, dozens of trees were uprooted or broken off,

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TENNESSEE, East

with widespread powerlines also down. Several homes, including mobile homes, were damaged. Most of the damage lay in the same direction, implying straight-line winds. However two homes had structure damage that implied small tornadoes. One porch roof was blown backwards, against the apparent wind direction. Some trees lay in partially circular patterns, indicating locations of at least partial rotation. The tornado then moved southeast into Johnson County.

**Sullivan County**  
Kingsport

03 1909EST 0 0 Hail (0.75)

**Johnson County**  
Shady Vly

03 1917EST 0 0 18K 15K Thunderstorm Wind

Several trees and powerlines down along Highway 91 near the town of Shady Valley.

**Johnson County**  
3 N Doeville to  
2 SE Bakers Gap

03 1920EST 8.5 75 0 3 125K 75K Tornado (F1)  
1930EST

This is a continuation of the tornado originating in Carter County. The tornado's path continued to be intermittent. Near the community of Pandora, numerous trees were blown down or snapped off along hillsides and in river bottoms. Some trees were 1.5 feet in diameter. One home was totally destroyed, along with a mobile home on the same lot. The house was not attached to the foundation. Debris was scattered over the hillside over several acres. Mattresses from the home were found nearly a mile away at a convenience store, and family photos were found two miles away at the home of the sister of the owner of the destroyed house. A three-horse trailer was blown approximately one-quarter mile over the hilltop.

**Carter County**  
Elizabethton

03 1949EST 0 0 Hail (1.00)

**Monroe County**  
Vonore

05 1745EST 0 0 12K Thunderstorm Wind

Trees down in and around Vonore area.

**Cumberland County**  
Crossville

05 1800CST 0 0 Urban/Sml Stream Fld

Water in house and approaching top of some small dams.

**Knox County**  
North Knoxville

05 1801EST 0 0 Hail (0.75)

3/4" hail reported on Asheville Highway.

**Grainger County**  
Buffalo Spgs

05 1830EST 0 0 2K Tstm Wind/Hail

Abandoned trailer destroyed on Owl Hole Gap Road. 1" hail also.

**Sevier County**  
Kodak

05 1830EST 0 0 5K 14K Thunderstorm Wind

Trees down. Several billboards blown down.

**Hamblen County**  
Morristown

05 1840EST 0 0 Hail (1.00)

1 inch hail reported in Russellville also.

**Greene County**  
1 N Baileyton

05 1915EST 0 0 Hail (0.75)

**Hawkins County**  
4 S Rogersville

05 1915EST 0 0 Hail (0.75)

**Washington County**  
Jonesboro

05 1945EST 0 0 Hail (0.75)

3/4" hail also reported in Limestone.

**Greene County**  
Greeneville

05 2130EST 0 0 Urban/Sml Stream Fld

Nuisance flooding mainly along Newport Highway.

**Hamilton County**  
2 W Chattanooga

09 1740EST 0 0 5K Thunderstorm Wind

Trees down just west of Chattanooga.

**Cumberland County**  
Pomona

10 0945CST 0 0 15K 8K Thunderstorm Wind

Trees down on powerlines.

**Cumberland County**  
Crossville

10 1030CST 0 0 Urban/Sml Stream Fld

Two feet of water covering roads and lots of street flooding reported in Crossville and central part of county.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, East</b>									
<b>Hamilton County</b> Chattanooga	10	1230EST			0	0			Hail (1.00)
<b>Bradley County</b> Cleveland	10	1235EST			0	0	10K		Thunderstorm Wind
									Trees down.
<b>Meigs County</b> Big Spg	10	1245EST			0	0	10K		Thunderstorm Wind
									Trees down.
<b>Meminn County</b> 3 S Athens	10	1249EST			0	0	19K	10K	Thunderstorm Wind
									Numerous trees and powerlines down.
<b>Meigs County</b> Sewee	10	1300EST			0	0			Urban/Sml Stream Fld
									State route 305 was covered by water in some places.
<b>Monroe County</b> Madisonville	10	1315EST			0	0	18K		Thunderstorm Wind
									Numerous trees down.
<b>Hamilton County</b> Chattanooga	10	1320EST			0	0	20K	10K	Thunderstorm Wind
									Trees and powerlines down in Chattanooga and throughout the county.
<b>Hamilton County</b> 5 N Chattanooga	10	1320EST			0	0	22K	15K	Thunderstorm Wind
									Numerous trees and powerlines down.
<b>Roane County</b> Cave Creek	10	1330EST			0	0			Urban/Sml Stream Fld
									Numerous roads covered by water in the Lake Awana area.
<b>Bradley County</b> Cleveland	10	1340EST			0	0	20K		Thunderstorm Wind
									Trees down.
<b>Hamilton County</b> Sale Creek	10	1400EST			0	0	25K		Thunderstorm Wind
									Numerous trees down in Sale Creek and Middle Valley areas.
<b>Polk County</b> Copperhill	10	1400EST			0	0	22K		Thunderstorm Wind
									Numerous trees down.
<b>Hamilton County</b> Chattanooga	10	1415EST			0	0	5K		Thunderstorm Wind
									Trees down in Royal Oaks area.
<b>Hawkins County</b> Mooreburg	13	0545EST			0	0	10K	15K	Thunderstorm Wind
									Numerous trees down. One tree fell on a house.
<b>Grainger County</b> 4 SE Rutledge	13	0545EST			0	0	5K		Thunderstorm Wind
									Trees down near German Creek boat dock.
<b>Cumberland County</b> Crossville	14	1145CST			0	0	25K		Thunderstorm Wind
									Trees down in Crossville and scattered areas throughout the county.
<b>Morgan County</b> 3 S Sunbright	14	1220EST			0	0	10K		Thunderstorm Wind
									Trees down between Sunbright and Deer Lodge.
<b>Scott County</b> 5 SW Huntsville	14	1300EST			0	0	20K		Thunderstorm Wind
									Trees down throughout southern part of county.
<b>Fentress County</b> Jamestown	14 15	2320CST 2320CST			0	0	15K	10K	Thunderstorm Wind
									Trees and powerlines down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, East</b>									
<b>Cumberland County</b> Crossville	14	2335CST			0	0	10K		Thunderstorm Wind
			Trees down on Creston Road near Highway 70 North.						
<b>Roane County</b> Harriman	15	0125EST			0	0	5K		Thunderstorm Wind
			A few trees down.						
<b>Campbell County</b> Caryville	15	0155EST			0	0	10K		Thunderstorm Wind
			Powerlines down.						
<b>Knox County</b> Knoxville	15	0200EST			0	0	5K		Thunderstorm Wind
			A few trees down.						
<b>Hamilton County</b> Chattanooga	15	0200EST			0	0			Hail (0.75)
			3/4" hail reported in Highland Park and Red Bank areas.						
<b>Bradley County</b> Cleveland	15	0230EST			0	0	16K	16K	Thunderstorm Wind
			Trees down and power outages in Cleveland and spotty areas throughout the county.						
<b>Hawkins County</b> Rogersville	15	0230EST			0	0	20K		Thunderstorm Wind
			A few trees down in Rogersville and throughout the county.						
<b>Jefferson County</b> Chestnut Hill	15	0230EST			0	0	10K		Thunderstorm Wind
			Trees down.						
<b>Sevier County</b> Gatlinburg	15	0230EST			0	0	15K		Thunderstorm Wind
			A few powerlines down in Gatlinburg and throughout the county.						
<b>Polk County</b> Copperhill	15	0245EST			0	0	14K	19K	Thunderstorm Wind
			A few trees and powerlines down in Copperhill and throughout the county.						
<b>Union County</b> Maynardville	22	1805EST			0	0	25K		Thunderstorm Wind
			Trees down in Maynardville and throughout the entire county.						
<b>Sullivan County</b> Kingsport	22	1828EST			0	0			Hail (1.00)
<b>Jefferson County</b> New Market	22	1906EST			0	0			Hail (0.88)
<b>Claiborne County</b> Tazewell	22	1910EST			0	0	15K	20K	Thunderstorm Wind
			Trees and powerlines down in Tazewell and throughout the county.						
<b>Greene County</b> 5 E Greeneville	22	1917EST			0	0	1K		Thunderstorm Wind
			Numerous 5 inch tree limbs down.						
<b>Grainger County</b> Rutledge	22	1930EST			0	0	2K		Thunderstorm Wind (G80)
			Winds estimated 65-70 mph and trees down in Rutledge and throughout the county.						
<b>Hamblen County</b> Morristown	22	1930EST			0	0	4K		Tstm Wind/Hail
			Large trees down on McGinnis Road. Dime size hail on Fish Hatchery Road.						
<b>Knox County</b> Knoxville	22	1930EST			0	0	15K	20K	Tstm Wind/Hail
			Trees, powerlines down and dime size hail. Winds estimated at 60 mph.						
<b>Hancock County</b> Sneedville	22	1930EST			0	0	20K		Thunderstorm Wind
			Trees down in Sneedville and across the entire county.						
<b>Carter County</b> Elizabethton	22	1940EST			0	0	20K	15K	Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, East</b>									
Trees and powerlines down in Elizabethton and throughout the county.									
<b>Roane County</b> 3 NE Kingston	22	1940EST			0	0	19K		Thunderstorm Wind
Trees down on Valley Road and Sugar Grove Valley Road.									
<b>Knox County</b> Knoxville	22	1945EST			0	0			Hail (0.75)
3/4" hail on Chapman Highway.									
<b>Greene County</b> Greeneville	22	2000EST			0	0	25K		Tstm Wind/Hail
Trees down and 3/4" hail in Greeneville and throughout the county.									
<b>Sullivan County</b> Kingsport	22	2000EST			0	0			Urban/Sml Stream Fld
Flooding reported in Kingsport, Colonial Heights and Bloomingdale.									
<b>Carter County</b> Hampton	22	2012EST			0	0			Flash Flood
Flash flooding forced the evacuation of 20 homes, mainly in the Hampton, Gap Creek, Simerly Creek and Rittertown communities. The evacuations proved precautionary, and there was no structural damage. A number of roads were blocked by fallen trees, high water and/or mudslides.									
<b>Blount County</b> Walland	22	2030EST			0	0	20K		Thunderstorm Wind (G52)
Estimated winds of 60 mph and trees down in Walland and throughout the county.									
<b>Unicoi County</b> 8 SW Erwin	22	2030EST			0	0	10K		Thunderstorm Wind
Trees down throughout the south end of the county.									
<b>Sevier County</b> Sevierville	22	2030EST			0	0	20K		Thunderstorm Wind
Trees down in Sevierville and across entire county.									
<b>Johnson County</b> Mountain City	22	2047EST			0	0	20K		Thunderstorm Wind
Powerlines down in Mountain City and throughout the county.									
<b>Loudon County</b> Loudon	22	2100EST			0	0	18K	20K	Thunderstorm Wind
Trees and powerlines down in Loudon and throughout the county.									
<b>Blount County</b> Maryville	22	2100EST			0	0	25K		Thunderstorm Wind
Trees down in Maryville and throughout the county.									
<b>Monroe County</b> Madisonville	22	2115EST			0	0	1K		Thunderstorm Wind
Tree down on Provo Road.									
<b>Meminn County</b> 3 SE Athens	22	2140EST			0	0	1K		Thunderstorm Wind
A few trees down.									
<b>Sullivan County</b> Blountville	24	1340EST			0	0			Hail (0.75)
<b>Sullivan County</b> Blountville	24	1400EST			0	0			Hail (0.75)
<b>Washington County</b> 5 W Jonesboro	24	1500EST			0	0	15K		Thunderstorm Wind
Powerlines down in western part of county.									
<b>Greene County</b> 2 S Baileyton	24	1615EST			0	0			Hail (0.75)
<b>Washington County</b> 5 W Jonesboro	24	1645EST			0	0	16K		Thunderstorm Wind
Trees down in western part of county.									
<b>Sullivan County</b> Sullivan Gardens	24	1645EST			0	0			Urban/Sml Stream Fld
Creek out of banks and roads flooded around Sullivan Gardens, Mitchell Road and Fordtown Road.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, East</b>									
<b>Sullivan County</b> Kingsport	24	1650EST			0	0	2K		Thunderstorm Wind
									Tree down on Summerville Road.
<b>Johnson County</b> Mountain City	24	1710EST			0	0	19K		Thunderstorm Wind
									Trees down.
<b>Greene County</b> Greeneville	24	1730EST			0	0	25K		Tstm Wind/Hail
									Numerous trees down in Greeneville and countywide. 1" hail reported in Baileyton.
<b>Carter County</b> Elizabethton	24	1745EST			0	0			Hail (0.75)
									3/4" hail in Elizabethton and across northern part of county.
<b>Hawkins County</b> Bulls Gap	24	1810EST			0	0			Hail (1.00)
<b>Cocke County</b> Newport	24	1815EST			0	0			Hail (0.75)
<b>Sevier County</b> Sevierville	24	1840EST			0	0	20K		Thunderstorm Wind
									Trees down in Sevierville and countywide.
<b>Jefferson County</b> New Market	24	1845EST			0	0			Hail (0.75)
<b>TNZ069</b> Knox	27	0900EST			1	0			Excessive Heat
									Victim was found by neighbors on the morning of the 27th. He had been deceased for a day or two, so the exact time and date of death is unknown. He lived in a low-income, high crime area and lived on a fixed income. He was afraid he could not pay his electric bill, so did not turn on his air conditioning. Because of the neighborhood, he was afraid to open the windows. When found, all the windows in his home were shut with only a small fan blowing. NWSO Morristown had issued several statements concerning the high heat in the area during this time. M78PH
<b>TNZ069</b> Knox	28	1500EST			1	0			Excessive Heat
									Victim was found by neighbors in the afternoon of the 28th. She had been deceased for a day or two, so the exact time and date of death is unknown. She lived in a low-income, high crime area and lived on a fixed income. She was afraid she could not pay her electric bill, and because of the neighborhood she lived in, did not turn on her air conditioning and kept all windows closed. NWSO Morristown had issued several statements concerning the high heat in the area during this time. F88PH
<b>Union County</b> Maynardville	29	1605EST			0	0	15K		Thunderstorm Wind
<b>Claiborne County</b> Tazewell	29	2320EST			0	0	15K		Thunderstorm Wind
	30	2320EST							Several trees down on Cedar Fork Road.
<b>Claiborne County</b> Clairfield	30	1325EST			0	0	10K		Thunderstorm Wind
									Several trees down.
<b>Fentress County</b> 7 S Jamestown	30	1335EST			0	0			Hail (1.75)
<b>Greene County</b> Greeneville	30	1440EST			0	0			Hail (1.00)
									1" hail reported in Greeneville and countywide.
<b>Hawkins County</b> Rogersville	30	1500EST			0	0	15K	20K	Thunderstorm Wind
									Trees and powerlines down in Rogersville and countywide.
<b>Hamblen County</b> Morristown	30	1500EST			0	0	30K	25K	Thunderstorm Wind
									Numerous trees and powerlines down in Morristown and countywide. A roof was blown off a home on Kidwell Ridge Road.
<b>Cocke County</b> Del Rio	30	1515EST			0	0	5K		Thunderstorm Wind
									Trees down.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>TENNESSEE, East</u></b>									
<b>Anderson County</b>									
Clinton	30	1600EST			0	0		7K	Thunderstorm Wind
			A few trees down.						
<b>Grainger County</b>									
Rutledge	30	1615EST			0	0		10K	Thunderstorm Wind
			Trees down.						
<b>Johnson County</b>									
Doeville to Laurel Bloomery	30	1710EST			0	0		25K	Thunderstorm Wind
<b><u>TENNESSEE, West</u></b>									
<b>Henry County</b>									
Countywide	04	0955CST 1300CST			0	0		5K	Flash Flood
			At least 15 roads were closed or washed out. Several culverts and bridges were washed out when nearly 8 inches of rain fell over the area. Twenty mobile homes were evacuated with two homes actually getting water in them and water reaching the underpinning on several others.						
<b>Weakley County</b>									
Countywide	04	0955CST 1300CST			0	0		5K	Flash Flood
			Numerous roads were closed and several culverts were washed out.						
<b>Obion County</b>									
Union City	05	0100CST 0300CST			0	0		1K	Flash Flood
			Several roads were closed due to flash flooding.						
<b>Shelby County</b>									
Memphis Intl Arpt	05	0107CST 0115CST			0	0		0	Thunderstorm Wind (G74)
			An 85 mph wind gust was reported at the Memphis International Airport.						
<b>Shelby County</b>									
Memphis	05	0115CST 0130CST			0	1		1M	Thunderstorm Wind
			A 13-year-old boy was injured when the chimney of his home toppled and crashed through the roof and landed on him. Numerous homes and businesses were damaged. Numerous trees were knocked down.						
<b>Tipton County</b>									
Bride	05	0115CST 0120CST			0	0		5K 25K	Thunderstorm Wind
			Several acres of corn were damaged by the high winds.						
<b>Shelby County</b>									
Collierville	05	0124CST 0130CST			0	0		0	Thunderstorm Wind (G60)
			A 68 mph wind gust was reported by a remote weather site in Collerville.						
<b>Fayette County</b>									
1 E Moscow to La Grange	05	0140CST 0150CST			0	0		15K	Thunderstorm Wind
			One trailer was destroyed just east of Moscow. Several trees were knocked down in Moscow and La Grange.						
<b>Hardeman County</b>									
Countywide	05	0200CST 0210CST			0	0		25K	Thunderstorm Wind
			Several homes in Middleton and Whiteville were damaged. Numerous trees were knocked down across the county.						
<b>Mcnairy County</b>									
Countywide	05	0230CST 0235CST			0	0		10K	Thunderstorm Wind
			Numerous trees and power lines were knocked down across the county.						
<b>Henderson County</b>									
Huron	05	0245CST 0250CST			0	0		25K	Thunderstorm Wind
			The roof was blown off a double wide trailer. A nearby storage building and pool were badly damaged. Another trailer was blown over. Several trees had their tops twisted off.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, West</b>									
<b>Hardin County</b> Savannah	05	0300CST 0305CST			0	0	10K		Thunderstorm Wind
									Numerous trees were knocked down all over the town of Savannah.
<b>Henry County</b> Paris	05	0600CST 0605CST			0	0	1K		Lightning
									A large tree was struck by lightning and destroyed.
<b>Madison County</b> Jackson	05	1513CST 1520CST			0	0	0.10K		Hail (1.00)
<b>Madison County</b> Jackson	05	1535CST 1540CST			0	0	0.75K		Hail (1.75)
<b>Henderson County</b> Sand Ridge	05	1545CST 1550CST			0	0	0.01K		Hail (0.75)
<b>TNZ002</b> Obion	06 08	1535CST 2100CST			0	0	20K	97K	Flood
									Two levees broke on the Obion River producing flooding. In the town of Rives, two mobile homes were badly damaged and twelve other homes suffered minor damage. Over 500 acres of crops were lost to the flood waters.
<b>Obion County</b> Countywide	08 09	2330CST 0500CST			0	0	5K		Flash Flood
									Heavy rainfall produced flash flooding along the Obion River. This flooding was made worse by the levee breaks that occurred on June 6. Several roads near the river were flooded.
<b>Lauderdale County</b> Ripley	09	0800CST 0805CST			0	0	1K		Thunderstorm Wind
									A 100 year old sweet gum tree was knocked down.
<b>Madison County</b> Jackson	10	0830CST 0835CST			0	0	10K		Lightning
									Three high-voltage lightning arresters were damaged by lightning strikes. A few trees were also knocked down by lightning as well.
<b>Henderson County</b> Lexington	13	0035CST 0040CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
<b>Dyer County</b> Newbern	14	0015CST 0020CST			0	0	1K		Thunderstorm Wind
									Several large tree limbs were blown down.
<b>Dyer County</b> Dyersburg	14	0040CST 0045CST			0	0	0.01K		Hail (0.75)
<b>Gibson County</b> Rutherford	14	0045CST 0050CST			0	0	0.10K		Hail (1.00)
<b>Lake County</b> Tiptonville	14	1652CST 1700CST			0	0	0.05K		Hail (0.88)
<b>Lake County</b> Ridgely	14	1655CST 1700CST			0	0	5K		Thunderstorm Wind
									Several trees were knocked down.
<b>Obion County</b> Rives	14	1720CST 1725CST			0	0	0.01K		Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, West</b>									
<b>Obion County</b> Rives	14	1720CST 1725CST			0	0	10K		Thunderstorm Wind
			Numerous trees were knocked down.						
<b>Weakley County</b> 3 W Sharon	14	1740CST 1745CST			0	0	0.75K		Hail (1.75)
<b>Henry County</b> Henry	14	1835CST 1840CST			0	0	0.75K		Hail (1.75)
<b>Weakley County</b> Dresden	14	1925CST 1930CST			0	0	0.75K		Hail (1.75)
<b>Henry County</b> Paris	14	1940CST 1945CST			0	0	5K		Thunderstorm Wind
			A few trees were blown down in downtown Paris.						
<b>Henry County</b> 5 W Paris	14	2000CST 2005CST			0	0	0.75K		Hail (1.75)
<b>Henry County</b> 5 W Paris	14	2000CST 2005CST			0	0	5K		Thunderstorm Wind
			Several trees were knocked down.						
<b>Henry County</b> Paris	14	2040CST 2230CST			0	0	1K		Flash Flood
			A few streets were flooded.						
<b>Weakley County</b> Martin	14	2045CST 2230CST			0	0	1K		Flash Flood
			Several streets were closed due to flash flooding.						
<b>Dyer County</b> Dyersburg	15	2310CST 2315CST			0	0	5K		Thunderstorm Wind
			Several trees and power lines were knocked down. The roof of a restaurant near the Dyersburg Airport was blown off. A DC-3 airplane was blown into a hangar.						
<b>Carroll County</b> Mc Kenzie	18	0330CST 0335CST			0	0	5K		Lightning
			A large tree had its bark peeled off by lightning. The lightning also disabled a television, computer, stereo and telephone service at a nearby home.						
<b>Tipton County</b> Garland	21	1635CST 1640CST			0	0	0.05K		Hail (0.88)
<b>Haywood County</b> Countywide	21	1645CST 1655CST			0	0	40K		Thunderstorm Wind
			One house suffered roof damage and the top came off of another building in Brownsville. Several store fronts had windows broken. Some trees were knocked down across the county.						
<b>Tipton County</b> Brighton to Mason	21	1650CST 1705CST			0	0	40K		Thunderstorm Wind
			A trailer was overturned and destroyed in Mason. A chicken house was destroyed in Brighton. Several trees were blown down. A large tree was knocked down on top of a car.						
<b>Tipton County</b> Gilt Edge	21	1650CST 1655CST			0	0	0.01K		Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TENNESSEE, West</b>									
<b>Tipton County</b> Munford	21	1652CST 1700CST			0	0	0.75K		Hail (1.75)
<b>Fayette County</b> Lambert	21	1715CST 1720CST			0	0	5K		Thunderstorm Wind
									Several trees were blown down.
<b>Madison County</b> Jackson	21	1725CST 1730CST			0	0	0.01K		Hail (0.75)
<b>TEXAS, Central</b>									
<b>TXZ049-053&gt;054-064&gt;066-071&gt;073-076&gt;078-098&gt;099-113&gt;114-127&gt;128-139&gt;140-154&gt;155-168&gt;170</b>	01 30	0000CST 0000CST			0	0			Drought
									A severe drought continued across all of West Central Texas. Total crop losses and damage amounts will be tabulated next month.
<b>Fisher County</b> 1 N Rotan	03	2006CST			0	0			Hail (0.88)
<b>Callahan County</b> 3 NE Baird	04	1600CST			0	0			Hail (1.00)
<b>Concho County</b> 5 E Eola	04	1615CST			0	0	10K		Thunderstorm Wind
									A barn was destroyed by high winds
<b>Shackelford County</b> Moran	04	1615CST			0	0			Hail (0.75)
<b>Concho County</b> 7 SE Paint Rock	04	1640CST			0	0			Hail (1.75)
<b>Coleman County</b> 8 SW Gouldbusk	04	1645CST			0	0			Hail (1.25)
<b>Coleman County</b> 8 SW Gouldbusk	04	1645CST			0	0	10K		Thunderstorm Wind (G56)
									Wind gust of 64 mph damaged sailboats at the O.H. Ivie Reservoir
<b>Mcculloch County</b> 10 S Brady	04	1705CST			0	0			Hail (0.88)
<b>Mcculloch County</b> 7 SE Brady	04	1715CST			0	0			Hail (1.25)
<b>Mcculloch County</b> 2 E Rochelle to 3 E Rochelle	04	1730CST			0	0			Hail (0.75)
<b>Brown County</b> 12 SW Brownwood	04	1734CST			0	0			Hail (1.75)
<b>Brown County</b> 12 SW Brownwood	04	1734CST			0	0	5K		Thunderstorm Wind
									Powerpoles blown down
<b>San Saba County</b> San Saba	04	1815CST			0	0			Hail (1.75)
<b>San Saba County</b> San Saba	04	1815CST			0	0	2K		Thunderstorm Wind
									Powerlines blown down
<b>San Saba County</b> 9 E San Saba	04	2000CST			0	0			Hail (0.88)
<b>Tom Green County</b> Christoval	05	0020CST			0	0			Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Central</b>									
<b>Mcculloch County</b> Doole	05	0045CST			0	0			Hail (1.75)
<b>Menard County</b> 17 SW Menard	05	0500CST			0	0	1K		Thunderstorm Wind
									Trees blown down
<b>Concho County</b> 1 S Eden	04	2355CST			0	0			Hail (0.75)
<b>Mcculloch County</b> Lohn	05	0054CST			0	0			Hail (0.75)
<b>Mcculloch County</b> Lohn	05	0054CST			0	0			Thunderstorm Wind (G52)
<b>Concho County</b> Eden	05	0130CST			0	0			Hail (1.75)
<b>Menard County</b> 6 NNE Menard	05	0130CST			0	0			Hail (0.75)
									Scattered severe thunderstorms produced widespread hail and wind damage across the area. The O.H. Ivie reservoir area was particularly hard hit, with wind gusts up to 65 mph and half dollar size hail damaging boats at a local marina. Other hail reports across the area ranged from dime to golf ball size.
<b>Mitchell County</b> Westbrook	07	1315CST			0	0			Hail (1.75)
<b>Fisher County</b> 4 S Roby	07	1440CST			0	0			Hail (1.75)
<b>Jones County</b> Hamlin	07	1510CST			0	0			Hail (0.75)
<b>Jones County</b> Hamlin	07	1615CST			0	0			Hail (0.75)
<b>Shackelford County</b> Albany	07	1658CST			0	0			Hail (0.75)
									Scattered severe thunderstorms produced dime to golf ball size hail across the Big Country.
<b>Coleman County</b> Coleman	09	1730CST			0	0			Hail (0.75)
<b>Coleman County</b> Coleman	09	1730CST			0	0	10K		Thunderstorm Wind
									A restaurant had a third of its roof peeled back, allowing extensive water damage below.
<b>Mitchell County</b> Loraine	10	2030CST			0	0	1K		Thunderstorm Wind
									Large tree limbs were blown off
<b>Nolan County</b> Roscoe	10	2035CST			0	0	1K		Thunderstorm Wind
									Antenna blown down
<b>Fisher County</b> 13 S Roby	10	2045CST			0	0	7K		Thunderstorm Wind
									A roof was blown off a house
<b>Schleicher County</b> Eldorado	10	2120CST			0	0	0.50K		Thunderstorm Wind
									Large tree limbs broken
<b>Jones County</b> Anson	10	2140CST			0	0	10K		Thunderstorm Wind
									An apparent microburst damaged several buildings in the city of Anson. Trees and power lines were also knocked down across the city.
<b>Brown County</b> Brownwood	10	2330CST			0	0	10K		Thunderstorm Wind
									Two roofs were blown off and several trees blown over. A tractor trailer was also overturned.
<b>Brown County</b> Early	10	2335CST			0	0	5K		Thunderstorm Wind
									Trees were blown down and a railroad crossing barrier snapped off

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, Central

Scattered severe thunderstorms produce downburst winds across mainly the Big Country.

<b>Runnels County</b> 5 SW Ballinger	12	1635CST			0	0	2K		<b>Thunderstorm Wind</b>
			Several large cotton trailers overturned						
<b>Tom Green County</b> 14 N San Angelo	12	1635CST			0	0			<b>Hail (0.88)</b>
<b>Coke County</b> 10 SW Robert Lee	12	1640CST			0	0			<b>Hail (0.88)</b>
<b>Brown County</b> 10 S Brownwood	12	1710CST			0	0	1K		<b>Thunderstorm Wind</b>
			Telephone pole blown over						
<b>Haskell County</b> Rule	12	1715CST			0	0	2K		<b>Thunderstorm Wind</b>
			A hotel suffered extensive roof damage						
<b>Jones County</b> Stamford	12	1730CST			0	0			<b>Hail (0.75)</b>
<b>Coleman County</b> 20 SW Coleman	12	1805CST			0	0	0.50K		<b>Thunderstorm Wind</b>
			A picnic table was picked up and thrown 50 yards						
<b>Coleman County</b> 20 SW Coleman	12	1805CST			0	0	6K		<b>Thunderstorm Wind</b>
			Several sailboats run aground at O.H. Ivie Reservoir						
<b>Coleman County</b> 8 SW Gouldbusk	12	1805CST			0	0			<b>Thunderstorm Wind (G56)</b>
<b>Concho County</b> 13 E Paint Rock	12	1809CST			0	0			<b>Thunderstorm Wind (G61)</b>
<b>Brown County</b> 18 SW Brownwood	12	1900CST			0	0	4K		<b>Thunderstorm Wind</b>
			Powerlines blown down						
<b>San Saba County</b> 22 NW San Saba	12	1920CST			0	0			<b>Hail (0.88)</b>
<b>Brown County</b> 10 S Brownwood	12	1925CST			0	0			<b>Hail (0.88)</b>
<b>Shackelford County</b> 10 E Albany	12	1927CST	0.1	10	0	0			<b>Tornado (F0)</b>
			A brief tornado touched down over open country						
<b>Brown County</b> 10 S Brownwood	12	1930CST			0	0			<b>Thunderstorm Wind (G52)</b>
<b>Shackelford County</b> Albany	12	1930CST			0	0			<b>Hail (1.00)</b>
<b>Shackelford County</b> Albany	12	1930CST			0	0	2K		<b>Thunderstorm Wind</b>
			Numerous power lines blown down						
<b>Haskell County</b> 2 S Haskell	12	2010CST			0	0			<b>Hail (0.75)</b>
<b>Coleman County</b> Coleman	12	2021CST			0	0			<b>Hail (1.75)</b>
<b>Runnels County</b> Wingate	12	2135CST			0	0	5K		<b>Thunderstorm Wind</b>
			A roof was blown off a barn						
			Scattered severe thunderstorms developed late in the afternoon across the eastern half of the area, producing substantial hail and wind damage. The area near O.H. Ivie Reservoir was hardest hit, when wind gusts up to 70 mph ran sailboats ashore. One tornado was also spotted just west of Albany in Shackelford County. The tornado moved across open ranchland and did no reported damage.						
<b>Tom Green County</b> 10 NW San Angelo	18	0240CST			0	0			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Central</b>									
<b>Irion County</b>									
Mertzon	18	0452CST			0	0			Hail (0.75)
<b>Haskell County</b>									
1 W Haskell	19	1652CST			0	0			Hail (0.88)
<b>Haskell County</b>									
Rule	19	1705CST			0	0			Hail (1.00)
<b>Haskell County</b>									
Haskell	19	1809CST			0	0			Hail (1.00)
<b>Jones County</b>									
1 SW Hamlin	20	1715CST			0	0			Hail (1.75)
<b>Jones County</b>									
Hamlin	20	1720CST 1740CST			0	0	1M		Hail (2.50)
		Golfball to tennis ball size hail fell in Hamlin for 20 minutes							
<b>Jones County</b>									
Hamlin	20	1720CST			0	0	1M		Thunderstorm Wind (G70)
		Winds estimated at 80 mph destroyed a barn and knocked down trees and power poles across the city							
<b>Jones County</b>									
Hamlin	20	1837CST			0	0			Hail (1.25)
<b>Jones County</b>									
8 E Hamlin	20	1839CST			0	0			Thunderstorm Wind (G61)
		Winds estimated at 70 mph							
<b>Jones County</b>									
5 SE Hamlin	20	1841CST			0	0			Hail (0.88)
<b>Shackelford County</b>									
9 N Albany	20	1842CST			0	0			Thunderstorm Wind (G52)
<b>Jones County</b>									
1 SW Hamlin	20	1843CST			0	0			Hail (1.00)
<b>Throckmorton County</b>									
Woodson	20	1848CST			0	0	5K		Thunderstorm Wind (G52)
		Winds up to 60 mph destroyed a garage.							
<b>Mitchell County</b>									
19 SW Colorado City	20	1945CST			0	0	8K		Thunderstorm Wind
		Several power poles were blown down and a roof was severely damaged							
		Several severe thunderstorms developed across the Big country during the early evening hours. The community of Hamlin in northern Jones County took the brunt of the storms, with 3 separate storms producing damaging hail. The first Hamlin storm was the strongest, producing golf ball to tennis ball size hail for over 20 minutes. Winds estimated at 80 mph combined with the large hail to break car and house windows, damage roofs, and knock down power poles and trees throughout the community. Hail and wind damage just in Hamlin was estimated at over 2 million dollars.							
<b>TEXAS, Central Southeast</b>									
<b>TXZ163&gt;164-176&gt;179- 195&gt;200-210&gt;214- 226&gt;227-235&gt;238</b>									
		<b>Houston - Trinity - Madison - Walker - San Jacinto - Polk - Burleson - Brazos - Washington - Grimes - Montgomery - Liberty - Colorado - Austin - Waller - Harris - Chambers - Wharton - Fort Bend - Jackson - Matagorda - Brazoria - Galveston</b>							
	01	0000CST			0	0			Drought
	30	2359CST							
		Drought conditions continue from May. By the end of June, many locations across SE TX were 8-12 inches below normal in rainfall amounts since March. Agriculture losses continue to escalate as well as heat related medical conditions/deaths. Afternoon highs were regularly around the century mark with overnight lows only falling into the upper 70s to lower 80s. With little chance of significant rainfall anytime soon, drought-like conditions will continue into July.							
<b>Austin County</b>									
Welcome	05	1556CST			0	0	3K		Hail (1.00)
		Hail along HWY 109.							
<b>Brazos County</b>									
4 W College Station	05	1600CST			0	0	3K		Hail (1.00)
		Hail at BYYT2.							
<b>Trinity County</b>									
Apple Spgs	05	1610CST			0	0	3K		Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Central Southeast</b>									
<b>Trinity County</b> 4 S Trinity	05	1610CST			0	0	0.50K		Thunderstorm Wind
									Boat overturned in Lake Livingston by high wind gusts.
<b>Grimes County</b> 10 N Navasota	05	1625CST			0	0	10K		Hail (1.75)
									Hail on FM 159.
<b>Waller County</b> Hempstead	05	1651CST			0	0	15K		Hail (2.00)
<b>Austin County</b> 6 N Bellville	05	1700CST			0	0	2K		Thunderstorm Wind
									Hurricane fence damaged and trampoline blown 200 yards downwind.
<b>Brazos County</b> 4 SSE Wellborn	05	1700CST			0	0	3K		Hail (0.88)
									Hail along FM 2154.
<b>Walker County</b> 6.5 N Huntsville	05	1705CST			0	0	5K		Tstm Wind/Hail
									Trees blown down and 3/4" hail.
<b>Colorado County</b> Weimar	05	1710CST			0	0	3K		Hail (0.75)
<b>Colorado County</b> 1 E Columbus	05	1715CST			0	0	3K		Hail (0.75)
<b>Colorado County</b> Weimar	05	1715CST			0	0	2K		Thunderstorm Wind
									Trees blown down along FM 250.
<b>Waller County</b> Waller	05	1725CST			0	0	5K		Hail (1.50)
<b>Harris County</b> 4 NE Hockley	05	1730CST			0	0	10K		Hail (1.75)
									Hail at intersection of U.S. 290 & FM 2920.
<b>Wharton County</b> 4 NW Louise	05	2125CST			0	0	10K		Hail (2.00)
<b>Wharton County</b> El Campo	05	2130CST			0	0	10K		Hail (1.75)
<b>Fort Bend County</b> Rosenberg	05	2146CST 2147CST	0.2	50	0	0	35K		Tornado (F0)
									Brief tornado touchdown at the Fort Bend County Fairgrounds. Moderate roof damage to structures along with signs and trees blown down.
<b>Brazoria County</b> 4 E Rosharon	05	2245CST			0	0	5K		Thunderstorm Wind
									Trees blown down and cars blown into ditches along HWY 288.
<b>Brazoria County</b> 5 N West Columbia	05	2245CST			0	0	5K		Thunderstorm Wind
									Trees blown down and cars blown into ditches along HWY 36.
<b>Galveston County</b> Jamaica Beach	05	2345CST			0	0	3K		Hail (0.75)
<b>Galveston County</b> Galveston	06	0000CST			0	0	20K		Thunderstorm Wind (G85)
									Coast Guard estimated 85 knot winds at the ferry landing. 150 dry dock blew off moorings into a ship. Dredge pipes (75 foot long, 2000-3000 pounds) blown off shore into the water.
<b>Chambers County</b> Smith Pt	06	0113CST			0	0	3K		Thunderstorm Wind
									Wind damage to a RV park.
<b>TXZ213</b>	<b>Harris</b> 09	0417CST			1	0			Excessive Heat
									Teenager died from excessive heat (playing basketball). M17BF



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, Central Southeast

<b>San Jacinto County</b>									
Shepherd	15	1615CST			0	0	15K		Thunderstorm Wind
Downburst snapped tops of trees off. Minor roof damage to a convenience store.									
<b>Houston County</b>									
Countywide	15	1700CST			0	0	5K		Thunderstorm Wind
Trees blown down in Davy Crockett National Forest.									
<b>Trinity County</b>									
Countywide	15	1700CST			0	0	5K		Thunderstorm Wind
Trees blown down in Davy Crockett National Forest.									
<b>Harris County</b>									
Westfield	15	1758CST			0	0	5K		Hail (0.75)
Hail along FM 1960.									
<b>Trinity County</b>									
Pennington	15	1830CST			0	0	10K		Hail (1.75)
<b>Fort Bend County</b>									
Richmond	23	1415CST			0	0	5K		Thunderstorm Wind
Downburst downed trees.									
<b>Galveston County</b>									
South Portion	29	0040CST 0140CST			0	0			Flash Flood
Flash flooding on Galveston Island. Harborside Dr, 19th St, 30th St, 35th St, and 50th St impassable due to high water.									

## TEXAS, Extreme West

NONE REPORTED.

## TEXAS, Mid - South

<b>Live Oak County</b>									
George West	15	1445CST			0	0			Hail (0.75)
<b>Jim Wells County</b>									
Orange Grove	15	1450CST			0	0			Thunderstorm Wind (G50)
<b>Bee County</b>									
Beeville	15	1530CST			0	0			Hail (1.75)
<b>Jim Wells County</b>									
Alice	15	1535CST 1550CST			0	0			Thunderstorm Wind (G60)
Thunderstorm wind destroyed two portable buildings and downed power poles.									
<b>Nueces County</b>									
1 W Agua Dulce	15	1555CST			0	0			Thunderstorm Wind (G60)
Thunderstorm wind overturned a tractor trailer on U.S. highway 44.									
<b>Goliad County</b>									
Berclair	15	1600CST			0	0			Hail (1.25)
<b>Jim Wells County</b>									
Orange Grove	15	1600CST			0	0			Tstm Wind/Hail
Golfball sized hail was reported by an NWS Spotter along with the report of a destroyed horse barn as a result of thunderstorm wind gusts.									
<b>Bee County</b>									
Beeville	15	1620CST			0	0			Hail (0.75)
<b>Jim Wells County</b>									
Orange Grove	15	1623CST			0	0			Hail (1.75)
<b>Goliad County</b>									
Berclair	15	1628CST			0	0			Thunderstorm Wind (G50)
<b>Goliad County</b>									
Weesatche	15	1637CST			0	0			Tstm Wind/Hail
NWS Spotter report of golfball sized hail along with large trees and power poles downed by thunderstorm wind									
<b>Victoria County</b>									
Nursery	15	1643CST			0	0			Hail (1.50)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Mid - South</b>									
<b>Goliad County</b> 5 E Weesatche	15	1645CST			0	0			Hail (1.75)
<b>Jim Wells County</b> Sandia	15	1710CST			0	0			Hail (1.75)
<b>Jim Wells County</b> 5 SW Ben Bolt	15	1925CST			0	0			Hail (0.75)
<b>TEXAS, North</b>									
<b>TXZ119-145</b>									
		<b>Dallas - Hill</b>							
	01	1300CST			2	0			Excessive Heat
	19	0800CST							
A 23 year-old man was found dead on 6/1/98 at Cedar Hill State Park. The cause of death was determined to be hyperthermia combined with a pre-existing heart condition. The time of death is unknown.									
A two year-old girl died on 6/19/98 after being accidently left in a closed vehicle on 6/17/98. The cause of death was hyperthermia with no secondary complications indicated. The time of death is approximate.									
A prolonged excessive heat event began across portions of north Texas in late May and continued through early September. M23OU, F2VE									
<b>Stephens County</b> Gunsight	04	1627CST			0	0			Hail (1.75)
<b>Eastland County</b> 5 NW Cisco	04	1640CST			0	0			Hail (2.00)
<b>Jack County</b> Perrin	04	1645CST			0	0			Hail (1.25)
<b>Montague County</b> Nocona	04	1700CST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed trees and powerlines.									
<b>Eastland County</b> 10 NW Eastland	04	1706CST			0	0			Hail (1.75)
<b>Palo Pinto County</b> 1 NW Mineral Wells	04	1710CST			0	0			Hail (0.75)
<b>Montague County</b> St Jo	04	1720CST			0	0			Hail (1.00)
<b>Montague County</b> St Jo	04	1720CST			0	0	3K		Thunderstorm Wind
Thunderstorm winds downed powerlines and damaged buildings.									
<b>Cooke County</b> Gainesville	04	1730CST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed trees and powerlines.									
<b>Eastland County</b> Gorman	04	1730CST			0	0	5K		Thunderstorm Wind
Thunderstorm winds blew down a storage building and took a sheet metal roof from a house.									
<b>Wise County</b> 1 W Bridgeport	04	1730CST			0	0			Hail (0.75)
<b>Erath County</b> 1 N Dublin	04	1745CST			0	0			Hail (1.00)
<b>Grayson County</b> Whitesboro	04	1815CST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed numerous trees, powerlines, and fences.									
<b>Mills County</b> 5 SE Mullin	04	1815CST			0	0	2K		Thunderstorm Wind
Thunderstorm winds overturned a boat dock on Lake Merritt. Thunderstorm winds also donwed large tree limbs.									
<b>Grayson County</b> Sherman Muni Arpt	04	1816CST			0	0			Thunderstorm Wind (G50)
<b>Somervell County</b> 5 W Glen Rose	04	1820CST			0	0	2K		Thunderstorm Wind (G74)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, North</b>									
									Thunderstorm winds blew a tree onto a building.
<b>Tarrant County</b> Blue Mound	04	1825CST			0	0			Hail (1.00)
<b>Denton County</b> Denton	04	1830CST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed signs and a large tree.
<b>Erath County</b> Bunyan	04	1830CST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds downed trees and took the roof from a mobile home.
<b>Hood County</b> 5 S Tolar	04	1830CST			0	0			Hail (1.00)
<b>Tarrant County</b> Keller	04	1834CST			0	0			Thunderstorm Wind (G54)
<b>Tarrant County</b> Saginaw	04	1836CST			0	0			Thunderstorm Wind (G61)
<b>Cooke County</b> 7 E Gainesville	04	1843CST			0	0			Thunderstorm Wind (G52)
									Thunderstorm winds downed large tree limbs.
<b>Tarrant County</b> Saginaw	04	1846CST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds downed powerlines and blew garage doors into garages.
<b>Collin County</b> Celina	04	1900CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed large tree limbs. No dollar amount of damage was reported.
<b>Grayson County</b> Countywide	04	1900CST			0	0	0		Thunderstorm Wind
									Wind damage was reported at many locations in Grayson County. No dollar estimate of damage was reported.
<b>Tarrant County</b> Colleyville	04	1900CST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds blew a large metal fence gate from its hinges.
<b>Tarrant County</b> Keller	04	1900CST			0	0			Hail (0.88)
<b>Tarrant County</b> Watauga	04	1900CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Johnson County</b> Cleburne	04	1903CST			0	0	5K		Lightning
									Lightning struck a house, setting it on fire.
<b>Johnson County</b> Cleburne	04	1903CST			0	0	100K		Thunderstorm Wind
									Thunderstorm winds destroyed two mobile homes and damaged 15 others. Thunderstorm winds also downed trees and powerlines.
<b>Johnson County</b> 8 E Cleburne	04	1913CST			0	0	5K		Thunderstorm Wind
									Thunderstorm winds destroyed a barn.
<b>Fannin County</b> Leonard	04	1915CST			0	0	2K		Thunderstorm Wind
									Thunderstorm winds blew trees onto houses.
<b>Fannin County</b> Trenton	04	1915CST			0	0	1K		Thunderstorm Wind
									Thunderstorm winds downed trees and a light pole.
<b>Johnson County</b> Rio Vista	04	1915CST			0	0			Thunderstorm Wind (G69)
									Thunderstorm winds downed trees.
<b>Tarrant County</b> Grapevine	04	1915CST			0	0			Thunderstorm Wind (G57)
<b>Fannin County</b> 8 N Bonham	04	1930CST			0	0	2K		Thunderstorm Wind (G65)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, North</b>									
									Thunderstorm winds blew trees onto powerlines.
<b>Dallas County</b> Sachse	04	1935CST			0	0			Thunderstorm Wind (G57)
<b>Hunt County</b> Wolfe City	04	1958CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed powerlines. No dollar estimate of damage was provided.
<b>Ellis County</b> Maypearl	04	2000CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds damaged a barn. No dollar estimate of damage was reported.
<b>Ellis County</b> Red Oak	04	2000CST			0	0	3K		Thunderstorm Wind
									Thunderstorm winds downed trees, damaging a fence and a carport.
<b>Ellis County</b> Waxahachie	04	2000CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Hill County</b> Itasca	04	2005CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Delta County</b> Klondike	04	2007CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed large tree limbs. No dollar estimate of damage was reported.
<b>Hunt County</b> Wolfe City	04	2012CST			0	0			Thunderstorm Wind (G69)
<b>Lampasas County</b> Lometa	04	2030CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds damaged an outbuilding. No dollar estimate of damage was reported.
<b>Navarro County</b> Corbet	04	2030CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Navarro County</b> Corsicana	04	2030CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Navarro County</b> Dawson	04	2030CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Lamar County</b> Paris	04	2032CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Kaufman County</b> Kaufman	04	2033CST			0	0	3K		Thunderstorm Wind (G52)
									Thunderstorm winds unroofed buildings and downed signs.
<b>Hill County</b> Hubbard	04	2050CST			0	3	50K		Thunderstorm Wind (G75)
									Thunderstorm winds took the roof from a house and blew a metal awning onto two cars. Three people were injured by flying glass. Thunderstorm winds also damaged buildings and downed trees.
<b>Navarro County</b> Silver City	04	2055CST			0	0			Hail (1.00)
<b>Limestone County</b> Coolidge	04	2100CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed powerlines. No dollar estimate of damage was reported.
<b>Van Zandt County</b> Wills Pt	04	2103CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>McLennan County</b> 7 NE Mc Gregor	04	2104CST			0	0			Hail (0.88)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, North</b>									
<b>McLennan County</b> 2 S Mc Gregor Muni Arprt	04	2104CST			0	0			Flash Flood
<b>McLennan County</b> Woodway	04	2114CST			0	0			Thunderstorm Wind (G57)
<b>McLennan County</b> Moody	04	2117CST			0	0			Flash Flood
Street flooding was reported in Moody.									
<b>McLennan County</b> 3 E Moody	04	2117CST			0	0			Hail (1.75)
<b>McLennan County</b> West	04	2117CST			0	0	0		Thunderstorm Wind
Thunderstorm winds downed trees. No dollar estimate of damage was reported.									
<b>Limestone County</b> Coolidge	04	2130CST			0	0	0		Thunderstorm Wind
Wind damage was reported by the county sheriff. No dollar estimate of damage was reported.									
<b>McLennan County</b> Mc Gregor	04	2130CST			0	0	0		Thunderstorm Wind
Thunderstorm winds damaged a roof. No dollar estimate of damage was reported.									
<b>McLennan County</b> Waco	04	2130CST			0	0	4K		Lightning
Lightning started a house fire.									
<b>McLennan County</b> Waco	04	2130CST			0	0	0		Thunderstorm Wind
Thunderstorm winds downed trees. No dollar estimate of damage was reported.									
<b>Van Zandt County</b> Grand Saline	04	2130CST			0	0			Thunderstorm Wind (G52)
<b>McLennan County</b> Waco	04	2154CST			0	0	0		Thunderstorm Wind
Thunderstorm winds downed powerlines. No dollar estimate of damage was reported.									
<b>Anderson County</b> Montalba	04	2200CST			0	0	0		Thunderstorm Wind
Thunderstorm winds downed trees. No dollar estimate of damage was reported.									
<b>Limestone County</b> Groesbeck	04	2200CST			0	0	25K		Thunderstorm Wind (G65)
Thunderstorm winds blew trees onto cars and houses.									
<b>Coryell County</b> Turnersville	05	0240CST			0	0			Hail (1.75)
<b>McLennan County</b> Robinson	05	0338CST			0	0			Hail (1.75)
<b>Limestone County</b> Groesbeck	05	0420CST			0	0			Hail (0.88)
<b>Limestone County</b> 4 E Groesbeck	05	0435CST			0	0			Thunderstorm Wind (G52)
<b>Henderson County</b> Athens	05	0700CST			0	3	50K		Thunderstorm Wind
Thunderstorm winds unroofed a house. Three people were injured by debris when they abandoned the house. Thunderstorm winds also downed numerous trees and powerlines.									
Scattered strong to severe thunderstorms developed ahead of a slow-moving cold front. These storms produced numerous instances of damaging wind gusts. Dense smoke from Mexican and Central American wildfires hampered storm spotters during the late afternoon and evening as visibilities lowered to near three miles in many locations.									
<b>Stephens County</b> 5 S Breckenridge	07	1744CST			0	0			Hail (1.00)
<b>Stephens County</b> 7 S Breckenridge	07	1800CST			0	0	0		Thunderstorm Wind
Thunderstorm winds downed large tree limbs. No dollar estimate of damage was reported.									

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					Killed	Injured	Property	Crops	
<b>TEXAS, North</b>									
<b>Stephens County</b> Caddo	07	1810CST			0	0			Hail (0.88)
<b>Palo Pinto County</b> 7 SW Palo Pinto	07	1840CST			0	0			Hail (1.00)
<b>Palo Pinto County</b> Palo Pinto Res	07	1850CST			0	0			Hail (0.75)
<b>Parker County</b> Millsap	07	1925CST			0	0			Hail (1.75)
<b>Grayson County</b> 1 N Denison	07	2330CST			0	0			Hail (1.75)
									Scattered strong to occasionally severe thunderstorms developed ahead of a cold front over northwest portions of north Texas.
<b>Montague County</b> 1 N Nocona	09	1745CST			0	0			Hail (0.75)
<b>Montague County</b> 1 N Nocona	09	1745CST			0	0			Thunderstorm Wind (G54)
<b>Montague County</b> Nocona	09	1748CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Montague County</b> St Jo	09	1800CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Cooke County</b> Muenster	09	1917CST			0	0			Hail (0.75)
<b>Cooke County</b> Muenster	09	1917CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed trees. No dollar estimate of damage was reported.
<b>Cooke County</b> 2 NW Gainesville	09	1938CST			0	0			Hail (0.75)
									Scattered strong to occasionally severe thunderstorms developed ahead of a cold front across northern portions of north Texas.
<b>Young County</b> Olney	11	2300CST			0	0	0		Thunderstorm Wind
									Thunderstorm winds downed numerous trees. No dollar estimate of damage was reported.
<b>Young County</b> Graham	11	2345CST			0	0			Thunderstorm Wind (G57)
<b>Eastland County</b> Rising Star	12	1815CST			0	0			Hail (0.75)
<b>Stephens County</b> Breckenridge	12	1945CST			0	0			Hail (0.88)
<b>Stephens County</b> Breckenridge	12	1945CST 2005CST			0	0	100K		Thunderstorm Wind
									Thunderstorm winds downed a radio tower, numerous trees, and powerlines. Cars were damaged by falling trees. In addition, signs and metal buildings were damaged.
<b>Montague County</b> Nocona	18	2057CST	0	0	0	0	0		Tornado (F0)
									A brief tornado was reported near Nocona. No damage was reported.
<b>Montague County</b> Nocona	18	2100CST			0	0			Thunderstorm Wind (G61)
									Thunderstorm winds downed a tree.
<b>Montague County</b> Montague	18	2130CST			0	0			Hail (1.75)
<b>Cooke County</b> Gainesville	18	2159CST			0	0			Hail (1.00)
<b>Cooke County</b> Gainesville	18	2159CST			0	0			Thunderstorm Wind (G61)
<b>Cooke County</b> 8 E Marysville	18	2159CST			0	0			Hail (1.00)

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					Killed	Injured	Property	Crops	

## TEXAS, North

Large hail was reported at Hubert H. Moss Lake.

<b>Cooke County</b> Gainesville	18	2203CST			0	0			Hail (0.75)
<b>Cooke County</b> Callisburg	18	2213CST			0	0			Hail (1.00)
<b>Cooke County</b> 5 SE Valley View	18	2340CST			0	0			Hail (0.88)
Large hail was reported at Lake Ray Roberts.									
<b>Denton County</b> Corinth	19	0000CST			0	0	0		Thunderstorm Wind

Wind damage was reported at a mobile home park. No dollar estimate of damage was reported.

Scattered strong to severe thunderstorms developed ahead of a cold front over northern portions of north Texas.

## TEXAS, North Panhandle

<b>Dallam County</b> Perico	07	1310CST			0	0			Hail (1.50)
A severe thunderstorm over the extreme northwest Texas panhandle produced large hail during the early afternoon hours.									
<b>Ochiltree County</b> 17 S Perryton	22	1647CST			0	0			Hail (1.50)
<b>Ochiltree County</b> 6 S Perryton	22	1659CST			0	0			Hail (1.75)
<b>Ochiltree County</b> 11 S Perryton	22	1701CST			0	0			Hail (1.75)
Severe thunderstorms over the northeast Texas panhandle produced large hail during the early evening hours.									
<b>Hemphill County</b> 3 WNW Gageby	30	1900CST			0	0			Hail (1.75)
<b>Ochiltree County</b> 5 W Perryton	30	1925CST			0	0			Hail (0.88)
<b>Ochiltree County</b> 10 S Perryton	30	2003CST			0	0			Hail (1.00)
<b>Lipscomb County</b> 5 W Darrouzett	30	2040CST			0	0			Hail (1.00)
<b>Ochiltree County</b> 15 SE Perryton	30	2115CST 2330CST			0	0			Flash Flood
Flooding in Wolf Creek Park about 15 miles southeast of Perryton. Water covering State Highway 70 over southern Ochiltree county.									
<b>Dallam County</b> 8 NW Dalhart	30	2145CST			0	0			Thunderstorm Wind (G87)
Six inch diameter tree limbs were reported down.									
Severe thunderstorms across the northeast Texas panhandle produced large hail and some flooding from very heavy rains during the evening hours. Another severe thunderstorm over the northwest Texas panhandle during the late evening produced very high winds along with some damage to trees.									

## TEXAS, Northeast

<b>TXZ165</b>	<b>Angelina</b>								
	01	0000CST			1	0			Excessive Heat
	30	2359CST							
June continued where May left off. Excessive heat continued across northeast Texas making June the hottest since 1980. F82PH									
<b>TXZ096&gt;097-108&gt;112-124&gt;126-136&gt;138-149&gt;153-165&gt;167</b>	<b>Red River - Bowie - Franklin - Titus - Camp - Morris - Cass - Wood - Upshur - Marion - Smith - Gregg - Harrison - Cherokee - Rusk - Panola - Nacogdoches - Shelby - Angelina - San Augustine - Sabine</b>								
	01	0000CST			0	0	150M		Drought
	30	0000CST							
<b>Red River County</b> 6 S Boxelder	04	2100CST			0	0			Thunderstorm Wind (G56)
<b>Bowie County</b> De Kalb	04	2115CST			0	0			Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Northeast</b>									
			Few large trees down.						
<b>Wood County</b> 2 N Quitman	04	2135CST			0	0			Thunderstorm Wind (G56)
<b>Camp County</b> Pittsburg	04	2155CST			0	0			Thunderstorm Wind (G52)
<b>Upshur County</b> 2 N Gladewater	04	2200CST			0	0			Thunderstorm Wind (G52)
<b>Smith County</b> 5 W Tyler	04	2202CST			0	0			Thunderstorm Wind (G52)
<b>Morris County</b> 2 N Lone Star	04	2203CST			0	0			Thunderstorm Wind (G52)
<b>Gregg County</b> 2 SW Gladewater	04	2215CST			0	0			Thunderstorm Wind (G52)
<b>Cass County</b> Hughes Spgs	04	2220CST			0	0			Thunderstorm Wind (G52)
<b>Smith County</b> Tyler	04	2223CST			0	0			Thunderstorm Wind (G55)
<b>Smith County</b> 6 SE Tyler	04	2232CST			0	0			Hail (1.75)
<b>Gregg County</b> 2 W Gladewater	04	2242CST			0	0	50K		Thunderstorm Wind (G61)
			Powerlines down.						
<b>Panola County</b> Panola	04	2345CST			0	0			Thunderstorm Wind (G52)
<b>Rusk County</b> 10 WNW Henderson	05	0645CST			0	0	55K		Thunderstorm Wind (G52)
<b>Rusk County</b> Countywide	05	0655CST			0	0			Thunderstorm Wind (G60)
			Numerous trees down throughout county.						
<b>Harrison County</b> Countywide	05	0715CST			0	0			Thunderstorm Wind (G60)
			Numerous trees down across the county.						
<b>Panola County</b> Countywide	05	0715CST			0	0			Thunderstorm Wind (G60)
			Numerous trees down across entire county.						
<b>San Augustine County</b> San Augustine	05	1320CST			0	0			Hail (1.00)
<b>Angelina County</b> 5 N Lufkin	05	1550CST			0	0			Hail (1.75)
<b>Angelina County</b> 6 NNE Lufkin	05	1555CST			0	0			Thunderstorm Wind (G61)
			Trees down across FM 2021.						
<b>Nacogdoches County</b> 15 SE Nacogdoches	05	1620CST			0	0			Hail (0.75)
<b>San Augustine County</b> San Augustine	05	1637CST			0	0			Hail (0.75)
<b>San Augustine County</b> Broadus	05	1645CST			0	0	35K		Thunderstorm Wind (G52)
			Trees and powerlines down.						
<b>San Augustine County</b> 5 S San Augustine	05	1659CST			0	0			Thunderstorm Wind (G56)
<b>San Augustine County</b> San Augustine	05	1659CST			0	0			Hail (1.50)
<b>Sabine County</b> Hemphill	05	1712CST			0	0			Thunderstorm Wind (G57)



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					Killed	Injured	Property	Crops	
<b><u>TEXAS, Northeast</u></b>									
<b>Sabine County</b> Pineland	05	1715CST			0	0			Thunderstorm Wind (G61)
<b>Sabine County</b> Bronson	05	1715CST			0	0			Thunderstorm Wind (G57)
<b>Red River County</b> 6 S Boxelder	05	2100CST			0	0			Thunderstorm Wind (G52)
<b>Shelby County</b> 10 S Center	15	1628CST			0	0			Hail (0.75)
<b>Shelby County</b> 4 E Center	15	1644CST			0	0			Hail (0.75)
<b>Angelina County</b> 7 N Lufkin	15	1630CST			0	0			Hail (1.75)
<b>Nacogdoches County</b> Melrose	15	1630CST			0	0			Thunderstorm Wind (G52)
<b>Sabine County</b> Hemphill	22	1056CST			0	0			Thunderstorm Wind (G52)
<b>Sabine County</b> Hemphill	22	1915CST Trees and powerlines down.			0	0			Thunderstorm Wind (G52)
<b>Sabine County</b> 8 W Hemphill	22	1920CST			0	0			Thunderstorm Wind (G52)
<b><u>TEXAS, South</u></b>									
<b>Starr County</b> 7 NNW Roma	15	1716CST			0	0	0		Hail (1.00)
<b>Starr County</b> 4 E El Sauz	15	1755CST			0	0	0		Thunderstorm Wind (G50)
<b>Zapata County</b> Falcon	15	1755CST Extensive tree damage			0	0	2K		Thunderstorm Wind
<b><u>TEXAS, South Central</u></b>									
<b>Zavala County</b> La Pryor	04	2205CST 2210CST			0	0	60K	0	Thunderstorm Wind
									Wind damage was reported to the roofs of numerous buildings in LaPryor.
<b>Kendall County</b> Sisterdale	05	1415CST 1420CST			0	0	30K	0	Hail (2.00)
									Hail broke out windows in buildings.
<b>Kendall County</b> Kendalia	05	1430CST 1435CST			0	0	0	0	Hail (0.75)
<b>Caldwell County</b> Lockhart	05	1420CST 1430CST			0	0	0	0	Hail (0.75)
<b>Comal County</b> Spring Branch	05	1430CST 1435CST			0	0	0	0	Hail (1.50)
<b>Comal County</b> Fischer	05	1446CST 1451CST			0	0	0	0	Hail (1.00)
<b>Blanco County</b> Johnson City	05	1520CST 1525CST			0	0	0	0	Hail (0.75)
<b>Hays County</b> San Marcos	05	1520CST 1525CST			0	0	0	0	Hail (0.75)

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					Killed	Injured	Property	Crops	
<b>TEXAS, South Central</b>									
<b>Blanco County</b>									
Twin Sisters	05	1530CST 1540CST			0	0	0	0	Hail (1.50)
<b>Williamson County</b>									
Georgetown	05	1500CST 1505CST			0	0	0	0	Hail (0.75)
<b>Caldwell County</b>									
Martindale	05	1525CST 1530CST			0	0	0	0	Hail (1.00)
<b>Caldwell County</b>									
Lockhart	05	1548CST 1550CST			0	9	20K	100K	Hail (2.75)
<b>Caldwell County</b>									
5 S Lockhart to 5 SE Lockhart	05	1548CST	0.5	100	0	0	0	0	Tornado (F0)
<b>Caldwell County</b>									
9 SE Lockhart to 10 SE Lockhart	05	1600CST 1603CST	1	200	0	0	50K	0	Tornado (F1)
<p>The two tornadoes were preceded by large hail that shattered numerous windows in the Lockhart area and also destroyed corn crops in and around Lockhart. The first tornado developed about 5 miles south of Lockhart. It was small and very short-lived tornado was spotted by an off-duty police officer. It touched down in open country with no damage indicated. The second small tornado was spotted along SH86, around 9 miles southeast of Lockhart, as it moved briefly northeastward. This tornado, slightly stronger and longer-lived than the previous, uprooted numerous trees and snapped others at their bases.</p>									
<b>Bastrop County</b>									
Bastrop	05	1620CST 1625CST			0	0	0	0	Hail (1.75)
<b>Bastrop County</b>									
Smithville	05	1620CST 1625CST			0	0	0	0	Hail (2.75)
<b>Fayette County</b>									
Flatonia	05	1621CST 1622CST			0	0	0	0	Funnel Cloud
<b>Fayette County</b>									
2 N Flatonia	05	1621CST 1625CST			0	0	0	0	Hail (1.75)
<b>Fayette County</b>									
Flatonia	05	1621CST 1625CST			0	0	20K	0	Thunderstorm Wind
<b>Fayette County</b>									
Flatonia	05	1625CST 1635CST			0	0	0	0	Hail (1.50)
<b>Fayette County</b>									
2 N Engle to 2 NE Engle	05	1632CST 1634CST	1	200	0	0	20K	0	Tornado (F1)
<b>Fayette County</b>									
Schulenburg	05	1640CST 1645CST			0	0	0	0	Hail (1.50)
<p>A small and short-lived tornado struck just north of Engle, knocking down numerous trees as it moved briefly northeastward. The tornado was preceded by a series of brief downbursts in the Flatonia area that blew over numerous trees.</p>									
<b>Williamson County</b>									
Georgetown	05	1635CST 1640CST			0	0	0	0	Hail (0.75)
<b>Fayette County</b>									
Cistern	05	1800CST 1805CST			0	0	0	0	Hail (0.75)

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					Killed	Injured	Property	Crops	
<b>TEXAS, South Central</b>									
<b>Fayette County</b> 3 S Muldoon	05	1815CST 1820CST			0	0	0	0	Hail (2.00)
<b>Fayette County</b> Southeast Portion	05	1900CST 2200CST			0	0	5K	0	Flash Flood
Up to 4 inches of rain fell across the southeast part of the county, causing brief flash flooding of many small county roads.									
<b>Uvalde County</b> Uvalde	10	0830CST 0835CST			0	0	30K	0	Thunderstorm Wind
A severe downburst knocked over numerous large tree limbs. The wind also knocked out power lines in the Uvalde area.									
<b>Val Verde County</b> (Drt)Del Rio Intl Ar	10	2215CST 2218CST			0	0	0	0	Thunderstorm Wind (G53)
<b>Kinney County</b> Brackettville	10	2255CST 2300CST			0	0	20K	0	Thunderstorm Wind
The Sheriff's Department in Kinney County reported trees and power lines blown down by high winds. The wind gusts were estimated at well over 50 knots.									
<b>Val Verde County</b> (Df)Laughlin Afb De	13	2150CST 2155CST			0	0	0	0	Thunderstorm Wind (G51)
<b>Kinney County</b> 3 N Brackettville	13	2220CST 2225CST			0	0	20K	0	Thunderstorm Wind
Department of Public Safety personnel reported wind damage to trees and power lines with gusts estimated at well over 50 knots.									
<b>Wilson County</b> 4 N Stockdale	15	0955CST 1000CST			0	0	0	0	Hail (0.75)
<b>Gonzales County</b> 5 N Cheapside	15	1115CST 1120CST			0	0	0	0	Hail (1.50)
<b>Lavaca County</b> Shiner	15	1640CST 1650CST			0	0	200K	0	Thunderstorm Wind
<b>Lavaca County</b> 6 W Hallettsville	15	1645CST 1650CST			0	0	0	0	Hail (0.75)
<b>Lavaca County</b> Hallettsville	15	1650CST 1655CST			0	0	0	0	Hail (1.00)
<b>Lavaca County</b> Hallettsville	15	1650CST 1655CST			0	0	40K	0	Thunderstorm Wind
As thunderstorms moved into Lavaca County from the west, they began to produce downbursts. The winds first struck in the Shiner area, where they destroyed five barns and 4 homes. As the storms moved eastward, they produced a combination of large hail and damaging winds in the Hallettsville. A 14x80 mobile home was destroyed by the winds near Hallettsville.									
<b>De Witt County</b> Thomaston	15	1652CST 1655CST			0	0	0	0	Hail (1.50)
<b>Lavaca County</b> 15 SE Hallettsville	15	1800CST 1805CST			0	0	0	0	Hail (0.88)
<b>Medina County</b> Southeast Portion	29	1630CST 1800CST			0	0	10K	0	Flash Flood
<b>Frio County</b> Northeast Portion	29	1715CST 1900CST			0	0	10K	0	Flash Flood

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					Killed	Injured	Property	Crops	

## TEXAS, South Central

Rainfall of up to 6 inches fell over the southeast part of Medina County and the northeast part of Frio County, causing the flooding of numerous roads.

## TEXAS, South Panhandle

### **TXZ021>044**

**Parmer - Castro - Swisher - Briscoe - Hall - Childress - Bailey - Lamb - Hale - Floyd - Motley - Cottle - Cochran - Hockley - Lubbock - Crosby - Dickens - King - Yoakum - Terry - Lynn - Garza - Kent - Stonewall**  
**01 0100CST 0 0 Drought**  
**30 2300CST**

The ongoing drought across West Texas caused significant crop damage across the South Plains, extreme southern panhandle, and the Low Rolling Plains in June. This event will be described in more detail in later months after the impact on crops is better known.

### **Kent County**

#### **Clairemont**

**03 1900CST 0 0 0 0 Hail (0.75)**  
 Dime-sized hail was reported near Clairemont by the public.

### **Parmer County**

#### **Bovina**

**07 1858CST 0 0 50K Hail (1.75)**

### **Parmer County**

#### **Bovina**

**07 1920CST 0 0 50K Hail (2.25)**

### **Parmer County**

#### **4 W Lazbuddie**

**07 1925CST 0 0 50K Hail (1.75)**

### **Castro County**

#### **10 W Dimmitt**

**07 1930CST 0 0 0 100K Hail (1.00)**

### **Castro County**

#### **7 SW Dimmitt**

**07 1940CST 0 0 50K 100K Hail (3.50)**

### **Castro County**

#### **Dimmitt**

**07 1944CST 0 0 0 Hail (1.00)**

### **Castro County**

#### **12 ESE Dimmitt**

**07 2033CST 0 0 100K Hail (4.50)**

### **Swisher County**

#### **7 W Tulia**

**07 2038CST 0 0 100K Hail (1.75)**

### **Swisher County**

#### **Tulia**

**07 2054CST 0 0 50K 0 Hail (1.75)**

### **Swisher County**

#### **1 W Tulia**

**07 2055CST 0 0 Hail (2.00)**

A isolated supercell storm that developed in eastern New Mexico moved east across the extreme southern Texas Panhandle, including Parmer, Castro, and Swisher Counties. The storm dumped huge hail (up to softball-size) as it moved east across those counties. There were many reports of golfball (or greater) -sized hail from this storm, especially in/near Bovina, Dimmitt, and Tulia. The hail destroyed thousands of acres of wheat, cotton, and corn.

This storm still appeared to be severe on radar as it continued moving east through Briscoe and Hall Counties, though no verifying ground truth reports were received.

### **Dickens County**

#### **19 E Dickens**

**09 1430CST 0 0 Hail (1.75)**

### **King County**

#### **8 NNW Guthrie**

**09 1515CST 0 0 Hail (1.75)**

An NWS co-op observer reported golfball-sized hail in extreme eastern Dickens County. The storm moved east and caused golfball-sized hail north of Guthrie, too.

### **Garza County**

#### **Post**

**10 1530CST 0 0 50K 0 Thunderstorm Wind**

### **Lubbock County**

#### **Lubbock Intl Arpt**

**10 1843CST 0 0 0 0 Thunderstorm Wind (G52)**

Outflow winds from thunderstorms caused damage in Post. Several power poles were snapped, some trees were uprooted, and a few buildings' roofs were damaged. The outflow winds moved west toward Lubbock, where a gust to 52 knots was reported at the International Airport.

### **Childress County**

#### **Kirkland**

**21 1728CST 0 0 0 0 Hail (0.75)**

### **Dickens County**

#### **Dickens**

**21 1756CST 0 0 0 0 Hail (0.88)**

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, South Panhandle

### **Cottle County Swearingen**

21	1800CST				0	0	0		<b>Hail (1.00)</b>
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Widely scattered strong thunderstorms caused marginally severe weather over Dickens, Cottle, and Childress Counties. No damages were reported.

### **Lubbock County**

#### **10 W Lubbock**

22	1925CST				0	0			<b>Hail (1.75)</b>
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### **Lubbock County**

#### **Lubbock Intl Arpt**

22	2006CST				0	0	0	0	<b>Hail (0.75)</b>
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Spotters reported up to golfball-sized hail at Reese Center (the former Reese Air Force Base), about 10 miles west of Lubbock. Dime-sized hail was reported at Lubbock International Airport at 2006 CST. No damages were reported.

## TEXAS, Southeast

### **TXZ180>182-201- 215>216**

#### **Tyler - Jasper - Newton - Hardin - Jefferson - Orange**

01	0000CST				0	0			<b>Drought</b>
30	0000CST								

A mild to moderate drought continued across southeast Texas in the month of June. Only two days provided any relief from the dry weather - June 5th and June 26th. Many places recorded less than two inches of rain for the entire month of June.

Crop losses continued to mount, primarily in the rice business, as well as forestry resources. exact dollar figures will be published in the July 1998 Storm Data.

### **Tyler County**

#### **1 NW Woodville**

05	1730CST				0	0			<b>Hail (0.75)</b>
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### **Tyler County**

#### **Warren**

15	1641CST				0	0	10K		<b>Thunderstorm Wind</b>
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Trees and power lines were blown down in Warren.

### **Jasper County**

#### **Buna**

15	1720CST				0	0	25K		<b>Thunderstorm Wind</b>
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SKYWARN spotter reported trees and power lines down in Buna.

## TEXAS, West

### **TXZ045>048-050>052- 057>063-067>070- 074>075-079>082** - **Gaines - Dawson - Borden - Scurry - Andrews - Martin - Howard - Van Horn/Guadalupe Mountains Area - Reeves County And Upper Trans Pecos - Loving - Winkler - Ector - Midland - Glasscock - Ward - Crane - Upton - Reagan - Davis Mountains - Pecos - Presidio Valley - Marfa Plateau - Big Bend Area - Terrell**

01	0000CST				0	0			<b>Drought</b>
30	2359CST								

Drought conditions continued in Southwest Texas and Southeast New Mexico. The Midland International Airport reported 0.30 inches of precipitation for June, which is 1.25 inches below normal. The total for the April-June period was a bleak 0.32 inch versus the climate average of 4.36 inches or about 7% of normal the driest April-June period on record. The first six months of the year were the second driest on record at 1.48" as compared to the driest January-June period of 1.31 inches in 1933. June 1998 was the 7th driest June on record dating back to 1930. Adding to the dryness was the fact that the high temperature averaged 100.2 degrees for the month and top readings for the month were 111 degrees on both the 3rd and the 27th.

Agricultural losses will be great but will not be included until the end of the drought or the end of the harvest when totals are calculated.

### **Martin County**

#### **2 N Stanton**

07	1200CST				0	0			<b>Hail (0.75)</b>
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### **Howard County**

#### **7 WSW Big Spring**

07	1215CST				0	0			<b>Hail (1.50)</b>
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### **Howard County**

#### **Coahoma**

07	1248CST				0	0			<b>Hail (1.00)</b>
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### **Scurry County**

#### **3 W Ira**

07	1345CST				0	0			<b>Hail (0.75)</b>
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A weak upper level disturbance helped to form convective showers in Winkler County, TX and Lea County, NM that intensified as they moved eastward into richer moister. Showers and thunderstorms formed into a NW-SE line that stretched from near Seminole to Big Spring. The storms continued strong as they left the KMAF warning area to the east. These storms were embedded in low clouds and were being fed by warm, moist air above the surface as surface conditions were still quite cool during the event.

### **Brewster County**

#### **10 NW Panther Junction**

07	1840CST				0	0			<b>Hail (0.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, West</b>									
<b>Ward County</b> Royalty	10	1605CST			0	0	12K		Dry Microburst
			14 Utility poles downed in the Royalty area.						
<b>Presidio County</b> 21 WNW Marfa	10	1606CST			0	0			Dry Microburst
			A 70 mph wind was reported at the Aerostat site west of Marfa.						
<b>Presidio County</b> Marfa	10	1610CST			0	0	5K		Dry Microburst
			Sheet metal was blown off roofs in town and a 72 mph wind gust was recorded by the KMRF AWOS station at the airport.						
<b>Jeff Davis County</b> 10 NW Ft Davis	10	1700CST			0	0			Dry Microburst
			60 mph wind gusts at McDonald Observatory.						
<b>Dawson County</b> 1 S Lamesa	10	1729CST			0	0	20K		Thunderstorm Wind (G61)
			A bowing thunderstorm caused wind damage on the south end of Lamesa near the highway 137/349 split. A metal barn and two pivot irrigation systems were destroyed by the wind. A peak wind gust of 70 mph was recorded at KPET radio station. Also one utility pole was knocked down in this area.						
<b>Ector County</b> 3 N Odessa	10	1742CST			0	0	1K		Thunderstorm Wind
			Thunderstorm winds blew down trees in the north sections of Odessa						
<b>Scurry County</b> 2 SW Snyder	10	1745CST			0	0	0.40K		Thunderstorm Wind
			Trees were knocked down in southwestern Snyder.						
<b>Scurry County</b> 3 SE Snyder	10	1749CST			0	0	3K		Thunderstorm Wind
			Part of a mobile home roof was peeled up by thunderstorm winds. Later in the evening rainfall damaged the contents inside.						
<b>Ector County</b> Gardendale	10	1755CST			0	0	2K		Thunderstorm Wind
			Outflow winds from a bowing thunderstorm knocked down a brick wall.						
<b>Midland County</b> 8 NNW (Maf) Midland Intl	10	1802CST			0	0			Thunderstorm Wind (G52)
			As the Gardendale storm moved into northwestern Midland County winds were estimated at 60+ mph.						
<b>Dawson County</b> 5 NNE Lamesa	10	1830CST			0	0	4K		Thunderstorm Wind
			5 utility poles were knocked down by strong outflow winds.						
<b>Dawson County</b> 8 E Lamesa	10	1840CST			0	0	2K		Thunderstorm Wind
			The Key community was at the apex of a bowing thunderstorm where half of a carport was ripped apart.						
<b>Howard County</b> Knott	10	1945CST			0	0	1.5K		Thunderstorm Wind
			Two utility poles were knocked down by strong outflow winds.						
<b>Terrell County</b> 8 SE Sanderson	10	1900CST 1905CST			0	0	1K		Thunderstorm Wind
			Outflow winds knocked down a utility pole along U.S. Highway 90 that cut the power to all points east.						
<b>Terrell County</b> 5 W Dryden	10	1924CST			0	0	1K		Thunderstorm Wind (G52)
			Thunderstorm outflow winds clocked at 52 knots before power was knocked out at the airport. Also, a utility pole was knocked down about 3 miles north of the airport.						
<b>Terrell County</b> 5 N Sanderson	12	1814CST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds destroyed a large barn on a ranch north of Sanderson.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, West</b>									
<b>Terrell County</b> West Portion	12	1930CST 2330CST			0	0			<b>Flash Flood</b>
			Torrential rains flooded portions of Ranch Road 2400.						
<b>Pecos County</b> 4 S Ft Stockton	13	1425CST			0	0	5K		<b>Thunderstorm Wind</b>
			A cluster of small cells formed in Pecos County moving to the east. One of the cell produced microburst winds that turned over a diesel tanker truck and down utility lines.						
<b>Pecos County</b> 9 NE Bakersfield	13	1520CST			0	0	10K		<b>Thunderstorm Wind</b>
			The Fort Stockton cluster continued to move to the east and took the roof off one mobile home, damaged the walls of another mobile home, and damaged a barn in the Bakersfield Valley community.						
<b>Upton County</b> 2 SE Mc Camey	13	1545CST			0	0			<b>Thunderstorm Wind (G52)</b>
			The north end of the Bakersfield valley cluster sent 60 mph outflow winds into extreme southern Upton County. This day saw unstable air on both sides of the dry line located from the southwest corner of Oklahoma SSW to west of Sanderson. At 1800 UTC, the moist air mass temperatures were near 90 degrees with dew points near 70 degrees, whereas in the "dry" air temperatures in the upper 90s and dew points in the lower to mid 50s.						
<b>Brewster County</b> Alpine	13	1715CST			0	0	3K		<b>Thunderstorm Wind</b>
			A cluster of small storms moved over Alpine with microburst winds knocking down utility poles and blowing out windows.						
<b>Martin County</b> 2 SW Stanton	13	1730CST			0	0	2.5K		<b>Thunderstorm Wind</b>
			Utility poles were knocked down by microburst winds from a small single cell storm that was in a broken line of storms moving to the east.						
<b>Terrell County</b> 5 W Dryden	13	1924CST			0	0			<b>Thunderstorm Wind (G50)</b>
			A line of storms extended from McCamey south to the Rio Grande. A 50 knot gust was recorded by the Terrell County Airport ASOS.						
<b>Terrell County</b> 38 NNE Dryden	13	1935CST			0	0	5K		<b>Thunderstorm Wind</b>
			A cell in the northern part of the line had damaging wind gusts that ripped doors off one house, blew belongings out into the yard, and took the roof off a barn.						
<b>Terrell County</b> South Portion	13	1940CST 2100CST			0	0			<b>Flash Flood</b>
			Heavy rains from clusters of storms caused flooding along U.S. Highway 90 ten miles east of Sanderson.						
<b>Terrell County</b> West Portion	13	1940CST 2200CST			0	0			<b>Flash Flood</b>
			Very Heavy rains from clusters of storms caused flooding in several places along Ranch Road 2400.						
<b>TXZ061</b> <b>Ector</b>	17	1605CST			0	0	10K		<b>High Wind (G52)</b>
			A large dust devil took a 30 x 40 foot corrugated metal roof covering off a church building in Odessa. When the metal was cast into the air it became entangled with and took down utility lines along a two block area. The roof and lines landed in a busy University Blvd. where five cars were scratched by the roof. The event was about 3 miles west of downtown.						
<b>Midland County</b> 4 W Midland	17	1845CST			0	0	50K		<b>Hail (1.75)</b>
			The initial storm of this event developed along the dry line, near the Ector/Crane County line. The storm developed rapidly and was a single cell storm for much of its life. The storm intensified as it moved into the western part of Midland where golfball size hail fell briefly damaging vehicles and a few roofs.						
<b>Howard County</b> Knott	17	1910CST			0	0			<b>Hail (1.75)</b>
			Another storm that developed along the dry line and moved in from Martin County.						
<b>Scurry County</b> 2 NW Snyder	17	2015CST			0	0	5K		<b>Thunderstorm Wind</b>
			Thunderstorm outflow winds damaged three new pickup truck beds and destroyed a bed topper. Also a goat shed had much of its metal stripped off.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, West</b>									
<b>Scurry County</b> 2 NE Snyder	17	2025CST			0	0	1K		<b>Thunderstorm Wind</b>
	Power lines and a tree were knocked down by the same storm as it moved to the east.								
	A strong capping inversion kept most of West Texas from seeing any deep convection on this afternoon, but a combination of very hot temperatures and strong convergence along the dry line started storms in Southwest Texas. The high temperature at KMAF was 106 on this afternoon on the dry side of the dry line, with KFST reporting 101 degrees and a dew point of 64 degrees on the moist side plus an easterly 25 knot wind. To get an idea of the mid-level warmth that had to be overcome, the 00 UTC 700 mb temperature at KMAF was 16.2 degrees C.								
<b>Howard County</b> 3 S Luther	17	1935CST			0	0	2K		<b>Thunderstorm Wind</b>
	Thunderstorm outflow rolled over and damaged a farm animal pen and broke a storm door.								
<b>Upton County</b> Mc Camey	18	0005CST			0	0			<b>Hail (1.00)</b>
	This multicell severe storm moved in from northern Pecos County.								
<b>Pecos County</b> Iraan	18	0315CST			0	0			<b>Hail (1.75)</b>
	A line of storms developed that stretch from near Sweetwater to Marathon. The most intense cell in the line marched over Iraan.								
<b>Pecos County</b> 1.7 SW Girvin	18	2355CST			0	0			<b>Hail (1.75)</b>
<b>Pecos County</b> 1.7 SW Girvin	18	2355CST			0	0			<b>Thunderstorm Wind (G52)</b>
	A thunderstorm passed through Girvin that produced hail up to golf ball size and winds estimated at over 60 mph.								
<b>Midland County</b> Spraberry	19	1845CST			0	0			<b>Hail (1.25)</b>
	Thunderstorm formed along the dry line in hot and moderately humid air with a temperatures near 100 degrees and dew points near 60 degrees.								
<b>Upton County</b> 20 N Mc Camey	20	1745CST			0	0	2K		<b>Thunderstorm Wind</b>
	Thunderstorm outflow winds knocked down at least one utility pole as well as some highway signs along Texas 329.								
<b>Dawson County</b> 6 WNW Patricia	21	1800CST 1840CST			0	0			<b>Thunderstorm Wind (G52)</b>
	An almost stationary thunderstorm over southwestern Dawson County pounded the area with 60+ mph wind gusts for a 40 minute period.								
<b>Dawson County</b> 4 SW Patricia	21	1810CST			0	0	20K	100K	<b>Thunderstorm Wind</b>
	A farm that received torrential rain, small hail, and high winds flipped an irrigation system and destroyed several hundred acres of cotton. The rain total at this farm was 3.5 inches.								
<b>Dawson County</b> Patricia	21	1820CST			0	0			<b>Thunderstorm Wind (G70)</b>
	The storm in the southwestern Dawson County moved slowly to the east and produced winds estimated at close to 80 mph at a Cotton Gin.								
<b>Martin County</b> 14 NW Tarzan	21	1845CST 1915CST			0	0	1K		<b>Thunderstorm Wind</b>
	Just as occurred in SW Dawson County, a long duration of wind occurred from this storm as it developed southward into Martin County. Many tree limbs were broken off and a small shed was damaged. A total of 2.25" of rain was recorded here.								
<b>Dawson County</b> South Portion	21	1900CST 2030CST			0	0			<b>Flash Flood</b>
	Many County Roads in the area of heaviest rains became washed out. Two miles south of Patricia 3.5" of precipitation was recorded.								
<b>Martin County</b> 4 WNW Three Leagues	21	1900CST 2030CST			0	0			<b>Flash Flood</b>
	Minor flooding occurred on State Highway 349 just south of the Dawson County line.								
	Thunderstorms fired along the dry line during a once again hot and moderately humid afternoon. At 2100 UTC temperatures								



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, West

around 103 degrees with dew points in the upper 50s. CAPE values were around 2200 J/kg on the SHARP work station when lifting the low-level mean parcel.

### **Andrews County 20 SW Andrews**

22	1815CST	0	0						<b>Hail (1.75)</b>
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During the time the intense cells were over Andrews County, the maximum organization of the strongest cell occurred here where this cell briefly approached supercell status. The storm was located near the intersection of highways 115 and 128.

### **Andrews County 20 SW Andrews**

22	1815CST	0	0		1.5K				<b>Thunderstorm Wind</b>
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A couple of utility poles were knocked down by strong winds from this storm.

### **Andrews County Andrews**

22	1857CST	0	0						<b>Hail (1.25)</b>
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The same cluster of storms moved into Andrews although less intense than when the storms were farther southwest.

Another hot day with enough moisture to produce isolated severe thunderstorms. At maximum heating temperatures were near 101 degrees with dew points in the upper 50s. The KMAF 00 UTC sounding showed 2800 J/kg of CAPE. The Andrews County storms formed in Winkler County and moved to the northeast. During the life cycle the storms were multicell, but with the leading cells (on the east side) being the best organized with good relative inflows.

## TEXAS, Western North

### **TXZ086**

#### **Wichita**

02	1300CST	0	2						<b>Excessive Heat</b>
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Two people were treated for heat related injuries at United Regional Health Care in Wichita Falls.

Excessive heat and drought conditions affected western and central Oklahoma as well as western portions of north Texas from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September across central and southern Oklahoma and western portions of north Texas. The heat and drought was less severe across northwest and north central Oklahoma. In total, there were 21 fatalities and at least 5 injuries directly related to the heat. Agricultural losses are estimated at nearly 2 billion dollars for Oklahoma and 2.1 billion dollars for Texas. Sixty of Oklahoma's 77 counties and all of Texas's counties were declared federal disaster areas.

Excessive heat and drought began in May, intensified in July and August, and diminished in September and early October. Oklahoma City experienced it's 6th warmest and 16th driest May on record, while Wichita Falls experienced it's 3rd warmest and 3rd driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western and central Oklahoma and western portions of north Texas until early September. The heat and drought then ended in early October when widespread rain and cooler temperatures returned to the southern plains.

The first fatality directly related to the heat occurred on June 21st, when an 81 year-old woman was found dead in her house in Oklahoma City (Canadian County). A 76 year-old man was then found dead in his Del City home on June 29th. The heat claimed 17 lives in July. The first occurred in Wichita Falls (Wichita County) on July 3rd, when a 75 year-old man was found dead in his home. Four heat related fatalities occurred between the 9th and the 11th. Two persons died on the 9th. A 46 year-old man was found dead in a hotel room in Oklahoma City with no air conditioning. The temperature in the room was 115 degrees. A 73 year-old man was then found dead in his Oklahoma City home. On July 10th, a 79 year-old man was found dead in his mobile home in Mulhall (Logan County). Another heat related fatality occurred on the 11th, when a 51 year-old woman was found dead in her home in Wewoka (Seminole County). The second and last report of a heat related fatality in western portions of north Texas occurred on the 14th, when a 74 year-old man was found dead in his Wichita Falls home.

On July 17th, in Altus (Jackson County, Oklahoma), a 79 year-old man was found dead in his home, while on the 19th, there were 3 heat related deaths reported. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City. The second fatality occurred in Guthrie (Logan County) when a 55 year-old man was found dead in his house, while the 3rd fatality occurred to a 78 year-old woman when she was found dead in her Oklahoma City apartment. On July 20th, a 78 year-old woman was found dead in her Duncan (Stephens County) home, while on the 21st, another 78 year-old woman was found dead in her home, this time in Guthrie (Logan County). Two persons died in their homes from the heat on the 27th, the first, a 61 year-old man from Oklahoma City, the second, a 67 year-old man found from Cromwell (Seminole County). The last heat related fatality occurred on the 30th, when a 62 year-old woman was found dead in her Oklahoma City home.

Three heat related fatalities were reported in August. The first occurred on the 2nd when a 53 year-old man was found dead inside his Oklahoma City home. The second heat related fatality occurred on the 3rd, when an 82 year-old man was found dead inside his Oklahoma City home. The last heat related fatality in August occurred on the 5th in Gene Autry (Carter County) when a 76 year-old man was found dead inside his home. Only one heat related fatality was reported in September, and occurred on the 4th. A 76

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, Western North

year-old man was found dead outside of a retirement home in Oklahoma City. He was found after he went for a walk and did not return.

Only 5 heat related injuries were reported during the 5 month-long heat and drought. Two persons from Wichita Falls were treated for heat related injuries on June 2nd at United Regional Health Care. Three troop members from Fort Sill (Comanche County) were rushed to a local hospital on July 22nd and treated for heat related injuries as well.

Statistics provided by the Oklahoma State Department of Agriculture indicate economic losses of approximately 2 billion dollars to the state's agriculture business. Figures were not available for individual counties. Hay and cotton crops were particularly hard hit. Hay producers harvested only 30 to 80 percent of the normal yield, a loss of perhaps 80 million dollars. Cotton production was reduced by about 70 percent, a loss of 38 million dollars. Other crops such as grain sorghum, peanuts and soybeans also suffered major losses. In total, crop losses across Oklahoma were near 500 million dollars, but because of the multiplying effect on the overall economy, this figure is more like 2 billion dollars when considering the effect on the state's economy. Agricultural losses across Texas total about 2.1 billion dollars with no specific statistics available on a county-by-county basis, however cotton losses are expected to contribute significantly to the total loss.

The summer of 1998 (June-August) was the 4th hottest and 5th driest in Oklahoma City on record, and the 2nd hottest and 7th driest in Wichita Falls. The drought ended gradually in September and early October, but record warm temperatures continued through September. Oklahoma City recorded an average temperature of 81.2 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of heat and drought to affect Oklahoma and western portions of north Texas, still ranks as the hottest summer ever for both Oklahoma City and Wichita Falls, however Oklahoma City did experience a drier summer in 1998 than in 1980.

<b>Knox County Truscott</b>	<b>09</b>	<b>1415CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Knox County Knox City</b>	<b>09</b>	<b>1445CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Foard County 8 SE Crowell</b>	<b>09</b>	<b>1500CST 1530CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Knox County Gilliland</b>	<b>09</b>	<b>1500CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Wichita County Electra</b>	<b>09</b>	<b>1523CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Wichita County Electra</b>	<b>09</b>	<b>1523CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Wichita County 8 N Electra</b>	<b>09</b>	<b>1528CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.75)</b>
<b>Wichita County 2 E Electra</b>	<b>09</b>	<b>1530CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Baylor County Mabelle</b>	<b>09</b>	<b>1535CST</b>			<b>0</b>	<b>0</b>	<b>0.01K</b>		<b>Thunderstorm Wind</b>
Severe thunderstorm winds downed 2-inch tree limbs.									
<b>Wichita County Iowa Park</b>	<b>09</b>	<b>1537CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1558CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
Occurred at I-44 and Missile Road.									
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1558CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
Occurred at I44 and Missile Road.									
<b>Baylor County 8 N Mabelle</b>	<b>09</b>	<b>1600CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Baylor County 8 N Mabelle</b>	<b>09</b>	<b>1600CST</b>			<b>0</b>	<b>0</b>	<b>0.01K</b>		<b>Thunderstorm Wind</b>
Severe thunderstorm winds downed 2-inch tree limbs.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Western North</b>									
<b>Wichita County Sheppard Afb</b>	<b>09</b>	<b>1600CST 1615CST</b>			<b>0</b>	<b>2</b>	<b>1M</b>		<b>Hail (2.00)</b>
			Hail larger than golf balls, combined with severe thunderstorm winds up to 79 mph, caused extensive damage and 2 injuries at Sheppard Air Force Base. The 2 injuries occurred when some soldiers were caught outside in the hailstorm. 48 (out of a squadron of 200) T-37 training jets were damaged by 2-inch hail. The winds blew the protective covers from the planes and the hail then knocked holes in the wings and broke the planes' windshields. Over 100 cars on the base were damaged. A window was knocked out of the air traffic control tower. One house sustained heavy damage when all of its west-facing shutters were destroyed and 3 skylights and 2 windows were broken. Numerous trees were snapped by the severe winds.						
<b>Wichita County Burkburnett</b>	<b>09</b>	<b>1602CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Archer County Dundee</b>	<b>09</b>	<b>1603CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1603CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G65)</b>
			Measured at the KSPS observing site.						
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1604CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G68)</b>
			Measured at the KSPS observing site.						
<b>Archer County Dundee</b>	<b>09</b>	<b>1605CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.00)</b>
<b>Archer County Dundee</b>	<b>09</b>	<b>1605CST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.00)</b>
<b>Baylor County 4 N Mabelle</b>	<b>09</b>	<b>1610CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Baylor County 4 N Mabelle</b>	<b>09</b>	<b>1610CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1610CST</b>			<b>0</b>	<b>0</b>	<b>1K</b>		<b>Lightning</b>
			Lightning struck a house, setting fire to the attic. The fire was contained and damage was estimated at \$1,000.						
<b>Clay County Henrietta</b>	<b>09</b>	<b>1613CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Clay County 3 SW Dean</b>	<b>09</b>	<b>1620CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G61)</b>
<b>Archer County 2 S Holliday</b>	<b>09</b>	<b>1646CST</b>			<b>0</b>	<b>0</b>			<b>Hail (3.90)</b>
<b>Archer County 2 S Holliday</b>	<b>09</b>	<b>1646CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G78)</b>
<b>Archer County 5 SE Holliday</b>	<b>09</b>	<b>1701CST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Clay County 10 SW Henrietta</b>	<b>09</b>	<b>1701CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G57)</b>
<b>Clay County Henrietta</b>	<b>09</b>	<b>1712CST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
<b>Clay County Henrietta</b>	<b>09</b>	<b>1716CST</b>			<b>0</b>	<b>0</b>	<b>7K</b>		<b>Thunderstorm Wind</b>
			Thunderstorm winds downed trees and power lines and rolled a mobile home in a dealer's parking lot.						
<b>Archer County 2 N Windthorst</b>	<b>09</b>	<b>1744CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Wichita County Wichita Falls</b>	<b>09</b>	<b>1750CST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
			Bacon Switch Road was under water.						
<b>Archer County 4 W Windthorst</b>	<b>09</b>	<b>1800CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
<b>Clay County 12 S Henrietta</b>	<b>09</b>	<b>1810CST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## TEXAS, Western North

<b>Wilbarger County</b> Vernon	09	1816CST			0	0			Hail (0.75)
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Summary of events of June 9, 1998:

Severe thunderstorms moved from west Texas into north Texas during the afternoon of the 9th, producing large hail and damaging thunderstorm winds. The largest hail (up to the size of baseballs) was reported north of Electra in Wichita County. The strongest winds were estimated at 90 mph south of Holliday in Archer County. A particularly severe thunderstorm affected Sheppard Air Force Base in Wichita County, causing extensive damage to many of the buildings and an aircraft. Two soldiers were also injured by large hail.

See preceding individual Storm Data entries for further details and additional reports.

<b>Clay County</b> Byers	11	0000CST			0	0			Thunderstorm Wind (G57)
Numerous large tree limbs were blown down by winds estimated at 65 mph.									

<b>Baylor County</b> 4 NE Bomarton	12	1822CST			0	0			Hail (1.75)
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<b>Clay County</b> Henrietta	18	2048CST			0	0			Hail (0.88)
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<b>Clay County</b> Bluegrove	18	2110CST			0	0			Hail (0.75)
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<b>Clay County</b> 9 S Henrietta	18	2129CST			0	0			Hail (0.75)
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<b>Clay County</b> 9 S Henrietta	18	2131CST			0	0			Hail (1.00)
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<b>Baylor County</b> 8 N Mabelle	19	1647CST			0	0			Hail (0.75)
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<b>Baylor County</b> Lake Kemp	19	1700CST			0	0			Hail (1.00)
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<b>Baylor County</b> Lake Kemp	19	1702CST			0	0			Hail (0.75)
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<b>Baylor County</b> Lake Kemp	19	1705CST			0	0			Hail (1.00)
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<b>Baylor County</b> Lake Kemp	19	1730CST			0	0			Hail (1.75)
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<b>Baylor County</b> Lake Kemp	19	1805CST			0	0			Hail (1.75)
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<b>Baylor County</b> Mabelle	19	1850CST			0	0			Hail (1.75)
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<b>Archer County</b> Windthorst	19	1940CST			0	0	1K		Thunderstorm Wind
Thunderstorm winds uprooted trees and blew down power lines along Highway 281.									

Summary of events of June 19, 1998:

Severe thunderstorms over Baylor County produced hail as large as golf balls. Severe thunderstorm wind damage was also reported in Windthorst in Archer County.

See preceding individual Storm Data entries for further details and additional reports.

<b>Hardeman County</b> 5 NW Goodlett	21	1745CST			0	0			Hail (1.00)
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## UTAH, North, Central and South

<b>Box Elder County</b> 4 E Promontory	03	1515MST			0	0	0	0	Funnel Cloud
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<b>Box Elder County</b> 4 E Promontory	03	1515MST			0	0	0	0	Hail (0.75)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>UTAH, North, Central and South</b>									
<b>Kane County</b>									
15 NE Kanab	03	1700MST			0	0	0	0.20K	Thunderstorm Wind (G56)
<b>Tooele County</b>									
15 S Tooele	03	1808MST			0	0	0	3K	Hail (0.75)
<b>Utah County</b>									
Orem	03	2130MST			0	0	50K	0	Lightning
<b>Utah County</b>									
Orem	03	2140MST			0	0	8K	5K	Tstm Wind/Hail
Severe thunderstorms developed over northern Utah on this date. Hail, microburst winds and funnel clouds were all observed. Lightning sparked a house fire in Orem and caused extensive damage. Downed trees and power lines were also noted. 2 funnel clouds were observed by rangers at the Golden Spike National Monument.									
<b>Davis County</b>									
Layton	04	0400MST	0.1	25	0	0	30K	1K	Tornado (F0)
<b>UTZ008</b>									
<b>Wasatch Mountains South Of I80</b>									
	04	0400MST			0	0	0	0.20K	Heavy Snow
	05	0700MST							
<b>Davis County</b>									
Countywide	04	0500MST 1400MST			0	0	40K	4K	Heavy Rain
<b>Weber County</b>									
Countywide	04	0500MST 1400MST			0	0	20K	2K	Heavy Rain
<b>Utah County</b>									
20 W Provo	04	0800MST			0	0	0	0	Funnel Cloud
<b>Salt Lake County</b>									
5 N Magna	04	1200MST			0	0	0	0	Funnel Cloud
A storm caused mountain snow and valley rain in northern Utah. From .75-1.5" of rain fell along the Wasatch Front with several homes in Weber and Davis county experiencing flood damage. 13" of snow fell at the Snowbird Ski Resort. Funnel clouds were observed over Utah Lake and just south of the Great Salt Lake.									
<b>Utah County</b>									
Orem	07	1400MST 1700MST			0	0	260K	10K	Heavy Rain
<b>Utah County</b>									
Provo	07	1400MST			0	0	0	0.40K	Hail (0.75)
<b>Utah County</b>									
18 W Provo	07	1530MST			0	0	0	0	Funnel Cloud
Severe thunderstorms with hail, heavy downpours and strong winds ripped through Utah county. Homes were flooded in the Orem area. Several funnel clouds were spotted in the Provo area. A roof collapsed on a health club due to the winds and heavy rain. About an inch of rain occurred in an hours time according to spotters in the area.									
<b>Davis County</b>									
Countywide	09	1900MST 2100MST			0	0	2K	0.80K	Heavy Rain
<b>Salt Lake County</b>									
West Jordan	09	1900MST 2100MST			0	0	1.5M	10K	Heavy Rain
From .75-1.5" of rain occurred along the Wasatch Front. Extensive flood damage occurred in a new subdivision in West Jordan due to drainage problems.									
<b>Juab County</b>									
5 NW Nephi	10	1435MST			0	0	0	0	Funnel Cloud
A funnel cloud was observed near Nephi.									
<b>Salt Lake County</b>									
Countywide	13 16	0500MST 1000MST			0	0	17K	2K	Heavy Rain
<b>Utah County</b>									
Countywide	13 16	0500MST 1000MST			0	0	28K	3K	Heavy Rain
Heavy rains (about an inch) caused flood damage this morning in both Salt Lake and Utah counties.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## UTAH, North, Central and South

<b>UTZ019</b>	<b>Utah'S Dixie And Zion National Park</b>	16	1630MST 2100MST			0	0	700K	200K	High Wind (G70)
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<b>UTZ006&gt;010-017-023-025</b>	<b>Wasatch Mountain Valleys/Huntsville/Park City/Heber - Wasatch Mountains I80 North - Wasatch Mountains South Of I80 - Western Unita Mountains - Wasatch Plateau/Book Cliffs - Central And Southwest Mountains - Eastern Uinta Mountains - Tavaputs Plateau</b>	16	2100MST			0	0	40K	8K	Heavy Snow
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An early summer "winter" storm swept through Utah. Heavy snow fell in the mountains with up to 2' accumulating in the Wasatch and Uinta mountains. Minor flooding occurred in the lower elevations due to 1-2" rainfall. The cold front caused high winds to develop in Washington county. 70-80 mph wind gusts caused extensive damage to the area.

### **Rich County Randolph**

28	2155MST			0	0	0.20K	0.60K	Thunderstorm Wind (G61)
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Jane in Randolph measured a wind gust to 71 mph (61kts) from a severe thunderstorm.

## UTAH, Northeast

### **Uintah County**

#### **3 SSW Ft Duchesne**

17	1500MST 1600MST			0	0	5K	Flash Flood
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Heavy rains resulted in swollen streams and flash flooding which washed out a section of a paved county road.

### **Uintah County**

#### **6 W Ft Duchesne**

17	1500MST 2100MST			0	0	5K	Flood
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Rapid melting of a recent heavy snowfall in the Uinta mountains resulted in flooding and flash flooding to the south in Ballard. Canals and drainages were unable to carry the volume of water which caused flooding up to a foot deep to about a dozen homes as well as the Ballard city hall. 1 to 2 feet of high-density snow fell in the Uinta mountains in the night prior to the flooding.

## VERMONT, North and Central

### **Franklin County**

#### **Highgate**

04	1530EST 1600EST			0	0	Tstm Wind/Hail
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A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across many locations in Vermont. Specifically, small hail was reported in Highgate (Franklin county).

### **Chittenden County**

#### **Hanksville**

04	1610EST			0	0	Tstm Wind/Hail
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A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across many locations in Vermont. Specifically, in Hanksville (Chittenden county) 1/4 inch hail was reported with wind gusts to 25 mph.

### **Caledonia County**

#### **Sutton**

04	1630EST 1700EST			0	0	Tstm Wind/Hail
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A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across many locations in Vermont. Specifically, in Sutton (Caledonia county) the wind gusted up to 50 mph (43 knots) with a few power outages.

### **Addison County**

#### **Ripton**

04	1710EST			0	0	Tstm Wind/Hail
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A surface and upper level low pressure system over eastern Canada Thursday, June 4th resulted in scattered afternoon and evening thunderstorms with gusty winds and small hail across a number of locations in Vermont. Specifically, in Ripton (Addison county) 1/4 inch size hail was reported.

### **Essex County**

#### **Bloomfield**

17	1415EST 1530EST			0	0	10K	Flash Flood
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A slowly moving broad area of low pressure over the eastern Great Lakes and New York state combined with an unstable atmosphere to result in slow moving thunderstorms across portions of the area. These thunderstorms were accompanied by torrential downpours. Specifically, in the Vermont town of Bloomfield, water was reported across the road.

### **Addison County**

#### **Hancock**

17	1430EST 1630EST			0	0	10K	Flash Flood
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VERMONT, North and Central</b>									
<b>Addison County</b>									
Orwell	17	1430EST 1630EST			0	0	10K		Flash Flood
			A slowly moving broad area of low pressure over the eastern Great Lakes and New York state combined with an unstable atmosphere to result in slow moving thunderstorms across portions of the area. These thunderstorms were accompanied by torrential downpours. Specifically, in the Vermont towns of Hancock and Orwell, roads were flooded.						
<b>Windsor County</b>									
Reading	17	1530EST 1630EST			0	0	5K		Flood
			A slowly moving broad area of low pressure over the eastern Great Lakes and New York state combined with an unstable atmosphere to result in slow moving thunderstorms across portions of the area. These thunderstorms were accompanied by torrential downpours. Specifically, in the Vermont town of Reading, roads were flooded.						
<b>Orange County</b>									
Tunbridge	17	1600EST 1700EST			0	0	10K		Flash Flood
			A slowly moving broad area of low pressure over the eastern Great Lakes and New York state combined with an unstable atmosphere to result in slow moving thunderstorms across portions of the area. These thunderstorms were accompanied by torrential downpours. Specifically, in the Vermont town of Tunbridge roads were flooded.						
<b>Lamoille County</b>									
West Portion	18	0300EST 0800EST			0	0	200K		Flash Flood
			Showers and thunderstorms moved south along the western slopes of the Green Mountains from Franklin county Vermont into western Lamoille and eastern Chittenden counties during the early morning of Thursday, June 18th. Between 2.5 and 3.5 inches of rain fell with locally higher amounts in the mountains resulting in flash flooding of brooks, streams and small rivers. In the Vermont towns of Cambridge, Pleasant Valley and Hyde Park, numerous roads were washed out. A bridge was washed out by the Seymour River in Pleasant Valley.						
<b>Chittenden County</b>									
East Portion	18	0430EST 0800EST			0	0	200K		Flash Flood
			Showers and thunderstorms moved south along the western slopes of the Green Mountains from Franklin county Vermont into western Lamoille and eastern Chittenden counties during the early morning of Thursday, June 18th. Between 2.5 and 3.5 inches of rain fell with locally higher amounts in the mountains resulting in flash flooding of brooks, streams and small rivers. In the Vermont towns of Jericho and Underhill, numerous roads were washed out, and a bridge was washed out in Underhill. A number of houses were also flooded.						
<b>Grand Isle County</b>									
South Hero	22	1700EST 1800EST			0	0	10K		Lightning
			Lightning struck and damaged a barn in South Hero, Vermont (Grand Isle county).						
<b>Chittenden County</b>									
Colchester	22	1800EST 1900EST			0	0	50K		Lightning
			Lightning struck and caused damage to structures in Colchester (Chittenden county) Vermont.						
<b>Rutland County</b>									
Benson	25	2110EST			0	0	5K		Thunderstorm Wind
<b>Rutland County</b>									
Bomoseen	25	2115EST			0	1	500K		Thunderstorm Wind
<b>Rutland County</b>									
Castleton	25	2118EST			0	0	5K		Thunderstorm Wind
<b>Rutland County</b>									
Middletown Spgs	25	2125EST			0	0	5K		Thunderstorm Wind
			An area of weak low pressure over New England and New York combined with a moist unstable airmass resulted in evening thunderstorms with strong winds and torrential downpours Thursday, June 25th. Specifically, across Rutland county Vermont, numerous trees and power lines were blown down in the towns of Benson, Bomoseen, Castleton and Middletown Springs. In addition, extensive roof damage to a structure was done by the wind with one injury resulting due to collapsing debris. There were many reports of frequent cloud to ground lightning.						
<b>Washington County</b>									
Countywide	27	0100EST 1200EST			0	0	5M	200K	Flash Flood
			An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VERMONT, North and Central

Saturday (June 27). Heavy convective rains fell with 3 to 6 inches across the county. Extensive flooding occurred, especially along the Mad River. Most of the damage was concentrated in the Warren and Waitsfield areas. A number of people were without power. A state of emergency was declared with the National Guard assisting with cleanup operations.

Numerous extensive road washouts resulted with a few bridges washed out. A covered bridge in Warren was heavily damaged. Two people were rescued from trees when their mobile home washed away. Flooding also occurred in Moretown where roads and homes were flooded. There were 600 feet of railroad track undermined in and around the town of Roxbury. Elsewhere, the Winooski was high and muddy with field flooding.

Agricultural losses included damage to hay and corn crops and farm equipment.

### **Addison County Countywide**

<b>27</b>	<b>0115EST 1200EST</b>	<b>0</b>	<b>0</b>	<b>5M</b>	<b>500K</b>	<b>Flash Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Heavy convective rains fell with 3 to 6 inches across the county. Extensive flooding occurred, especially along the New Haven and White Rivers. A number of people were without power. A state of emergency was declared with the National Guard assisting cleanup operations.

In Bristol and Lincoln extensive road washouts resulted with a number of bridges washed out. The New Haven River ripped up trees and moved trailer homes off their foundations. In Bristol up to 10 people had to be rescued with a number of evacuations. In Lincoln, the library flooded with 80 percent of the literary material damaged. In Granville and Hancock where the White River flooded...road damage was extensive.

Extensive agricultural losses included widespread damage to hay and corn crops, damage to farm equipment and 2 pigs drowned.

### **Windsor County North Portion**

<b>27</b>	<b>0220EST 1800EST</b>	<b>0</b>	<b>0</b>	<b>1M</b>	<b>Flash Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Heavy convective rains fell with 3 to 6 inches across northern portions of the county. Extensive flooding occurred along the White River and its branches.

In the Vermont towns of Rochester and Bethel, extensive flooding resulted in massive road damage and washouts.

### **Orange County Countywide**

<b>27</b>	<b>0400EST 1200EST</b>	<b>0</b>	<b>0</b>	<b>2M</b>	<b>Flash Flood</b>
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An area of low pressure tracked across New York and New England during the late night of Friday (June 26) and morning of Saturday (June 27). Heavy convective rains fell with 4 to 8 inches across northern portions of the county with extensive flooding. The Waits River and Ayers Brook experienced massive flooding.

Widespread flooding was reported in Randolph. In Braintree 75 percent of the town roads were damaged. In Bradford, 2 feet of water was reported across many roads with road washouts and erosion. Many homes and businesses were flooded with a state of emergency declared. Up to 1000 people were without power. The National Guard assisted with cleanup operations.

### **Franklin County Fairfax**

<b>29</b>	<b>1655EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in Fairfax (Franklin county) a thunderstorm resulted in 3/4 inch hail.

### **Chittenden County West Milton**

<b>29</b>	<b>1655EST</b>	<b>0</b>	<b>0</b>	<b>1K</b>	<b>Thunderstorm Wind</b>
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A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in west Milton (Chittenden county) strong winds with a thunderstorm blew down trees.

### **Lamoille County Stowe**

<b>29</b>	<b>1733EST</b>	<b>0</b>	<b>0</b>	<b>Hail (0.75)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VERMONT, North and Central

### **Lamoille County**

**Stowe**

**29 1745EST 0 0 5K Thunderstorm Wind**

A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in Stowe (Lamoille county) a thunderstorm resulted in 3/4 inch hail with strong winds which blew down trees.

### **Washington County**

**Calais**

**29 1800EST 0 0 1K Thunderstorm Wind**

### **Washington County**

**Marshfield**

**29 1800EST 0 0 1K Thunderstorm Wind**

### **Washington County**

**Plainfield**

**29 1810EST 0 0 1K Thunderstorm Wind**

A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in the Vermont towns of Marshfield, Calais and Plainfield (all in Washington county) trees and wires were blown down by strong winds from thunderstorms. In addition, 1/2 inch hail was reported in Marshfield at 720 pm EDT (620 PM EST).

### **Caledonia County**

**Groton**

**29 1922EST 0 0 5K Thunderstorm Wind**

A warm front moved across the region during the morning of Monday, June 29th with an increasingly moist atmosphere. A cold front moved into Vermont during the late afternoon and evening of June 29th. Thunderstorms developed along and ahead of this front with locally strong winds and large hail. Specifically, in Groton (Caledonia county) thunderstorm winds blew down trees and power lines.

### **Washington County**

**Marshfield**

**29 2030EST 0 0 5K Flash Flood**  
**2130EST**

A cold front moved into Vermont during the late afternoon and evening of Monday, June 29th. Thunderstorms developed along and ahead of this front with locally heavy rainfall. Flash flooding resulted in road washouts in Marshfield (Washington county).

### **Caledonia County**

**Ricker Mills**

**29 2030EST 0 0 5K Flash Flood**  
**2130EST**

A cold front moved into Vermont during the late afternoon and evening of Monday, June 29th. Thunderstorms developed along and ahead of this front with locally heavy rainfall. Flash flooding resulted in road washouts in and around Ricker Mills. Specifically, road washouts were reported in the Ricker Campgrounds (Caledonia county).

### **Chittenden County**

**Countywide**

**30 1205EST 0 0 10K Flash Flood**  
**1530EST**

A storm system moved across southern Canada during Tuesday, June 30, 1998. Ahead of the associated cold front, a very moist airmass was in place across Vermont. This triggered afternoon thunderstorms with locally torrential rain. Local roads were washed out in portions of Chittenden county. In particular, roads were washed out in the Vermont towns of Underhill and Westford, with road flooding in Colchester, Vermont.

### **Lamoille County**

**West Portion**

**30 1300EST 0 0 10K Flash Flood**  
**1500EST**

A storm system moved across southern Canada during Tuesday, June 30, 1998. Ahead of the associated cold front, a very moist airmass was in place across Vermont. This triggered afternoon thunderstorms with torrential rain. Local roads were washed out in portions of Lamoille county. In particular, roads were washed out in and around Cambridge, Vermont.

### **Franklin County**

**South Portion**

**30 1345EST 0 0 10K Flash Flood**  
**1500EST**

A storm system moved across southern Canada during Tuesday, June 30, 1998. Ahead of the associated cold front, a very moist airmass was in place across Vermont. This triggered afternoon thunderstorms with torrential rain. Local roads were washed out across southern portions of Franklin county. In particular, roads were flooded and undermined in and around Fairfax, Vermont.

### **Washington County**

**East Portion**

**30 1645EST 0 0 10K Flash Flood**  
**1900EST**

A storm system moved across southern Canada during Tuesday, June 30, 1998. Ahead of the associated cold front, a very moist airmass was in place across Vermont. This triggered afternoon thunderstorms with locally torrential rain. Fields were flooded in the area of Marshfield, Vermont and the Winooski River left its banks.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>VERMONT, South</u></b>									
<b>Windham County</b> Countywide	19	1430EST 1600EST			0	0	70K		<b>Flash Flood</b>
									Thunderstorms with torrential downpours produced flash floods across parts of Windham County. Shoulders of routes 100 and 112 were washed out near Jacksonville and Halifax. Flooding also occurred in the Putney area and at Rawsonville. Several mountain roads were washed out throughout the county.
<b>Bennington County</b> Dorset	25	2145EST			0	0	2K		<b>Thunderstorm Wind</b>
									A severe thunderstorm downed trees at Dorset in Bennington County.
<b>Windham County</b> Marlboro	26	0405EST			0	0	8K		<b>Thunderstorm Wind</b>
									A trough of low pressure produced an isolated severe thunderstorm at Marlboro in Windham County. Thunderstorm winds blew a tree down on a house.
<b><u>VIRGIN ISLANDS</u></b>									
<b>St. Thomas County</b> St. Thomas	17	1600AST 1800AST			0	0			<b>Urban/Sml Stream Fld</b>
									Urban flooding was reported over Charlotte Amalie harbour due to heavy downpours.
<b>St. Croix County</b> Countywide	21	1330AST 1630AST			0	0	20K		<b>Thunderstorm Wind</b>
<b>St. John County</b> Countywide	21	1330AST 1630AST			0	0	5K		<b>Thunderstorm Wind</b>
<b>St. Thomas County</b> Countywide	21	1330AST 1630AST			0	0	5K		<b>Thunderstorm Wind</b>
									Showers and thunderstorms associated with a strong tropical wave produced strong winds that downed trees and power lines across most of the U.S. Virgin Islands. Residents in St. Croix were without power for a few hours. A wind gust of 57 mph was reported in St. Croix.
<b>VIZ030</b> St. Thomas	29 30	0000AST 2359AST			0	0			<b>Saharan Dust</b>
									A thick layer of Saharan dust covered the region and reduced visibilities in some areas to less than three miles.
<b><u>VIRGINIA, East</u></b>									
<b>Nottoway County</b> Nottoway	03	1955EST			0	0	2K		<b>Thunderstorm Wind</b>
									Several large trees down.
<b>Suffolk (C)</b> Holland	03	2025EST			0	0	3K		<b>Thunderstorm Wind</b>
									Several trees down. A few trees/limbs down on houses. A car was blown a couple hundred feet.
<b>Chesapeake (C)</b> 3 NW Northwest	03	2120EST			0	0	10K		<b>Thunderstorm Wind</b>
									Several trees were either snapped off at the top or blown over. Also, the wall of a barn was blown down and the roof collapsed. Some roof damage was observed to other farm structures as well as a tree blown across the roof of a residence.
<b>Mecklenburg County</b> Boydton	13	1356EST			0	0			<b>Hail (1.00)</b>
<b>Cumberland County</b> Farmville	13	1415EST			0	0			<b>Thunderstorm Wind (G53)</b>
									Wind gust to 53 knots (61 mph) at Farmville Airport.
<b>Cumberland County</b> 2 N Farmville	13	1420EST			0	0			<b>Hail (2.00)</b>
<b>Greensville County</b> Skippers	13	1425EST			0	0	2K		<b>Thunderstorm Wind</b>
									Trees down across Route 301.
<b>Emporia County</b> Emporia	13	1433EST			0	0	2K		<b>Thunderstorm Wind</b>
									Few trees down.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>VIRGINIA, East</b>									
<b>Amelia County</b>									
Amelia	13	1435EST			0	0	2K		Thunderstorm Wind
		Several trees down.							
<b>Louisa County</b>									
Blue Ridge Shrs	13	1435EST			0	0			Hail (0.88)
<b>Powhatan County</b>									
Powhatan	13	1440EST			0	0			Hail (2.00)
<b>Caroline County</b>									
Countywide	13	1452EST			0	0	2K		Thunderstorm Wind
		Several trees down.							
<b>Nottoway County</b>									
3 W Spainville	13	1454EST			0	0			Hail (0.88)
<b>Caroline County</b>									
Port Royal	13	1510EST			0	0	2K		Thunderstorm Wind
		Tree down on a house.							
<b>Southampton County</b>									
Courtland	13	1510EST			0	0			Hail (0.75)
<b>Southampton County</b>									
Courtland	13	1510EST			0	0	3K		Thunderstorm Wind
		Roof was blown off shed.							
<b>Mecklenburg County</b>									
4 W South Hill	13	1515EST			0	0			Hail (1.00)
<b>Mecklenburg County</b>									
4 W South Hill	13	1515EST			0	0	5K		Thunderstorm Wind
		Damage to a house. Numerous trees down or sheared off.							
<b>Hanover County</b>									
Ashland	13	1520EST			0	0			Hail (0.75)
<b>Henrico County</b>									
Sandston	13	1520EST			0	0	3K		Thunderstorm Wind
		Numerous trees down.							
<b>Richmond (C)</b>									
Richmond	13	1525EST 1530EST			0	0			Hail (1.00)
<b>Chesterfield County</b>									
Midlothian	13	1527EST			0	0			Hail (1.00)
<b>Chesterfield County</b>									
Chesterfield	13	1530EST			0	0	3K		Thunderstorm Wind
		Numerous trees down.							
<b>Essex County</b>									
Countywide	13	1540EST			0	0	3K		Thunderstorm Wind
		Numerous trees down.							
<b>King And Queen</b>									
County	13	1540EST			0	0	3K		Thunderstorm Wind
		Numerous trees down.							
<b>Westmoreland County</b>									
Oak Grove	13	1540EST			0	0	3K		Thunderstorm Wind
		Trees and power lines down.							
<b>Prince George County</b>									
Countywide	13	1545EST			0	0	2K		Thunderstorm Wind
		Several trees down.							
<b>Richmond County</b>									
Warsaw	13	1545EST			0	0	2K		Thunderstorm Wind
		Several trees down along Route 690.							
<b>Newport News (C)</b>									
Oyster Pt	13	1555EST			0	0			Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>VIRGINIA, East</u></b>									
<b>Hampton (C)</b> Hampton	13	1558EST			0	0			Thunderstorm Wind (G51)
									Wind gust of 51 knots (59 mph) was recorded at LFI (Langley Air Force Base).
<b>Hampton (C)</b> Hampton	13	1600EST			0	0	5K		Hail (3.00)
									Langley Air Force Meteorologist reported 3 inch hail. Hail produced minor automobile and home damage.
<b>King William County</b> King William	13	1600EST			0	0	3K		Thunderstorm Wind
									Numerous trees down.
<b>York County</b> Poquoson	13	1600EST			0	0			Hail (2.00)
<b>Charles City (C)</b> Charles City	13	1610EST			0	0	1K		Thunderstorm Wind
									Large pine tree blown down.
<b>New Kent County</b> Quinton	13	1615EST			0	0	2K		Thunderstorm Wind
									Several trees down.
<b>Northumberland County</b> Countywide	13	1620EST			0	0	3K		Thunderstorm Wind
									Trees and power lines down throughout the county.
<b>James City County</b> Jamestown	13	1630EST			0	0	2K		Thunderstorm Wind
									Few trees down.
<b>Middlesex County</b> Healys	13	1630EST			0	0	2K		Thunderstorm Wind
									Trees down on Route 629.
<b>Surry County</b> Countywide	13	1640EST			0	0	3K		Thunderstorm Wind
									Several trees down.
<b>Gloucester County</b> Countywide	13	1650EST			0	0	3K		Thunderstorm Wind
									Several trees down.
<b>Northampton County</b> Countywide	13	1715EST			0	0	3K		Thunderstorm Wind
									Several trees down.
<b>Accomack County</b> Accomac	13	1720EST			0	0	2K		Thunderstorm Wind
									Few trees down.
<b>Fluvanna County</b> Bremo Bluff	15	1504EST			0	0			Hail (0.75)
<b>Goochland County</b> Goochland	15	1545EST			0	0	5K		Thunderstorm Wind
									Several trees down. Also, awnings off a few buildings.
<b>Goochland County</b> Goochland	15	1601EST			0	0			Hail (1.75)
<b>Goochland County</b> Manakin	15	1620EST			0	0	2K		Thunderstorm Wind
									Several trees down.
<b>Goochland County</b> Manakin	15	1621EST			0	0			Hail (0.75)
<b>Henrico County</b> 4 S Short Pump	15	1630EST			0	0			Hail (0.75)
<b>Richmond (C)</b> Richmond	15	1635EST			0	0			Hail (0.75)
<b>Henrico County</b> 4 S Short Pump	15	1645EST			0	0	2K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>VIRGINIA, East</u></b>									
			Several trees down.						
<b>Mecklenburg County</b>									
<b>South Hill</b>	15	1700EST			0	0	2K		Thunderstorm Wind
			Several trees down on Route 1.						
<b>Suffolk (C)</b>									
<b>Suffolk</b>	15	1730EST			0	0			Hail (0.75)
<b>York County</b>									
<b>Tabb</b>	15	1740EST			0	0			Hail (0.75)
<b>Newport News (C)</b>									
<b>Denbigh</b>	15	1749EST			0	0			Hail (1.00)
<b>York County</b>									
<b>Poquoson</b>	15	1802EST			0	0			Hail (0.75)
<b>Fluvanna County</b>									
<b>4 SW Central Plains</b>	15	2104EST			0	0	2K		Thunderstorm Wind
			Several trees down along Route 646.						
<b>Nottoway County</b>									
<b>Crewe</b>	16	1630EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>Louisa County</b>									
<b>5 W Louisa</b>	16	1635EST			0	0			Hail (1.75)
<b>Louisa County</b>									
<b>5 W Louisa</b>	16	1635EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>Lunenburg County</b>									
<b>Plantersville</b>	16	1635EST			0	0	2K		Thunderstorm Wind
			Few trees down.						
<b>Mecklenburg County</b>									
<b>South Hill Arpt</b>	16	1655EST			0	0			Thunderstorm Wind (G50)
<b>Amelia County</b>									
<b>Mannboro</b>	16	1700EST			0	0	2K		Thunderstorm Wind
			Few trees down.						
<b>Greensville County</b>									
<b>Pleasant Shade</b>	16	1715EST			0	0	2K		Thunderstorm Wind
			Few trees down.						
<b>Brunswick County</b>									
<b>Lawrenceville</b>	16	1717EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>King William County</b>									
<b>King William</b>	16	1730EST			0	0			Hail (1.75)
<b>Emporia County</b>									
<b>2 E Emporia</b>	16	1734EST			0	0	3K		Thunderstorm Wind
			Five trees down on Route 58.						
<b>Essex County</b>									
<b>Tappahannock</b>	16	1739EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>Richmond County</b>									
<b>Warsaw</b>	16	1740EST			0	0			Hail (0.88)
<b>Sussex County</b>									
<b>Yale</b>	16	1740EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>Southampton County</b>									
<b>Courtland</b>	16	1750EST			0	0	3K		Thunderstorm Wind
			Several trees and power lines down.						
<b>Franklin (C)</b>									
<b>Franklin</b>	16	1800EST			0	0	3K		Thunderstorm Wind
			Several trees and power lines down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>VIRGINIA, East</u></b>									
<b>Westmoreland County</b>									
Foneswood	16	1800EST			0	0			Hail (1.75)
<b>Caroline County</b>									
Bowling Green	16	1801EST			0	0	2K		Thunderstorm Wind
			Few trees down.						
<b>Isle Of Wight County</b>									
Windsor to Smithfield	16	1810EST 1815EST			0	0	3K		Thunderstorm Wind
			Several trees twisted down or blown down. Power lines down.						
<b>Suffolk (C)</b>									
Suffolk	16	1810EST			0	0	3K		Thunderstorm Wind
			Numerous trees down.						
<b>Portsmouth (C)</b>									
Portsmouth	16	1818EST			0	0	2K		Thunderstorm Wind
			Numerous tree limbs and debris blown onto Route 164 in Twin Pines area.						
<b>Isle Of Wight County</b>									
Carrollton	16	1823EST			0	0	2K		Thunderstorm Wind
			Several trees down.						
<b>Portsmouth (C)</b>									
Portsmouth	16	1824EST			0	0	2K		Thunderstorm Wind
			Dugout roof at baseball field blown off at Churchland high school.						
<b>Chesapeake (C)</b>									
Deep Creek	16	1830EST			0	0	2K		Thunderstorm Wind
			Few trees and power lines down.						
<b>Hampton (C)</b>									
Hampton	16	1830EST			0	0			Thunderstorm Wind (G55)
			Wind gust of 55 knots (63 mph) was recorded at Langley Air Force Base (LFI).						
<b>Norfolk (C)</b>									
Ocean View	16	1830EST			0	0	5K		Thunderstorm Wind
			Several trees down. A couple of trees damaged a few homes.						
<b>Portsmouth (C)</b>									
Portsmouth	16	1830EST			0	0	2K		Thunderstorm Wind
			Four pine trees blown down at Churchland high school.						
<b>Newport News (C)</b>									
Newport News	16	1833EST			0	0	2K		Thunderstorm Wind
			Several trees and power lines down.						
<b>Norfolk (C)</b>									
Norfolk	16	1835EST			0	0			Thunderstorm Wind (G58)
			Wind gust of 58 knots (67 mph) was recorded at Norfolk International Airport (ORF).						
<b>Virginia Beach (C)</b>									
Virginia Beach	16	1845EST			0	0	2K		Thunderstorm Wind
			Few trees down.						
<b>Northampton County</b>									
Cape Charles	16	1900EST			0	0	10K		Thunderstorm Wind
			Roof blown off of a gas station. Several trees down.						
<b>Accomack County</b>									
Wallops Is	26	2125EST 2130EST			0	0	5K		Thunderstorm Wind
			Several trees and light poles blown down. Window blown out of a car.						
<b>Henrico County</b>									
Yellow Tavern	28	0218EST			0	0	1K		Thunderstorm Wind
			Large tree blown down across Route 1.						
<b>Richmond (C)</b>									
Richmond	28	0222EST			0	0	2K		Thunderstorm Wind
			Several trees down in north side of city.						
<b>James City County</b>									
Jamestown	28	0335EST			0	0	2K		Thunderstorm Wind
			Several trees down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>VIRGINIA, East</u></b>									
<b>Surry County</b> Bacons Castle	28	0337EST			0	0	2K		Thunderstorm Wind
		Power lines down.							
<b><u>VIRGINIA, Extreme Southwest</u></b>									
<b>Wise County</b> Wise	03	1800EST			0	0	15K	10K	Tstm Wind/Hail
		Numerous trees and powerlines down throughout the county. 3/4" to 1" hail reported in many locations in the county.							
<b>Washington County</b> Benhams	03	1836EST			0	0			Hail (1.00)
<b>Scott County</b> Gate City	03	1845EST			0	0	50K	750K	Tstm Wind/Hail
		Large supercell thunderstorm dropped hail and downed numerous trees and powerlines throughout the county. Large areas of downed forest trees.							
<b>Washington County</b> 2 S Oak Grove	03	1918EST			0	0			Hail (1.75)
		Golfball size hail reported in the city of Bristol.							
<b>Russell County</b> Lebanon	10	0150EST			0	0		5K	Thunderstorm Wind
		Trees down.							
<b>Washington County</b> Glade Spg	10	0220EST			0	0			Hail (0.75)
<b>Russell County</b> Lebanon	10	0445EST			0	0		8K	Thunderstorm Wind
		Trees down.							
<b>Wise County</b> Wise	16	1345EST			0	0			Hail (0.75)
<b>Wise County</b> Wise	16	1405EST			0	0		8K	Thunderstorm Wind
		Trees down across Redwine Road.							
<b>Russell County</b> Honaker	16	1440EST			0	0			Hail (0.75)
<b>Lee County</b> Pennington Gap	22	1917EST			0	0		25K	Thunderstorm Wind
		Trees down in Pennington Gap as well as throughout the entire county.							
<b>Scott County</b> Duffield	22	1940EST			0	0		15K	Thunderstorm Wind
		Trees down.							
<b>Wise County</b> Wise	22	1945EST			0	0		20K	Thunderstorm Wind
		Trees down in Wise and throughout the county.							
<b>Russell County</b> Castlewood	22	1947EST			0	0	20K	25K	Tstm Wind/Hail
		Trees, powerlines down in Castlewood and throughout county. Trees down on a mobile home in Castlewood.							
<b>Washington County</b> Abingdon	22	2000EST			0	0	25K	20K	Thunderstorm Wind
		Trees and powerlines down in Abingdon as well as throughout the county. Many roads blocked by fallen trees.							
<b>Wise County</b> Coeburn to Wise	24	1335EST			0	0		18K	Thunderstorm Wind
		Trees down.							
<b>Wise County</b> Wise	24	1550EST			0	0		25K	Thunderstorm Wind
		Trees down in Wise and countywide.							
<b>Russell County</b> Dante	24	1610EST			0	0		9K	Thunderstorm Wind
		Trees down.							

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VIRGINIA, Extreme Southwest

<b>Scott County</b>									
Gate City	24	1615EST			0	0		25K	Thunderstorm Wind
Trees down in Gate City and countywide.									
<b>Washington County</b>									
Abingdon	24	1630EST			0	0	20K	23K	Thunderstorm Wind
Trees and powerlines down in Abingdon and countywide.									

## VIRGINIA, North

<b>Fairfax County</b>									
Tysons Corner	02	1808EST			0	0			Hail (0.75)
<b>Fairfax County</b>									
Great Falls	02	1823EST			0	0			Hail (1.00)
<b>Frederick County</b>									
4 E White Hall	02	2022EST			0	0			Hail (0.75)
<b>Clarke County</b>									
4 N Berryville	02	2050EST			0	0	10K	3K	Hail (1.75)
<b>Clarke County</b>									
Berryville	02	2050EST 2052EST	0.5	50	0	0	15K		Tornado (F0)
<b>Loudoun County</b>									
3 E Middleburg	02	2104EST			0	0	10K	3K	Hail (1.75)
<b>Loudoun County</b>									
3 SE Bluemont to 4 SE Bluemont	02	2110EST 2114EST	1	50	0	0		10K	Tornado (F0)
<b>Winchester (C)</b>									
4 N Winchester	02	2200EST			0	0			Hail (1.00)
<b>Clarke County</b>									
Berryville	02	2210EST			0	0			Hail (1.00)
<b>Prince William County</b>									
Dale City	02	2210EST			0	0			Hail (0.88)
<b>Fauquier County</b>									
The Plains	02	2245EST			0	0	5K		Hail (1.75)

The combination of an upper level disturbance, increasing atmospheric shear, and ample instability set the stage for a severe weather episode across northwestern Virginia during the evening. Individual mini-supercell storms contained large hail, damaging winds, and a few small tornadoes. The storms originated in eastern Ohio during the late afternoon and propagated through southwestern Pennsylvania, extreme northwestern Virginia, and portions of eastern West Virginia before scooting into northern Virginia.

Two weak tornadoes, emanating from the same mini-supercell, struck in Clarke and Loudoun Cos. Damage was noted near Berryville (Clarke Co) in the form of several uprooted trees and an unroofed barn. In western Loudoun Co, tree damage indicative of a tornado was surveyed along Snickersville Turnpike (local route 734). Elsewhere in northern Virginia, the main culprit was large hail, ranging in diameter from three-quarters of an inch to golf ball (1.75 inches). Damage likely occurred to some crop fields - the hail, in most cases, lasted from 5 to 15 minutes.

<b>Warren County</b>									
North Portion	13	1319EST			0	0	10K		Thunderstorm Wind
<b>Harrisonburg (C)</b>									
Harrisonburg	13	1321EST			0	0			Hail (0.75)
<b>Clarke County</b>									
South Portion	13	1330EST			0	0	3K		Thunderstorm Wind
<b>Fauquier County</b>									
Upperville to Paris	13	1330EST			0	0	5K		Thunderstorm Wind
<b>Greene County</b>									
Geer to Quinque	13	1330EST 1335EST			0	0	3K		Hail (1.50)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VIRGINIA, North</b>									
<b>Greene County</b> 2 S Quinke to Ruckersville	13	1345EST			0	0	3K		Thunderstorm Wind
<b>Orange County</b> Gordonsville	13	1345EST			0	0	3K		Hail (1.75)
<b>Orange County</b> South Portion	13	1345EST			0	0	3K		Thunderstorm Wind
<b>Loudoun County</b> Round Hill	13	1347EST			0	0	5K		Thunderstorm Wind
<b>Charlottesville (C)</b> Charlottesville	13	1355EST 1405EST			0	0	3K		Tstm Wind/Hail
<b>Loudoun County</b> Lucketts to Leesburg	13	1355EST 1410EST			0	0	10K	5K	Thunderstorm Wind
<b>Loudoun County</b> Middleburg	13	1355EST			0	0	2K	2K	Hail (1.75)
<b>Loudoun County</b> Leesburg	13	1412EST			0	0			Hail (0.75)
<b>Culpeper County</b> Countywide	13	1415EST			0	0	5K		Thunderstorm Wind
<b>Culpeper County</b> Elkwood	13	1415EST 1420EST			0	0	75K	15K	Hail (2.50)
<b>Fairfax County</b> Herndon	13	1415EST			0	0			Hail (0.75)
<b>Loudoun County</b> Leesburg	13	1418EST			0	0	3K		Thunderstorm Wind
<b>Stafford County</b> Stafford	13	1425EST			0	0	5K		Thunderstorm Wind
<b>Fairfax (C)</b> Fairfax	13	1430EST			0	0	7K		Thunderstorm Wind
<b>Falls Church (C)</b> Falls Church	13	1430EST			0	0	7K		Thunderstorm Wind
<b>Alexandria (C)</b> Alexandria	13	1435EST			0	0	13K		Thunderstorm Wind
<b>Fredericksburg (C)</b> Fredericksburg	13	1435EST			0	0	10K		Thunderstorm Wind
<b>Spotsylvania County</b> North Portion	13	1435EST 1440EST			0	0	10K		Thunderstorm Wind
<b>Albemarle County</b> Scottsville	13	1440EST			0	2			<b>Lightning</b>

A vigorous upper-level disturbance acted upon increasingly warm and humid air near the surface to produce a squall line of strong to severe thunderstorms which traversed all of northern Virginia during the afternoon. Overall, damage was dominated by numerous downed trees, large limbs, and power lines, though there were scattered occurrences of large hail with the more intense cells. Localized small stream and poor drainage flooding was noted, but true flash flooding did not occur due to the rapid movement of the line.

Initial damage occurred across northwestern Virginia, where there were several instances of scattered trees and large limbs down across portions of Clarke, Loudoun, Warren, and Fauquier Cos. There were several citizen and police reports of funnel clouds in the area, but surveys determined that damage was straight-line in nature - either due to embedded microbursts or the gust front. Farther south, hail fell, most between three-quarters and one inch in diameter. However, at least one cell produced more substantial hail across Greene, Orange, and Culpeper Cos. In Elkwood (Culpeper Co), a wholesale greenhouse shop sustained considerable damage - broken glass and double-layered plastic - when hail, estimated at tennis-ball size, fell. Medium-sized limbs and twigs were blown off trees at the University of Virginia in Charlottesville.

As the storms raced east, more tree and power line damage was noted, in Fairfax, Arlington, Stafford, and Spotsylvania Cos.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## VIRGINIA, North

Damage appeared to be most significant in northern Spotsylvania Co. In Fredericksburg, one tree fell onto a car and another onto a garage; the wind blew over several tents at a local arts festival, damaging most of one vendor's work and about \$1,000 worth of pottery at another stand. Elsewhere in the county, a tree fell on a house and another fell onto a mobile home, each causing some damage. At least a half dozen large trees were reported down in Falls Church; several others were knocked down in Alexandria.

The combination of wind damage and lightning knocked power out to at least 56,000 Virginia Power customers in northern Virginia; several thousand other residents served by Allegheny Power and local electric co-operatives likely lost power in western Virginia as well. One notable lightning strike occurred on the James River just south of Scottsville (Albemarle Co); two youths were shocked while swimming to shore after "tubing". Each sustained only minor injuries, and were treated and released from the University of Virginia medical center.

<b>Shenandoah County</b> Woodstock to Maurertown	15	1400EST 1408EST			0	0	5K		<b>Thunderstorm Wind</b>
<b>Shenandoah County</b> Woodstock	15	1407EST			0	0			<b>Hail (1.25)</b>
<b>Warren County</b> Front Royal	15	1420EST			0	0			<b>Hail (1.00)</b>
<b>Shenandoah County</b> Woodstock to Toms Brook	15	1430EST 1530EST			0	0	35K		<b>Flash Flood</b>
<b>Warren County</b> 3 SE Front Royal to Linden	15	1445EST 1456EST			0	0			<b>Hail (0.75)</b>
<b>Fauquier County</b> 2 SE Upperville to Marshall	15	1510EST 1525EST			0	0			<b>Hail (0.75)</b>
<b>Rappahannock County</b> North Portion	15	1515EST 1530EST			0	0	3K		<b>Thunderstorm Wind</b>
<b>Fauquier County</b> Warrenton to Paris	15	1530EST 1540EST			0	0			<b>Hail (1.00)</b>
<b>Warren County</b> 2 SW Front Royal	15	1530EST 1630EST			0	0	2K		<b>Flash Flood</b>
<b>Prince William County</b> 1 W Hickory Grove	15	1543EST			0	0			<b>Hail (1.00)</b>
<b>Fauquier County</b> The Plains	15	1552EST			0	0			<b>Hail (1.00)</b>
<b>Manassas (C)</b> Manassas	15	1554EST 1604EST			0	0	2K		<b>Hail (1.75)</b>
<b>Fairfax County</b> Centreville	15	1556EST			0	0	3K		<b>Thunderstorm Wind</b>
<b>Fairfax County</b> Chantilly to Oakton	15	1556EST 1601EST			0	0	5K		<b>Hail (1.75)</b>
<b>Fairfax County</b> Burke to Annandale	15	1609EST 1615EST			0	0	15K		<b>Hail (2.00)</b>
<b>Fairfax (C)</b> Fairfax	15	1610EST 1630EST			0	0	15K		<b>Lightning</b>
<b>Fauquier County</b> The Plains	15	1615EST			0	0	3K		<b>Thunderstorm Wind</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VIRGINIA, North</b>									
<b>Prince William County Greenwich</b>	15	1617EST 1620EST			0	0			Hail (1.00)
<b>Arlington County Central Portion</b>	15	1620EST			0	0	5K		Thunderstorm Wind
<b>Manassas (C) Manassas</b>	15	1624EST			0	0	3K	2K	Hail (1.75)
<b>Fairfax County Springfield to Franconia</b>	15	1627EST 1632EST			0	0			Hail (1.00)
<b>Alexandria (C) Central Portion</b>	15	1630EST 1636EST			0	0			Hail (1.00)
<b>Fairfax County Springfield to Mt Vernon</b>	15	1631EST			0	1	15K		Thunderstorm Wind
<b>Prince William County Dumfries</b>	15	1634EST			0	0			Hail (1.00)
<b>Rappahannock County South Portion</b>	15	1635EST 1650EST			0	0	8K		Thunderstorm Wind
<b>Alexandria (C) Central Portion</b>	15	1636EST			0	0	20K		Thunderstorm Wind
<b>Prince William County Triangle</b>	15	1745EST			0	0	3K		Thunderstorm Wind
<b>Stafford County Widewater</b>	15	1755EST 1800EST			0	0	12K		Thunderstorm Wind
<b>Nelson County East Portion</b>	15	1935EST			0	0	25K		Thunderstorm Wind

The juxtaposition of a northward moving warm front, strong surface low pressure over the midwest, and a fast upper-level jet combined to produce another outbreak of severe weather - this coming two days after a notable episode over much of northern Virginia on the 13th. Once again, damage was highlighted by downed trees, large hail, and several cases of flash flooding. Much of the notable tree damage occurred over and east of the piedmont; flash flooding was seen over and west of the piedmont.

The episode was dominated by a single supercell which developed over the west central piedmont near the Blue Ridge and propagated east through Fauquier, Prince William, Fairfax, and Arlington Cos, as well as the independent city of Alexandria. Earlier cells caused scattered severe weather generally northwest of these areas.

The first event of consequence occurred in Woodstock (Shenandoah Co), where a localized storm dumped at least 2 inches of rain in 2 hours - on top of saturated soil - producing flash flooding in portions of town. Poor drainage and low-lying areas were hard hit, in some instances worse than the flooding in 1996 (associated with tropical storm Fran). A two-block area was evacuated. Included in this area was a barbecue catering company, which had some equipment washed out of the store. A small sport utility vehicle was washed up against a low-water bridge, with water cascading over the vehicle's roof. Several side streets were flooded, not only in Woodstock but in nearby Toms Brook as well.

As the storms tracked east, there were several reports of hail ranging from 0.75" to 1" in diameter. Additional flash flooding occurred in Warren Co, where a minor mud slide temporarily closed a portion of Browntown Road. Low-lying flooding closed the intersection of River and Harrell Road. Around this time, one thunderstorm cell became dominant as it crossed into Fauquier Co. Soon after, the storm exhibited a bow-echo feature, and accounts of damaging winds increased accordingly.

Large hail, ranging from 0.75" to 2" in diameter, fell across portions of Prince William and Fairfax Cos. Wind gusts knocked trees and large limbs down in Centreville. Heavier damage occurred as the bow-echo strengthened, in southern Fairfax Co and Alexandria. In Springfield and Mt Vernon, trees fell on two cars; one motorist was injured (in Springfield) but the other(s) escaped unharmed. Farther east, at least a dozen trees were felled in Alexandria; large limbs fell on power lines in the south portion of Arlington. Several more large limbs and/or trees fell alongside or onto the Capital Beltway. A bit farther south, numerous trees fell along federal highway 1 (west of Wide Water) in extreme northern Stafford Co.

A final event occurred in eastern Nelson Co, where several trees fell, including one onto a porch and another onto the roof of the

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
same residence, causing substantial structural damage to the home.									
In all, 31,000 Virginia Power customers lost power during the storms. Frequent lightning was also a problem, though there were no house fires, and no injuries were reported.									
<b><u>VIRGINIA, North</u></b>									
Augusta County Craigsville	16	1500EST			0	0			Hail (1.25)
Augusta County Craigsville	16	1500EST			0	0	15K		Thunderstorm Wind
Augusta County Churchville	16	1518EST 1530EST			0	0	25K	10K	Hail (1.75)
Augusta County West Portion	16	1518EST 1530EST			0	0	35K		Thunderstorm Wind
Albemarle County Covesville	16	1527EST			0	0			Hail (1.00)
Madison County Wolfstown	16	1530EST 1545EST			0	0	50K	50K	Hail (2.75)
Albemarle County North Portion	16	1535EST			0	0	7K	10K	Hail (2.75)
Greene County Standardsville	16	1541EST			0	0	15K	8K	Hail (2.00)
Albemarle County 5 E (Cho)Charlottesville	16	1545EST			0	0	3K		Thunderstorm Wind
Harrisonburg (C) Harrisonburg	16	1550EST 1600EST			0	0	15K		Thunderstorm Wind
Rockingham County 3 S Linville to Broadway	16	1550EST 1600EST			0	0	25K		Thunderstorm Wind
Rockingham County South Portion	16	1550EST 1600EST			0	0	5K		Thunderstorm Wind
Madison County Madison	16	1600EST			0	0	10K	10K	Hail (1.75)
Culpeper County Culpeper	16	1601EST 1604EST			0	0	10K	5K	Hail (1.75)
Shenandoah County Woodstock	16	1604EST			0	0			Hail (0.88)
Culpeper County 1 N Jeffersonton	16	1607EST			0	0			Hail (1.00)
Albemarle County Northeast Portion	16	1620EST 1630EST			0	0	7K		Thunderstorm Wind
Frederick County Clear Brook to 2.5 NE Clear Brook	16	1635EST 1641EST	2.5	100	0	0	50K	50K	Tornado (F1)
Fauquier County Countywide	16	1641EST 1650EST			0	0	7K		Thunderstorm Wind
Loudoun County Middleburg	16	1642EST			0	0	3K		Thunderstorm Wind
Prince William County Quantico Mcas	16	1642EST			0	0			Thunderstorm Wind (G55)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VIRGINIA, North</b>									
<b>Charlottesville (C)</b> Charlottesville	16	1645EST 1655EST			0	0	7K		Thunderstorm Wind
<b>Clarke County</b> Berryville	16	1645EST			0	0	5K		Thunderstorm Wind
<b>Fauquier County</b> Markham	16	1645EST 1730EST			0	0			Flash Flood
<b>Loudoun County</b> Central Portion	16	1645EST 1700EST			0	0	200K		Lightning
<b>Prince William County</b> Northwest Portion	16	1645EST			0	0	3K		Thunderstorm Wind
<b>Fauquier County</b> 1 E Rectortown	16	1650EST			0	0			Hail (0.75)
<b>Loudoun County</b> Northwest Portion	16	1650EST 1700EST			0	0	15K	20K	Thunderstorm Wind
<b>Stafford County</b> North Portion	16	1650EST			0	0	5K		Thunderstorm Wind
<b>Loudoun County</b> Lovettsville	16	1655EST	0.5	75	0	0	10K	15K	Tornado (F0)
<b>Orange County</b> 1 W Thornhill	16	1655EST			0	0	8K		Thunderstorm Wind
<b>Fredericksburg (C)</b> Fredericksburg	16	1715EST 1730EST			0	0	10K		Lightning
<b>Fairfax County</b> Ft Belvoir	16	1800EST			0	1			Lightning
<b>Highland County</b> Countywide	16	1800EST			0	0	15K	25K	Thunderstorm Wind
<b>Highland County</b> Monterey	16	1800EST			0	0			Hail (0.75)

Like a broken record, severe weather erupted again in northern and western Virginia - exactly one day after thunderstorms pounded many of the same areas. This time around, a cold front aided in triggering the episode, though upper-level wind shear was a major player in destabilizing the atmosphere much like it had done the previous day. Incredibly, the 16th would be the third out of four afternoons that severe weather had occurred in some portion of northern and western Virginia.

A comma-shaped line of thunderstorms - indicative of a mesoscale low pressure system - developed by the middle of the afternoon. The comma "head" curled from eastern West Virginia into western Maryland, then formed a line through western and central Virginia. Several tornadoes touched down in the vicinity of the comma head, from extreme northwestern Virginia through eastern West Virginia and northern and western Maryland; along the comma tail, individual cells produced large hail with some damaging wind gusts.

Damage to trees and wires occurred in many areas but, overall, was not quite as substantial when compared to that of the 13th. Nevertheless, several trees were uprooted, including one which fell onto an automobile, between Harrisonburg and Broadway (Rockingham Co). Numerous trees were reported down near Craigsville (Augusta Co). Farther east, trees were down in portions of Fauquier, Loudoun, and Prince William Cos. A late storm produced damaging winds across much of Highland Co; numerous trees and wires were knocked down.

A small tornado struck in and northeast of Clear Brook (northeast Frederick Co), uprooting at least 7 maple trees, smashing a storm window, flattening a barn, and snapping or uprooting 24 additional trees along Grace Church Road. The parent thunderstorm would continue into eastern West Virginia and western Maryland, producing additional tornadoes. Allegheny Power reported 2300 customers lost electricity in Frederick Co alone. Another small tornado touched down in Lovettsville, causing structural damage at one residence and felling numerous trees in a 200-300 ft. wide path. Straight-line wind damage (mainly to trees) was also noted in other areas of northwestern Loudoun Co.

The main severe weather culprit this day was large hail. Hailstones the size of baseballs dented cars, broke vehicle windows, and stripped paint and siding in portions of Madison, Augusta, Albemarle, Greene, and Culpeper Cos. In general, hail ranged from 1 to

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VIRGINIA, North

2.75 inches in diameter. There were likely dozens of crop fields which sustained losses; a few residential gardens were wiped out by the large hail, which lasted 5 minutes or more in some locations.

Lightning also caused some damage. A home was set afire in Loudoun Co, causing an estimated \$200 thousand in damage. A security guard at Fort Belvoir (southern Fairfax Co) was shocked while opening a metal door; he was treated and released from the Army community hospital after slight numbness ensued. Other lightning damage was noted in Fredericksburg; one home was struck, sustaining minor damage; there were several instances of personal electronics equipment failures (as reported by a local repair shop).

Power outages were widespread; in all, Virginia Power reported approximately 64,000 customers without electricity in northern and western Virginia; Allegheny Power and several rural electric co-operatives reported at least 3,000 additional outages.

### Highland County

<b>Monterey</b>	<b>19</b>	<b>0730EST 0800EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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Slow-moving thunderstorms along a warm front moving through central Virginia caused heavy rains over the western highlands. Rainfall of at least one inch on top of saturated soil produced flash flooding in Monterey which closed two roads.

### Nelson County

<b>Faber</b>	<b>23</b>	<b>1455EST 1500EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### Nelson County

<b>Faber</b>	<b>23</b>	<b>1455EST 1500EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Tstm Wind/Hail</b>
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### Albemarle County

<b>2 W Esmont</b>	<b>23</b>	<b>1515EST 1520EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
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### Shenandoah County

<b>1 SW Maurertown</b>	<b>23</b>	<b>1515EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b>
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### Albemarle County

<b>2 E White Hall</b>	<b>23</b>	<b>1540EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
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### Madison County

<b>Madison</b>	<b>23</b>	<b>1545EST 1630EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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### Charlottesville (C)

<b>Charlottesville</b>	<b>23</b>	<b>1550EST 1630EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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### Culpeper County

<b>Elkwood</b>	<b>23</b>	<b>1600EST 1630EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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### Charlottesville (C)

<b>Charlottesville</b>	<b>23</b>	<b>1605EST 1615EST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind</b>
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### Prince William County

<b>2 N Bristow</b>	<b>23</b>	<b>2030EST 2130EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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### Spotsylvania County

<b>Massaponax</b>	<b>23</b>	<b>2055EST 2130EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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A warm front, combined with another potent (for the season) upper-level disturbance, set the stage for strong to severe thunderstorms across the western piedmont and central Shenandoah Valley during the afternoon and evening. Severe weather, mainly in the form of thunderstorm winds, was confined to Albemarle and Nelson Cos. Heaviest damage was noted in the Charlottesville area, where dozens of trees and large limbs fell, several onto cars and a few onto homes. Another severe storm, containing estimated winds gusts between 60 and 80 mph, mangled tree branches and split other trees in two in Maurertown along local route 625. One of the trees fell onto a home, causing minor damage.

The storms, which moved rather slowly over saturated ground, induced flash flooding in several counties. Rainfall totals, ranging between 2 and 6 inches in the strongest storms, produced street flooding in Charlottesville and Madison. The town of Elkwood received 6.2 inches of rain which brought area creeks and small streams out of their banks. In Prince William Co, just west of Manassas, several low-lying areas were flooded, and a few streams overspilled their banks. Over an inch of rain in 20 minutes

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VIRGINIA, North

forced creeks out of their banks near Massaponax. The storms knocked out power to at least 12,500 customers in northern and central Virginia.

### **Highland County Monterey to Hightown**

27	2132EST					0	0	7K	10K	Thunderstorm Wind
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A local severe thunderstorm knocked large trees and limbs onto federal highway 220 near Monterey. Additional limb and line damage was noted near the intersection of federal highway 250 and local road 600, with more damage seen across the southern portion of the county. Neighboring Bath Co. had more substantial damage.

## VIRGINIA, Northwest

### **Buchanan County Jewell Vly**

03	1440EST					0	0	25K		Hail (1.75)
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### **Dickenson County 1 W Clintwood**

03	1530EST					0	0	10K		Hail (1.00)
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### **Dickenson County Clintwood**

05	1750EST					0	0			Hail (0.88)
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### **Dickenson County 1.5 SW Bartlick**

10	0050EST					0	0			Hail (0.88)
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Nickel size hail fell around the John Flannagan Lake.

### **Dickenson County West Dante**

10	0116EST					0	0			Hail (1.25)
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### **Buchanan County Countywide**

10	0430EST 0800EST					0	0	220K		Flash Flood
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Dismal and Slate Creeks closed roads. Many hollows were inaccessible. Water surrounded a mobile home trailer park. A mud and rock slide partially buried a parked car.

### **Dickenson County Countywide**

10	0630EST 0900EST					0	0	25K		Flash Flood
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Rains of 2 to 3 inches closed several roads. A section of Route 611, northwest of Haysi, was washed out. Water from Russel 1 Prater Creek was 4 feet deep across Route 82 near the Buchanan County line.

### **Dickenson County Countywide**

22	1945EST					0	0	5K		Thunderstorm Wind
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Trees fell on power lines and across roads.

### **Dickenson County Countywide**

24	1530EST 1540EST					0	0	10K		Thunderstorm Wind
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An estimated gust of 60 mph occurred at Clintwood. Fallen trees caused numerous power outages.

## VIRGINIA, Southwest

### **Giles County Pearisburg**

02	1640EST					0	0			Hail (0.75)
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### **Montgomery County Blacksburg**

02	1645EST					0	0	50K		Lightning
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### **Montgomery County Blacksburg**

02	1648EST					0	0			Hail (0.88)
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### **Montgomery County 1 SE Pilot**

02	1655EST					0	0	0		Thunderstorm Wind
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### **Montgomery County Rogers**

02	1655EST					0	0	0		Thunderstorm Wind (G52)
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### **Montgomery County 1 SW Christiansburg to 1.5 SSW Christiansburg**

02	1700EST					0	0	60K		Thunderstorm Wind
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VIRGINIA, Southwest</b>									
<b>Montgomery County Pilot</b>	02	1715EST			0	0	5K		Thunderstorm Wind
<b>Franklin County 2 W Ferrum</b>	02	1722EST			0	0			Hail (0.75)
<b>Floyd County Check</b>	02	1725EST			0	0			Hail (1.00)
<b>Giles County 2 N Newport</b>	02	1728EST			0	0			Hail (0.75)
<b>Henry County Figsboro</b>	02	1738EST			0	0			Hail (1.00)
<b>Henry County Collinsville</b>	02	1745EST			0	0			Hail (1.50)
<b>Martinsville (C) Martinsville</b>	02	1750EST 1805EST			0	0	20K		Thunderstorm Wind
<b>Montgomery County Blacksburg</b>	02	1755EST			0	0			Hail (1.75)
<b>Giles County Newport</b>	02	1815EST			0	0			Hail (0.75)
<b>Floyd County Countywide</b>	02	1820EST 1840EST			0	0	50K		Thunderstorm Wind
<b>Montgomery County Blacksburg</b>	02	1820EST 1915EST			0	0			Flash Flood
<b>Pulaski County Fairlawn</b>	02	1845EST			0	0			Hail (0.88)
<b>Pulaski County Fairlawn</b>	02	1854EST			0	0	3K		Thunderstorm Wind
Thunderstorms produced hail up to 1.75 inches in diameter, damaging winds, damaging lightning, and flash flooding during the late afternoon and evening of the 2nd.									
Thunderstorm winds damaged a business roof, blew out service stations doors, tore siding off of 2 apartment buildings, and knocked down numerous trees from 1 mile southwest to 1.5 miles south southwest of Christiansburg.									
In Floyd County, thunderstorm winds toppled many large trees countywide, blew a roof off of a barn and damaged another house.									
Thunderstorm winds toppled trees onto a house in Fairlawn; downed power lines onto a road, toppled, trees, and blew off the roof of a house in Martinsville.									
In Blacksburg, heavy rain flooded a road and resulted in Strubles Creek overflowing its banks.									
Thunderstorm winds blew the roof off of a mobile home in Pilot and toppled a tree across Virginia route 615, one mile southeast of Pilot. A 60 mph wind gust downed tree limbs in Rogers.									
Lightning started fires in Blacksburg that damaged a house and destroyed a barn.									
<b>Tazewell County Jewell Ridge</b>	03	1440EST			0	0			Hail (1.75)
<b>Bland County Ceres</b>	03	1525EST			0	0			Hail (0.75)
<b>Wythe County Max Meadows</b>	03	1550EST			0	0			Hail (0.88)
<b>Wythe County Wytheville</b>	03	1550EST			0	0			Hail (1.75)
<b>Wythe County Wytheville</b>	03	1553EST			0	0			Hail (0.75)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **VIRGINIA, Southwest**

<b>Wythe County Max Meadows</b>	<b>03</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.25)</b>
<b>Wythe County Wytheville</b>	<b>03</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Hail (2.00)</b>
<b>Carroll County 6 NE Hillsville</b>	<b>03</b>	<b>1615EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Patrick County Stuart</b>	<b>03</b>	<b>1651EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Wythe County Max Meadows</b>	<b>03</b>	<b>1830EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Carroll County Cana</b>	<b>03</b>	<b>1910EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Patrick County Stuart</b>	<b>03</b>	<b>1910EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.75)</b>
<b>Patrick County Stuart</b>	<b>03</b>	<b>1910EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>

Thunderstorms during the late afternoon and evening of the 3rd produced damaging winds and hail up to 2.00 inches in diameter.

Thunderstorms winds toppled large trees in Stuart and caused a transformer to catch fire.

Hail in Wytheville damaged cars, roofs, and broke out windows.

<b>Tazewell County Bluefield</b>	<b>10</b>	<b>0225EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.25)</b>
<b>Bedford County Big Is</b>	<b>10</b>	<b>0456EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Smyth County 1 SE Saltville</b>	<b>10</b>	<b>0500EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
<b>Grayson County 2 N Independence</b>	<b>10</b>	<b>0510EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Lynchburg (C) Lynchburg</b>	<b>10</b>	<b>0514EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Amherst County 2 S Monroe</b>	<b>10</b>	<b>0515EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Appomattox County 6 N Appomattox</b>	<b>10</b>	<b>0533EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
<b>Smyth County West Portion</b>	<b>10</b>	<b>0620EST 1345EST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Flash Flood</b>
<b>Tazewell County West Portion</b>	<b>10</b>	<b>0830EST 1240EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>

Thunderstorms produced flash flooding and hail up to half dollar size during the morning of the 10th.

In the western part of Smyth County, Sulphur Creek flooded and resulted in the closing of several roads in Chilhowie. St Clair Creek was out of its banks and flooded state route 600, and a small section of Old Stage Road was washed out by flood waters.

In western Tazewell County, roads were flooded in Richlands, and several county roads around Richlands and Cedar Bluffs were flooded and closed. In addition, Indian Creek flooded onto and closed county road 627.

Thunderstorm winds in Smyth County toppled a large tree onto route 107, one mile southeast of Saltville.

## **VAZ007**

<b>Tazewell</b>	<b>10</b>	<b>0900EST 1700EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
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Heavy rain during the early morning hours on the 10th resulted in minor flooding on the Clinch River at Richlands. The Clinch

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **VIRGINIA, Southwest**

River crested a little over a foot above flood stage at 1200 EST on the 10th at Richlands.

### **Montgomery County**

<b>3 NE Radford City</b>	<b>11</b>	<b>1600EST</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>			<b>Tornado (F0)</b>
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A tornado touched down briefly three miles northeast of Radford. Debris was carried 300 to 400 feet into the air.

### **Halifax County**

<b>2 E Halifax</b>	<b>13</b>	<b>1340EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Halifax County**

<b>3 NW Halifax</b>	<b>13</b>	<b>1340EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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### **Halifax County**

<b>Scottsburg</b>	<b>13</b>	<b>1345EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Halifax County**

<b>Scottsburg</b>	<b>13</b>	<b>1345EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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### **Charlotte County**

<b>4 NW Red Oak</b>	<b>13</b>	<b>1357EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Buckingham County**

<b>12 S Buckingham</b>	<b>13</b>	<b>1410EST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.75)</b>
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Thunderstorms during the afternoon of the 13th produced hail up to 2.75 inches in diameter and damaging winds.

Thunderstorm winds toppled large trees 3 miles northwest of Halifax blocking highway 501, and downed large trees in Scottsburg.

### **Patrick County**

<b>10 NE Stuart</b>	<b>15</b>	<b>1335EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.25)</b>
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### **Patrick County**

<b>10 NE Stuart</b>	<b>15</b>	<b>1335EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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### **Campbell County**

<b>5 N Rustburg</b>	<b>15</b>	<b>1440EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Campbell County**

<b>5 N Rustburg</b>	<b>15</b>	<b>1440EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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### **Buckingham County**

<b>2 S Centenary</b>	<b>15</b>	<b>1515EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Charlotte County**

<b>Charlotte Court Hous</b>	<b>15</b>	<b>1540EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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Thunderstorms on the 15th produced hail up to half dollar size and damaging winds.

Thunderstorm winds downed trees and tree limbs in Charlotte Courthouse, brought down tree limbs 5 miles north of Rustburg, and 10 miles northeast of Stuart.

### **Carroll County**

<b>Laurel Fork</b>	<b>16</b>	<b>1248EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.25)</b>
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### **Floyd County**

<b>4 NNW Willis</b>	<b>16</b>	<b>1255EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Carroll County**

<b>Fancy Gap</b>	<b>16</b>	<b>1320EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
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### **Carroll County**

<b>Lambsburg</b>	<b>16</b>	<b>1330EST</b>			<b>0</b>	<b>0</b>			<b>Hail (2.00)</b>
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### **Patrick County**

<b>Ararat</b>	<b>16</b>	<b>1330EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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### **Franklin County**

<b>Ferrum</b>	<b>16</b>	<b>1346EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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### **Bedford County**

<b>Goodview</b>	<b>16</b>	<b>1408EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
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### **Bedford County**

<b>Goodview</b>	<b>16</b>	<b>1415EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.50)</b>
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### **Patrick County**

<b>10 NE Stuart</b>	<b>16</b>	<b>1415EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.88)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>VIRGINIA, Southwest</b>									
<b>Franklin County</b>									
1 NW Boones Mill	16	1425EST			0	0			Hail (1.00)
<b>Bedford County</b>									
6.5 N Moneta	16	1427EST			0	0			Hail (1.75)
<b>Roanoke County</b>									
5 SSW Cave Spg	16	1430EST			0	0			Hail (1.00)
<b>Franklin County</b>									
Penhook	16	1433EST			0	0			Hail (0.75)
<b>Bedford County</b>									
Goodview	16	1440EST			0	0			Hail (1.50)
<b>Bedford County</b>									
2 E Thaxton	16	1440EST			0	0			Hail (1.50)
<b>Bedford County</b>									
1 W Big Is	16	1447EST			0	0			Hail (0.75)
<b>Bedford County</b>									
Big Is	16	1448EST			0	0			Hail (1.75)
<b>Lexington (C)</b>									
Lexington	16	1450EST			0	0	10K		Thunderstorm Wind
<b>Lexington (C)</b>									
Lexington	16	1455EST			0	0			Hail (0.88)
<b>Pittsylvania County</b>									
Gretna	16	1500EST			0	0			Hail (0.75)
<b>Amherst County</b>									
12 NW Amherst	16	1505EST			0	0			Hail (2.00)
<b>Amherst County</b>									
Amherst	16	1513EST			0	0	1K		Thunderstorm Wind
<b>Alleghany County</b>									
2.5 W Selma	16	1525EST			0	0	0		Thunderstorm Wind
<b>Bath County</b>									
Millboro Spgs	16	1525EST			0	0			Hail (1.00)
<b>Halifax County</b>									
Nathalie	16	1525EST			0	0			Hail (0.88)
<b>Bath County</b>									
Millboro	16	1533EST			0	0			Hail (0.75)
<b>Craig County</b>									
8 SW New Castle	16	1545EST			0	0	0		Thunderstorm Wind
<b>Bland County</b>									
2 W Bland	16	1547EST			0	0	0		Thunderstorm Wind
<b>Charlotte County</b>									
Charlotte Court Hous	16	1555EST			0	0			Hail (0.75)
<b>Roanoke County</b>									
Catawba	16	1614EST			0	0	0		Thunderstorm Wind
<b>Rockbridge County</b>									
2 NE Rockbridge Baths	16	1615EST			0	0			Hail (0.75)
<b>Rockbridge County</b>									
2.5 NW Kerrs Creek	16	1630EST 1745EST			0	0	100K		Flash Flood
<b>Rockbridge County</b>									
Fairfield	16	1640EST			0	0			Hail (0.75)

Thunderstorms during the late afternoon and evening hours on the 16th produced flash flooding, hail up to two inches in diameter, and damaging winds.

Thunderstorm winds broke off large tree limbs eight miles southwest of New Castle, knocked down several trees two miles west of Bland and two and a half miles west of Selma, toppled trees and broke off large limbs in Ararat, knocked down power poles and downed a large tree in Catawba, downed a large tree in Lexington crushing a car, and downed a large tree in Amherst.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

**VIRGINIA, Southwest**

Creeks and streams two and a half northwest of Kerrs Creek flooded roads and washed some of them away.

<b>Carroll County Hillsville</b>	<b>19</b>	<b>1000EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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<b>Carroll County 2 NE Hillsville</b>	<b>19</b>	<b>1020EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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Thunderstorms during the morning hours on the 19th produced hail up to dime size and damaging winds.

Thunderstorm winds knocked down a tree 2 miles northeast of Hillsville.

<b>VAZ047 Buckingham</b>	<b>21</b>	<b>0400EST 2100EST</b>			<b>0</b>	<b>0</b>			<b>Flood</b>
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Heavy rain on the 19th resulted in minor flooding on the James River at Bremono Bluff.

The James River crested about a half a foot above flood stage at Bremono Bluff at 1400 EST on the 21st.

<b>Smyth County Saltville</b>	<b>22</b>	<b>2040EST</b>			<b>0</b>	<b>0</b>	<b>50K</b>		<b>Thunderstorm Wind</b>
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<b>Smyth County 1 W North Holston</b>	<b>22</b>	<b>2045EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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<b>Tazewell County Jewel Ridge</b>	<b>22</b>	<b>2120EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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Thunderstorm winds toppled trees onto route 91, one mile west of North Holston, toppled trees in Saltville damaging houses and downing power lines, and toppled trees onto route 67 in Jewel Ridge.

<b>Grayson County 3.5 NE Whitetop</b>	<b>24</b>	<b>1615EST</b>			<b>0</b>	<b>3</b>			<b>Lightning</b>
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<b>Smyth County 4 SSW Thomas Bridge</b>	<b>24</b>	<b>1630EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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<b>Montgomery County 1.5 SE Pilot</b>	<b>24</b>	<b>1710EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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Isolated thunderstorms on the 24th produced up to dime size hail and damaging winds.

Three youths were injured 3.5 miles northeast of Whitetop after being struck by lightning.

Thunderstorm winds toppled large trees 1.5 miles southeast of Pilot on Laurel Ridge Mill Road.

<b>Smyth County 7 SE Chilhowie</b>	<b>24</b>	<b>1630EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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Thunderstorms on the 24th produced dime size hail 7 miles southeast of Chilhowie.

<b>Rockbridge County 2 N Collierstown</b>	<b>25</b>	<b>1635EST</b>			<b>0</b>	<b>0</b>			<b>Hail (0.75)</b>
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Thunderstorms in Rockbridge County on the 25th produced hail up to dime size two miles north of Collierstown.

<b>Bath County Countywide</b>	<b>26</b>	<b>2320EST 2340EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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<b>Bath County Hot Spgs Arpt</b>	<b>26</b>	<b>2321EST</b>			<b>0</b>	<b>0</b>			<b>Thunderstorm Wind (G52)</b>
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<b>Alleghany County 1.5 N Iron Gate</b>	<b>26</b>	<b>2330EST</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>Thunderstorm Wind</b>
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Thunderstorms during the late evening of the 26th produced damaging winds.

Thunderstorm winds knocked down numerous trees in Bath County and toppled a tree 1.5 miles north of Iron Gate.

<b>Rockbridge County Kerrs Creek</b>	<b>27</b>	<b>0300EST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Lightning</b>
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Twenty registered Angus cattle were killed after being struck by lightning in Kerrs Creek.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## VIRGINIA, Southwest

### **Bath County**

<b>Hot Spgs</b>	27	2150EST			0	0	0		<b>Thunderstorm Wind</b>
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Thunderstorms during the evening on the 27th produced damaging winds that knocked down trees along route 220 in Hot Springs.

## WASHINGTON, Northeast

### **Chelan County**

<b>Plain</b>	05	1701PST 1801PST			0	0	0	0	<b>Heavy Rain</b>
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1.05 inches of rain in 1 hour and 1/4 inch hail

### **Whitman County**

<b>10 S Hay</b>	07	1130PST 1430PST			0	0	500K	0	<b>Flash Flood</b>
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flash flood damaged 2 buildings and washed away farm machinery

### **Okanogan County**

<b>8 E Chesaw</b>	10	1205PST 1220PST			0	0	0	0	<b>Flood</b>
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1.4 inches of rain in 15 minutes. Some flooding in Torado Creek

### **Whitman County**

<b>St John</b>	12	2005PST			0	0	0	0	<b>Hail (0.75)</b>
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3/4 inch hail from spotter

### **Ferry County**

<b>Republic</b>	28	1310PST			0	0	5K	0	<b>Flood</b>
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heavy rain flooded basement of library

### **Okanogan County**

<b>Oroville</b>	28	1426PST			0	0	0	0	<b>Heavy Rain</b>
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1 inch of rain in less than 1 hour

## WASHINGTON, Northwest

### **Snohomish County**

<b>Everett</b>	08	0517PST			0	0			<b>Lightning</b>
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Lightning struck the roof of a county courthouse complex, damaging parts of computers and the counties telephone network. Lightning also struck transformers on three power poles.

### **WAZ018**

#### **West Slopes Central Cascades And Passes**

	11	1310PST			1	7			<b>Avalanche</b>
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8 hikers were injured, one fatally, when they were caught in an avalanche descending Mt. Rainier.  
M29OU

## WASHINGTON, Southeast

### **Kittitas County**

<b>Cle Elum Arpt</b>	06	1705PST 1735PST			0	0			<b>Heavy Rain</b>
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0.41 inches of rain fell in 30 minutes with pea sized (1/4 inch) hail.

### **Yakima County**

<b>White Swan</b>	07	1458PST			0	0			<b>Tstm Wind/Hail</b>
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A thunderstorm in White Swan produced 1/2 inch hail, heavy rain, and wind gusts to 30 mph.

### **Klickitat County**

<b>Glenwood</b>	30	1720PST 1900PST			0	0			<b>Hail (0.75)</b>
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A thunderstorm in Glenwood produced 3/4 inch hail and heavy rain.

## WASHINGTON, Southwest

NONE REPORTED.

## WEST VIRGINIA, East

### **Mineral County**

3.4 SE Patterson Creek to 4.4 SE Patterson Creek	02	1936EST 1937EST	1	100	0	0	5K	10K	<b>Tornado (F1)</b>
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### **Hampshire County**

2.5 W Donaldson to Levels	02	1937EST 1946EST	8	150	0	0	20K	100K	<b>Tornado (F1)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **WEST VIRGINIA, East**

### **Hampshire County**

<b>Green Spg to Levels</b>	02	1937EST 1943EST			0	0	5K	50K	Hail (1.75)
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### **Mineral County**

5 SW Keyser to 3 E Burlington	02	2133EST 2146EST	10	150	0	0	150K	100K	Tornado (F2)
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### **Mineral County**

New Creek	02	2133EST			0	0	3K		Hail (1.25)
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### **Hampshire County**

2 NW Junction to 3 S Junction	02	2147EST 2151EST	5	150	0	5	100K	50K	Tornado (F1)
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The combination of an upper-level disturbance, increasing atmospheric shear, and ample instability set the stage for a major severe weather episode across portions of eastern West Virginia during the late afternoon and evening. The episode was highlighted by supercell thunderstorms which produced two multi-county tornadoes and several instances of large hail. For many residents of the Potomac highlands, the storms were a watershed event; the locals believed that tornadoes "like those in the midwest and Great Plains" could never strike.

The first twister, originally associated with a supercell which had produced a long (11-13 mile track) tornado in Somerset Co, Pennsylvania, re-emerged in extreme northeastern Mineral Co just east of Wagoner. The storm crossed into Hampshire Co, then passed an Allegheny Power substation before causing minor damage at some homes just north of Donaldson. Damage included a destroyed gazebo, stripped siding/trim from homes, and several uprooted or snapped trees. The tornado crossed River Mountain, causing damage primarily to forested areas. The path continued across the South Branch of the Potomac River before the tornado dissipated just outside the town of Levels.

The second tornado produced significantly more property damage. Initial reports of a funnel cloud over Bloomington, Maryland (Garrett Co) became prophetic as the first touchdown occurred 5 miles southwest of Keyser. Damage increased as the storm descended the Allegheny front range (Green Mountain). A car was blown over, a garage destroyed, and several trees were snapped or uprooted. A pine tree landed on one home, another home sustained minor damage, and a nearby mobile home had its skirting blown off.

The twister crossed New Creek Mountain, levelling numerous trees in heavily forested areas. Damage intensified after the tornado descended the mountain. One mobile home was destroyed - and, after the storm crossed federal highway 220, more tree damage was noted, as was minor damage to homes and extensive damage to outbuildings. The storm continued along federal highway(s) 50/220 to Ridgeville, rolling one mobile home, causing minor damage to nearby buildings, and destroying a barn near the Mill Creek Country Club just west of Burlington. From there, the tornado continued over Patterson Creek Mountain and into Hampshire Co, where several mobile homes were damaged or rolled along Davy Road. Five persons in one of the homes sustained minor injuries; only one accepted transport to a local hospital for head trauma. A station wagon was completely turned around and sustained minor damage. The twister then tracked three miles south of Junction, where it likely dissipated.

Hail was associated with each mini-supercell - and several residents, including fruit farmers, noted varying amounts of damage due to prolonged and, in some cases, sizeable hail. One grower reported total damage to his orchard (near Levels); other damage was seen in the form of stripped leaves and downed small limbs.

Conditions quieted after the final supercell (that which produced the second tornado) passed.

### **Hardy County**

2 NE Oldfields	13	1220EST			0	0	5K		Thunderstorm Wind
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### **Jefferson County**

Charles Town to Harpers Ferry	13	1400EST 1410EST			0	0	20K		Thunderstorm Wind (G56)
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A vigorous upper-level disturbance acted upon increasingly warm and humid air near the surface to produce scattered strong to severe thunderstorms across eastern West Virginia during the early afternoon. The individual cells eventually formed into a line, causing wind damage, large hail, and numerous power outages in northern Virginia and central Maryland. Two separate events were reported. The first was an area of downed trees and limbs near the South Branch of the Potomac River just north of Old Fields. The other was a measured wind gust of 65 mph in Jefferson Co. This cell also produced damage in the form of numerous downed trees and some wires. One tree fell onto a home near Harpers Ferry.

The storms moved out of the area by mid afternoon.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WEST VIRGINIA, East

<b>Hardy County</b> 5 W Wardensville	15	1400EST			0	0	5K		Thunderstorm Wind
<b>Hampshire County</b> Countywide	15	1545EST 1700EST			0	0			Flash Flood

Isolated strong to severe thunderstorms developed across eastern West Virginia's Potomac highlands during the mid afternoon, knocking down some trees and large limbs along the Big Ridge west of Wardensville. A slower-moving area of storms caused flooding in portions of Hampshire Co; specifically, the intersection of Kirby and Rio roads was reportedly under water.

<b>Berkeley County</b> .5 SE Ridgeway to .5 NE Ridgeway	16	1643EST 1645EST	1	50	0	0	50K		Tornado (F0)
<b>Jefferson County</b> Southeast Portion	16	1655EST 1705EST			0	0	5K		Thunderstorm Wind
<b>Berkeley County</b> 4 E Martinsburg to 4 NE Martinsburg	16	1708EST 1710EST	1	150	0	0	100K		Tornado (F1)

The approach of a cold front combined with impressive jet stream energy aloft acted on an unstable low-level atmosphere to produce a severe weather episode across eastern West Virginia for the second time in as many days. The combustible situation produced a mesoscale low pressure system which focused the most substantial severe weather in north-central Maryland and the eastern West Virginia panhandle. The episode featured two small tornadoes and one wind damage event.

The main event was a short-lived tornado which tracked through the small community of Swan Pond just east of Martinsburg. In Swan Pond Orchard, the tornado ripped a garage off the back of a home and knocked down eight miniature apple trees. The twister moved through a heavily wooded area, knocking down numerous trees before tracking across an open field where it tore the roof off a barn. It also flipped a trailer, moved a hay wagon, blew out doors to a hangar, and damaged a cinder block outbuilding.

This was the second tornado associated with the parent thunderstorm. The first, perhaps a continuation of one that had struck in extreme northern Frederick Co Virginia moments earlier, cut a brief path across extreme southern Berkeley Co near Ridgeway. Several trees were blown down, including one onto a mobile home and two more onto nearby homes. Interestingly, this same storm would spawn three more tornadoes in Washington Co, Maryland, a bit later.

In southeastern Jefferson Co, trees were knocked down along federal highway 340 near Harpers Ferry and along state route 9 just east of the Shenandoah River.

<b>Pendleton County</b> 3 NW Ruddle	27	1030EST	0.3	50	0	0	8K		Tornado (F0)
<b>Pendleton County</b> North Portion	28	2230EST			0	0	2K		Thunderstorm Wind

A local severe thunderstorm knocked down large limbs across a couple of roads in northern Pendleton Co.

## WEST VIRGINIA, North

<b>Brooke County</b> Colliers	02	1905EST			0	0			Hail (0.75)
<b>Hancock County</b> Weirton	02	1905EST			0	0			Hail (0.75)
<b>Preston County</b> 1 NW Glade Farms to 3 SE Glade Farms	02	2045EST 2050EST	4	300	0	0	5M	2M	Tornado (F2)

An F2 tornado passed southeast through southern Fayette County PA, the northeast tip of Preston County WV, and into northwest Garrett County MD. The total length of the tornado as it passed across these three counties was 12 miles. Damage in Preston County included a completely destroyed dairy barn, two completely destroyed house trailers, and at least 21 other structures heavily damaged, many with roofs partially or completely peeled off. Several cows were killed, with one cow thrown through the air over 100 yards. A clearly visible 300-yard wide, 1-mile long swath of trees which were completely sheared/uprooted was present near the Pennsylvania/West Virginia state border. One Fayette County official estimated at least two million dollars damage in lost timber alone in that county. Despite the damage, interviews with law enforcement officials, paramedics and local residents revealed

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, North</b>									
									no injuries occurred.
<b>Marion County Mannington</b>	<b>10</b>	<b>0610EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew two large trees down.
<b>Marion County Everson</b>	<b>10</b>	<b>0630EST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds snapped/uprooted around 20 trees at the Green Hills Country Club golf course in Everson.
<b>Hancock County Weirton</b>	<b>12</b>	<b>2145EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew several large trees down across the Weirton area.
<b>Ohio County Wheeling</b>	<b>13</b>	<b>1343EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew several large trees down.
<b>Marshall County Benwood</b>	<b>13</b>	<b>1345EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew several large trees down.
<b>Marshall County Moundsville</b>	<b>16</b>	<b>1458EST</b>			<b>0</b>	<b>0</b>			<b>Hail (1.00)</b>
<b>Marshall County Moundsville</b>	<b>16</b>	<b>1500EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees.
<b>Brooke County Weirton</b>	<b>16</b>	<b>1520EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several large trees.
<b>Wetzel County Smithfield</b>	<b>16</b>	<b>1525EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew several large trees and power lines down.
<b>Ohio County Wheeling</b>	<b>16</b>	<b>1530EST</b>			<b>0</b>	<b>0</b>	<b>100K</b>		<b>Thunderstorm Wind</b> An 80-foot long portion of a cinder block wall was blown in by thunderstorm winds. A large tree was blown onto a house, damaging the porch roof. A large plate glass window of a car dealership was blown in. A portion of a cinder block wall at Wheeling Downs Racetrack was blown over. Several roads in the Wheeling area were closed by fallen trees. Numerous fallen tree s were reported throughout the city.
<b>Marion County Farmington</b>	<b>16</b>	<b>1538EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees and power lines. US Route 250 was closed for 45 minutes due to fallen trees on the road.
<b>Marion County Katy</b>	<b>16</b>	<b>1538EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees and power lines.
<b>Marion County Mannington</b>	<b>16</b>	<b>1538EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees and power lines.
<b>Marion County Boothsville</b>	<b>16</b>	<b>1540EST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several large trees. One tree fell onto a house, causing minor damage.
<b>Monongalia County Brookhaven</b>	<b>16</b>	<b>1540EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees and power lines.
<b>Monongalia County Morgantown</b>	<b>16</b>	<b>1540EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several trees and power lines.
<b>Preston County Kingwood</b>	<b>16</b>	<b>1600EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Several trees blown down onto SR 7 by thunderstorm winds.
<b>Preston County Newburg</b>	<b>16</b>	<b>1605EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b> Thunderstorm winds blew down several large trees and power lines.



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, North</b>									
<b>Preston County</b> Cranesville	16	1630EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew a large tree down.						
<b>Tucker County</b> Parsons	19	0345EST			0	0			Hail (1.25)
<b>Ohio County</b> Elm Grove	19	0535EST 0930EST			0	0			Flash Flood
			Thunderstorm rains forced Elm Run Creek out of its banks, with minor flooding reported on Wheeling Road.						
<b>Ohio County</b> Triadelphia	19	0535EST 0930EST			0	0			Flash Flood
			Thunderstorm rains forced Carters Run Creek out of its banks onto US Route 40, closing it for a few hours.						
<b>Ohio County</b> Wheeling	19	0535EST 0930EST			0	0	100K		Flash Flood
			Torrential thunderstorm rains forced small creeks and storm sewers to overflow. Several streets in the Wheeling area were closed due to flooding, including US Route 40. Carters Run Creek overflowed, flooding a house and causing it to collapse. No injuries were reported.						
<b>Marshall County</b> Mt Olivet	19	0540EST 0730EST			0	0			Flash Flood
			Thunderstorm rains produced localized flooding of small creeks.						
<b>Tucker County</b> Countywide	19	0830EST 0930EST			0	0			Flash Flood
			Several roads across the county were closed due to localized flooding from thunderstorm rains.						
<b>Marion County</b> Fairmont	26	1320EST			0	0	50K		Thunderstorm Wind
			Thunderstorm winds blew numerous trees down across the city. At Fairmont State College, downed trees fell onto homes, causing minor damage. A tree also fell onto a parked automobile. This episode was the first of several days of severe thunderstorms which brought damaging winds and torrential rains to much of east-central Ohio, western Pennsylvania and northern West Virginia during the period of June 26-30. These storms caused eight deaths and several injuries, along with millions of dollars of damage across the region. High pressure anchored over the Tennessee Valley contributed to the northward transport of a tropical airmass into eastern Ohio by the afternoon of June 26th. Explosive thunderstorm development on the afternoon of June 26th over northeast Ohio and western Pennsylvania formed a Mesoscale Convective System (MCS) by late afternoon. As this MCS propagated slowly to the southeast during the evening, it left behind a northwest-to-southeast oriented outflow boundary. This boundary remained nearly stationary for over 36 hours and served to focus waves of thunderstorms from the evening of June 26th through the early morning hours of June 28th across eastern Ohio, western Pennsylvania, and northern West Virginia. On June 29th and 30th, severe thunderstorms moving rapidly through the area from the northwest brought damaging straight-line winds of up to 85 MPH across the region. The accompanying heavy rainfall with these storms only worsened the flooding conditions across the tri-state area.						
<b>Monongalia County</b> Daybrook	26	1322EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew several large tree limbs down.						
<b>Monongalia County</b> Morgantown	26	1340EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds blew several large tree limbs down.						
<b>Marion County</b> Farmington	26	1400EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Preston County</b> Terra Alta	26	1400EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds blew several large trees down.						
<b>Marshall County</b> Glendale	26	1900EST			0	0			Hail (0.88)
<b>Marshall County</b> Moundsville	26	1910EST			0	0	3K		Thunderstorm Wind
			Thunderstorm winds blew three large trees down.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, North</b>									
<b>Marshall County Moundsville</b>	26	1913EST			0	0			<b>Hail (0.88)</b>
<b>Preston County Kingwood</b>	26	2040EST			0	0	5K		<b>Thunderstorm Wind</b>
Thunderstorm winds blew several trees down, some onto State Route 26.									
<b>Marshall County Moundsville</b>	26	1858EST			0	0			<b>Hail (1.00)</b>
<b>Monongalia County Morgantown</b>	27	0209EST			0	0	3K		<b>Thunderstorm Wind</b>
Thunderstorm winds blew three large trees down.									
<b>Marshall County Dallas</b>	27	1910EST			0	0	5K		<b>Thunderstorm Wind</b>
Thunderstorm winds downed several trees and power lines.									
<b>Marshall County Rocklick</b>	27	1918EST			0	0	30K		<b>Thunderstorm Wind</b>
Thunderstorm winds blew the windows and siding off of a trailer; several trees also down.									
<b>Wetzel County Countywide</b>	27	1945EST 2000EST			0	0	20K		<b>Thunderstorm Wind</b>
Thunderstorm winds downed numerous trees across the entire county.									
<b>Monongalia County Countywide</b>	27	2000EST 2030EST			0	0	20K		<b>Thunderstorm Wind</b>
Thunderstorm winds downed numerous trees and power lines across the county.									
<b>Wetzel County Hundred</b>	27	2030EST 2200EST			0	0			<b>Flash Flood</b>
Thunderstorm rains produced minor flooding and a few mudslides on US Route 250.									
<b>Wetzel County New Martinsville</b>	28 29	2100EST 0000EST			0	0			<b>Flash Flood</b>
Thunderstorms with torrential rainfall caused several mudslides across the New Martinsville area, along with flooding on Fish Creek.									
<b>Wetzel County Jacksonburg</b>	28 29	2145EST 0000EST			0	0			<b>Flash Flood</b>
Buffalo Run Creek rose out of its banks and onto local roads. A total of 20 families were evacuated from the area.									
<b>Wetzel County Countywide</b>	29	1200EST 1700EST			0	0			<b>Flash Flood</b>
More thunderstorm rains forced North and South Fork Creeks out of their banks. Flooding was reported near Pine Grove along the North Fork. The Jacksonburg and Smithfield areas also reported flooding. A mudslide in Hundred caused part of a house foundation to slide down a hill.									
<b>Wetzel County Countywide</b>	30	0300EST 1100EST			0	0	10M		<b>Flash Flood</b>
Another round of thunderstorms caused the North Fork of Fishing Creek to rise out of its banks, causing widespread basement flooding in the Pine Grove area. This was the last in a series of thunderstorm rains that moved across the county from the 27th through the 30th of June. The flash flooding associated with these storms damaged a total of 81 houses across the county, with one house completely destroyed. Flood water also washed 20 county bridges away from their supports. Many county roads were also closed due to the flood waters.									
<b>Marshall County Moundsville</b>	27	2210EST			0	0	100K		<b>Flash Flood</b>
Basement flooding reported across Moundsville, along with some minor road flooding. Big Grave Creek rose out of its banks.									
<b>Marshall County Glendale</b>	29	0730EST 1000EST			0	0	25K		<b>Flash Flood</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, North</b>									
Runoff from thunderstorm rains produced flooding along Little Grave Creek.									
<b>Marshall County</b> 5 S Moundsville	30	0100EST 1000EST			0	0			Flash Flood
Thunderstorm rains forced Grave Creek out of its banks again, with minor flooding reported.									
<b>Ohio County</b> Countywide	28	1920EST 1950EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds downed numerous trees and power lines across the county.									
<b>Preston County</b> Terra Alta	28 29	1936EST 0000EST			0	0			Flash Flood
Thunderstorm rains produced localized flooding on area roads.									
<b>Brooke County</b> Wellsburg	28	1945EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several trees.									
<b>Monongalia County</b> Countywide	28	2100EST 2115EST			0	0	5K		Thunderstorm Wind
Several trees were downed by thunderstorm winds.									
<b>Monongalia County</b> Morgantown	28	2100EST			0	0	25K		Thunderstorm Wind
Thunderstorm winds downed several trees. Minor damage was reported to several trailers and one house.									
<b>Marion County</b> Countywide	28	2115EST			0	0	5K		Thunderstorm Wind
Thunderstorm winds downed several trees.									
<b>Monongalia County</b> Blacksville	28	2115EST			0	0	10K		Thunderstorm Wind
Thunderstorm winds blew a large tree onto a moving vehicle. No injuries were reported.									
<b>Preston County</b> Kingwood	28	2115EST			0	0	2K		Thunderstorm Wind
Thunderstorm winds downed a large tree.									
<b>Tucker County</b> Parsons	28	2155EST			0	0	3K		Thunderstorm Wind
Thunderstorm winds downed a few trees, blocking some local roads.									
<b>Brooke County</b> 2 NE Bethany	28 29	2200EST 0000EST			0	0			Flash Flood
Thunderstorm rains forced Castleman's Run out of its banks.									
<b>Brooke County</b> Wellsburg	28 29	2200EST 0000EST			0	0	25K		Flash Flood
Thunderstorm rains flooded several basements in town.									
<b>Brooke County</b> 4 E Wellsburg	28 29	2200EST 2200EST			0	0			Flash Flood
Thunderstorm rains forced Pierce's Run Creek out of its banks.									
<b>Ohio County</b> Wheeling	28 29	2030EST 0000EST			0	0	100K		Flash Flood
Torrential thunderstorm rains force Wheeling Creek out its banks. Numerous reports of basement flooding were received across town, especially in the Bethany Pike, North and South Park Street areas. Ponding of water was reported throughout the streets of Wheeling.									
<b>Ohio County</b> Warwood	28 29	2135EST 0000EST			0	0			Flash Flood
Thunderstorm rains created minor flooding and a mudslide.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b><u>WEST VIRGINIA, North</u></b>									
<b>Marion County</b> Countywide	28 29	2200EST 0300EST			0	0	5M		Flash Flood
			Torrential thunderstorm rains created widespread flash flooding across the county as numerous roads were closed. Several evacuations were required in the city of Bingamon, but the majority of problems were reported in the Mannington area. Flooding damaged 100 homes in Mannington, with around three feet of water reported in some of the city streets.						
<b>Marion County</b> Four States	30	0100EST 1000EST			0	0			Flash Flood
			Another wave of thunderstorm rains forced Teverbaugh Creek of of its banks, flooding the Four States area. Basement flooding was reported, with one car flooded in its garage. Water and mud forced several roads across the area to close.						
<b>Hancock County</b> Chester	30	1315EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed several trees and power lines.						
<b>Hancock County</b> Weirton	30	1345EST			0	0	5K		Thunderstorm Wind (G70)
			Thunderstorm winds estimated at 80 MPH downed several large trees.						
<b>Brooke County</b> Bethany	30	1511EST 1900EST			0	0			Flash Flood
			Minor flooding reported on Hukills Run.						
<b>Ohio County</b> West Liberty	30	1515EST			0	0	2K		Thunderstorm Wind
			Thunderstorm winds downed a large tree.						
<b>Ohio County</b> Wheeling	30	1515EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed several trees.						
<b>Preston County</b> Gladesville	30	1700EST			0	0	5K		Thunderstorm Wind
			Thunderstorm winds downed several trees, telephone poles and power lines.						
<b>Preston County</b> Newburg	30	1700EST			0	0	10K		Thunderstorm Wind
			Thunderstorm winds downed numerous trees across the area.						
<b><u>WEST VIRGINIA, Southeast</u></b>									
<b>Mercer County</b> Camp Creek	02	1545EST			0	0	15K		Thunderstorm Wind
<b>Summers County</b> 6 E Hinton	02	1600EST			0	0			Hail (1.15)
<b>Monroe County</b> 1 NW Wayside	02	1614EST			0	0			Hail (0.75)
<b>Monroe County</b> Red Sulphur Spgs	02	1615EST			0	0			Hail (2.25)
<b>Monroe County</b> Greenville	02	1620EST			0	0			Hail (1.75)
			Thunderstorms produced hail up to 2.25 inches in diameter and damaging winds during the afternoon of the 2nd.						
			Thunderstorm winds downed trees and power lines in Camp Creek.						
<b>Greenbrier County</b> Clintonville	16	1410EST			0	0	100K		Hail (3.00)
<b>Greenbrier County</b> Alta	16	1418EST			0	0	50K		Hail (1.75)
<b>Greenbrier County</b> Frankford	16	1430EST			0	0	50K		Hail (1.75)
<b>Greenbrier County</b> 2 S Frankford	16	1433EST			0	0	5K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, Southeast</b>									
<b>Greenbrier County</b> Rainelle	16	1435EST			0	0	0		Thunderstorm Wind
<b>Greenbrier County</b> Rainelle	16	1438EST			0	0			Hail (1.25)
<b>Mercer County</b> 7 W Matoaka	16	1443EST			0	0			Hail (1.50)
<b>Mercer County</b> 7 W Matoaka	16	1443EST			0	0	0		Thunderstorm Wind
<b>Greenbrier County</b> 1 E Mc Ross	16	1445EST			0	0			Hail (1.00)
Thunderstorms in southeastern West Virginia during the afternoon of the 16th produced hail up to 3 inches in diameter and damaging winds.									
Thunderstorm winds on the 16th downed trees in Rainelle and seven miles west of Matoaka, and knocked down trees and tore the roof off a barn two miles south of Frankford.									
Thunderstorms produced hail up to 3 inches in diameter damaging automobiles, breaking out windows, and damaging roofs in Clintonville, Alta, and Frankford.									
<b>Monroe County</b> Lindsay	19	0815EST			0	0	0		Thunderstorm Wind
Thunderstorm winds knocked down a tree in Lindsay.									
<b>WEST VIRGINIA, West</b>									
<b>WVZ008&gt;009-015&gt;016</b> Jackson - Wood - Kanawha - Roane	01 30	0000EST 2300EST			0	0			Monthly Rainfall
These counties were the wettest, but most of central West Virginia was well above normal. Ripley of Jackson County had 15.5 inches for June. Clendenin of Kanawha County had 14.6 inches, while Parkersburg saw 13.2 inches. It was the wettest month on record for Parkersburg, with records dating back to 1885. The previous wettest month for Parkersburg was 12.05 inches in July of 1958.									
<b>Mason County</b> 5.3 SE Apple Grove to 6 SE Apple Grove	02	1415EST 1416EST	0.7	40	0	1	75K		Tornado (F1)
Large trees were uprooted along Mount Union Ridge, mainly south of County Route 37. One mobile home was destroyed. One man was injured when a large tree hit his van, trapping him inside. The tornado crossed into Putnam County.									
<b>Putnam County</b> 2 W Pliny to 1.7 W Pliny	02	1416EST 1417EST	0.3	40	0	0	20K		Tornado (F1)
The tornado crossed the Mason/Putnam County line about 2 miles west of Pliny and uprooted large trees mainly south of County Route 9.									
<b>Putnam County</b> Buffalo	02	1425EST			0	0	25K		Thunderstorm Wind
<b>Kanawha County</b> Cross Lanes	02	1428EST			0	0	1M		Hail (1.75)
<b>Kanawha County</b> Ruth	02	1450EST			0	0	25K		Thunderstorm Wind (G60)
<b>Kanawha County</b> Charleston to Malden	02	1455EST 1500EST			0	0	3M		Thunderstorm Wind
<b>Kanawha County</b> (Crw) Yeager Arpt	02	1456EST			0	0			Hail (1.50)
<b>Kanawha County</b> Charleston	02	1457EST			0	0	2M		Hail (1.50)
<b>Kanawha County</b> Charleston to Rand	02	1458EST 1500EST			0	0	6M		Hail (2.00)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WEST VIRGINIA, West

<b>Kanawha County</b> 2 SE Charleston to 3.5 SE Charleston	02	1458EST 1500EST	1.5	80	0	0	100K	Tornado (F1)
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The tornado moved up Chappell Hollow, in the Kanawha City section of Charleston. The path was along the east facing slope of the hollow, and narrowly missed several homes. A few homes were still damaged by fallen trees. The estimated winds were between 90 and 100 mph.

<b>Kanawha County</b> 1 SW Leewood to 1 S Leewood	02	1519EST	0.5	60	0	0	10K	Tornado (F0)
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<b>Fayette County</b> Kincaid	02	1520EST			0	0	10K	Hail (1.00)
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<b>Raleigh County</b> Bragg to Abraham	02	1540EST			0	0	100K	Hail (1.75)
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The rotating supercell that formed in southeast Ohio cut a path southeast, up the Kanawha River Valley. The most damage was from large hail hitting the urban areas, especially the Kanawha City section of Charleston. Hundreds of vehicles were dented, including new cars at dealerships. Roofs, plus west facing siding and windows were also damaged. Large trees were also uprooted or snapped. The largest concentration of tree damage was from the South Hills and Kanawha City sections of Charleston on east, to Malden. So the wind damage was still substantial. One large tree damaged a church, another tree heavily damaged a home along Lower Donnally Road. The largest insurance company reported a total of about 10,000 claims for homes and vehicles combined.

One Kanawha City business owner said, "I never saw anything like this before. I never thought I'd go through this in West Virginia." The junior high school in Kanawha City was to be letting students go home just before the storm hit. Instead, the staff and students took shelter in the interior hallways of the school. The warnings and the smart action by citizens of the Kanawha Valley prevented any injuries from this powerful thunderstorm.

<b>Mason County</b> Apple Grove	10	0155EST			0	0		Hail (0.75)
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<b>Lincoln County</b> Ranger	10	0440EST			0	0	5K	Hail (1.75)
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<b>Taylor County</b> Prunytown	10	0635EST			0	0	2K	Thunderstorm Wind
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<b>Wirt County</b> Elizabeth	12	2338EST			0	0	5K	Thunderstorm Wind
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<b>Ritchie County</b> Hazelgreen	12	2345EST			0	0	90K	Thunderstorm Wind
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Winds ripped off a portion of a roof and cut a path of damage through a forested region.

<b>Jackson County</b> Kenna to Kentuck	13	0010EST 0015EST			0	0	150K	Thunderstorm Wind
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Several hundred trees were fallen or broke off. One barn was moved about 6 feet and roof was blown off. The Kenna Post Office was damaged. A survey found damage in a 3 mile long area, but there was no strong evidence of a tornado. One female mobile home resident of Kentuck said, "I put my baby on the floor, laid on top on him and just prayed. I thought we were dead, The sound of the wind was so strong. It was unreal."

<b>Braxton County</b> Centralia	13	0045EST			0	1	5K	Thunderstorm Wind
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A camper and his tent at Baker Run - Mill Creek Campground were tossed into Sutton Lake. The man was sent to the hospital with multiple injuries. A number of trees were fallen in the vicinity.

<b>Nicholas County</b> 2 E Gilboa to Gilboa	13	0100EST			0	0	12K	Thunderstorm Wind
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Trees fell down along Route 39. One house sustained damage to its roof and interior ceiling in the Enon vicinity.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Randolph County Elkins Arpt</b>	13	0126EST			0	0	10K		<b>Thunderstorm Wind (G55)</b>
									A gust to 63 mph was recorded at the airport.
<b>Randolph County Huttonsville</b>	13	0128EST			0	0	5K		<b>Thunderstorm Wind</b>
									Large trees fell, blocking some roads.
<b>Raleigh County Mac Arthur</b>	13	0146EST			0	0	60K		<b>Thunderstorm Wind</b>
									Two homes were damaged and 1 store window was broken. Most of the damage was confined to fallen trees. One resident said, "It just looked like a giant came through here and started breaking off trees".
<b>Putnam County Hurricane</b>	13	1330EST			0	0	10K		<b>Thunderstorm Wind</b>
									One building had minor structural damage.
<b>Fayette County Ansted</b>	13	1500EST			0	0			<b>Hail (0.75)</b>
<b>Boone County North Portion</b>	15	0100EST 0400EST			0	0	10K		<b>Flash Flood</b>
<b>Kanawha County Alum Creek to Hugheston</b>	15	0100EST 0400EST			0	0	125K		<b>Flash Flood</b>
<b>Lincoln County Countywide</b>	15	0100EST 0400EST			0	0	30K		<b>Flash Flood</b>
<b>Putnam County Countywide</b>	15	0100EST 0400EST			0	0	10K		<b>Flash Flood</b>
									Rains of 1.5 to 2.5 fell in less than 3 hours. In Kanawha County, evacuations occurred along Alum , Simmons, Witcher, Hughes, Georges Creeks. One mobile home was pushed off its foundation by Simmons Creeks near Belle. Water damaged gas meters along Trace Fork, a tributary of Davis Creek. In Lincoln County, evacuations occurred in the communities of Spurlocksville, Griffithsville, Yawkey, and Alum Creek. A few people were trapped in their vehicles in Lincoln County. Indian Creek flooded near Racine of Boone County.
<b>Mason County Flatrock</b>	15	1445EST			0	0	2K		<b>Thunderstorm Wind</b>
									Large trees fell along Route 2 and Plane Valley Road.
<b>Mason County Letart</b>	15	1445EST			0	0			<b>Hail (0.75)</b>
<b>Mcdowell County Caretta</b>	15	1520EST			0	0	2K		<b>Thunderstorm Wind</b>
									Fallen trees blocked Route 16.
<b>Harrison County Wallace to Clarksburg</b>	15	1530EST 2000EST			0	0	15K		<b>Flash Flood</b>
									Evacuations occurred along Little Ten Mile Creek and its small feeder runs. The Clarksburg airport measured 2.3 inches of rain.
<b>Taylor County Countywide</b>	15	1530EST 2000EST			0	0	5K		<b>Flash Flood</b>
									Roads were blocked by flooding streams, including Route 54 near Eby, Route 3 near Meadland, and Route5/5 near Turner Run. No evacuations took place.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Boone County</b> Julian	15	1550EST			0	0	2K		Thunderstorm Wind
			Trees were downed along Route 3.						
<b>Jackson County</b> Countywide	15	1600EST 2030EST			0	0	5K		Flash Flood
			Little Creek flooded roads near Frozencamp. Several other county creeks overflowed onto roads.						
<b>Braxton County</b> 1 E Gassaway	15	1635EST			0	0	2K		Thunderstorm Wind
			Trees were blown across Route 14.						
<b>Mason County</b> Countywide	15	1730EST 1930EST			0	0	5K		Flash Flood
<b>Calhoun County</b> North Portion	15	1800EST 1930EST			0	0	5K		Flash Flood
			Leading Creek flooded roads.						
<b>Gilmer County</b> Baldwin to Glenville	15	1800EST 1930EST			0	0	10K		Flash Flood
			Stewarts Creek flooded Route 33.						
<b>Clay County</b> Precious to Valley Fork	15	1830EST 2000EST			0	0	5K		Flash Flood
			Routes 4 and 36 were blocked by flooding small streams.						
<b>Braxton County</b> Little Birch to Tesla	15	1930EST 2100EST			0	0	5K		Flash Flood
<b>Webster County</b> Countywide	15	1930EST 2100EST			0	0	5K		Flash Flood
<b>Wyoming County</b> Cyclone	16	1145EST			0	0	15K		Hail (1.75)
<b>Braxton County</b> Sutton	16	1215EST			0	0	10K		Hail (1.00)
<b>Fayette County</b> Montgomery	16	1300EST			0	0	50K		Hail (1.50)
<b>Wayne County</b> 5 E Lavalette	16	1310EST			0	0	35K		Hail (1.00)
			Quarter size hail dented cars at a Beech Fork campground.						
<b>Wyoming County</b> Kopperston	16	1320EST			0	0	10K		Hail (1.50)
<b>Cabell County</b> Milton	16	1330EST			0	0	5K		Thunderstorm Wind
			Trees were downed on local roads.						
<b>Wyoming County</b> Cyclone	16	1344EST			0	0			Hail (1.00)
<b>Raleigh County</b> Glen Daniel	16	1355EST			0	0			Hail (1.25)



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Fayette County</b>									
Oak Hill	16	1400EST			0	0			Hail (0.75)
<b>Putnam County</b>									
1 S Hurricane	16	1400EST			0	0			Hail (0.88)
<b>Fayette County</b>									
Meadow Bridge	16	1403EST			0	0	30K		Hail (1.50)
<b>Mason County</b>									
Mason	16	1405EST			0	0			Hail (1.00)
<b>Clay County</b>									
1 E Duck	16	1410EST			0	0			Hail (1.25)
<b>Raleigh County</b>									
Beckley	16	1417EST			0	0			Hail (1.00)
<b>Raleigh County</b>									
Lester	16	1420EST			0	0			Hail (1.75)
<b>Braxton County</b>									
Frametown	16	1425EST			0	0	250K		Hail (2.00)
<b>Braxton County</b>									
Gassaway	16	1425EST			0	0	800K		Hail (1.75)
A Ford dealership had over 100 vehicles dented.									
<b>Braxton County</b>									
Sutton	16	1425EST			0	0	500K		Hail (1.75)
<b>Jackson County</b>									
Ripley	16	1430EST			0	0	25K		Thunderstorm Wind
<b>Wirt County</b>									
Creston	16	1430EST			0	0	25K	25K	Hail (1.25)
Gardens and trees were stripped around Creston and along Petes Run.									
<b>Medowell County</b>									
Coalwood	16	1435EST			0	0			Hail (2.00)
<b>Doddridge County</b>									
2 NE Leopold	16	1442EST			0	0	100K		Hail (1.75)
Golfball size hail fell along Route 18 between Leopold and Market.									
<b>Calhoun County</b>									
Industry to Grantsville	16	1445EST			0	0	50K		Thunderstorm Wind
Several locations had trees knocked down. No dwellings were affected. A survey found no evidence of a tornado.									
<b>Roane County</b>									
Spencer	16	1450EST			0	0			Hail (0.75)
<b>Doddridge County</b>									
Avon	16	1453EST			0	0	100K		Hail (1.75)
<b>Pleasants County</b>									
Raven Rock	16	1500EST			0	0	15K		Thunderstorm Wind
Trees were down along Route 2. Minor damage to a few dwellings occurred.									
<b>Ritchie County</b>									
Hazelgreen	16	1500EST			0	0	50K		Hail (1.75)
Vehicles were dented.									
<b>Tyler County</b>									
Bens Run	16	1500EST			0	0	50K		Thunderstorm Wind

An historic 190 year old house was hit by a large tree. Trees were blown down in 2 separate pockets separated by about 200 yards . A survey determined the damage was from a downburst embedded in the larger scale gust front.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Harrison County</b> Clarksburg	16	1512EST			0	0	750K		Hail (2.75)
Baseball size hail fell at the Mount Clair Golf Course, breaking wind shields on vehicles. The Laurel Park section of town saw leaves stripped off the trees. The hail was described as bigger than golfballs.									
<b>Gilmer County</b> Coxs Mills	16	1520EST			0	0	5K		Thunderstorm Wind
<b>Lewis County</b> Weston	16	1530EST			0	0	50K		Hail (0.75)
<b>Lewis County</b> Weston	16	1530EST			0	0	5K		Thunderstorm Wind
<b>Taylor County</b> Grafton	16	1540EST			0	0	200K		Hail (1.25)
<b>Taylor County</b> Grafton	16	1540EST			0	0	100K		Thunderstorm Wind
<b>Nicholas County</b> Mt Lookout	16	1700EST			0	0			Hail (0.75)
<b>Nicholas County</b> Mt Nebo	16	1705EST			0	0	50K		Hail (1.25)
<b>Nicholas County</b> Richwood	16	1716EST			0	0	15K		Thunderstorm Wind
Trees and power lines were knocked down in town.									
Unusually large hail for the Mountain State occurred in central counties. Insurance companies estimated on the order of 4000 claims across West Virginia with this event. The majority of the damage was from hail damaging vehicles.									
<b>Harrison County</b> Reynoldsville	19	0245EST			0	0	2K		Thunderstorm Wind
<b>Lewis County</b> 6 S Weston	19	0255EST			0	0	2K		Thunderstorm Wind
Trees were down at the intersection of Route 19 and Interstate 79.									
<b>Barbour County</b> Galloway	19	0315EST			0	0	2K		Thunderstorm Wind
Trees fell across Route 76.									
<b>Barbour County</b> Countywide	19	0330EST 0900EST			0	0	5K		Flash Flood
<b>Harrison County</b> Countywide	19	0330EST 1100EST			0	0	5K		Flash Flood
<b>Tyler County</b> Countywide	19	0500EST 2100EST			0	0	25K		Flash Flood
<b>Lewis County</b> Countywide	19	0530EST 1000EST			0	1	600K		Flash Flood
<b>Doddridge County</b> Countywide	19	0600EST 2300EST			0	0	100K		Flash Flood
<b>Randolph County</b> Countywide	19	0600EST 1000EST			0	0	25K		Flash Flood
<b>Pocahontas County</b> Slaty Fork	19	0700EST 1100EST			0	0	10K		Flash Flood

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## **WEST VIRGINIA, West**

<b>Webster County Bergoo</b>	<b>19</b>	<b>0700EST 1300EST</b>			<b>0</b>	<b>0</b>	<b>20K</b>		<b>Flash Flood</b>
<b>WVZ031 Harrison</b>	<b>19</b>	<b>1200EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Flood</b>
	<b>20</b>	<b>0600EST</b>							

The West Fork River overflowed its banks in the most vulnerable areas from the West Milford vicinity on down toward Enterprise. The crest at the river forecast point near Clarksburg was 16.1 feet at 2200E on the 19th. In Clarksburg, Liberty Ave, plus Routes 195 and 25 were flooded. No homes were affected by this crest.

<b>Braxton County Countywide</b>	<b>19</b>	<b>1230EST 1800EST</b>			<b>0</b>	<b>0</b>			<b>Flash Flood</b>
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Two rounds of early morning thunderstorms caused 1 to 4 inches of rain. There were 3 maximum rain areas. One was in the region within a West Union to Clarksburg to Weston triangle. The second rain maximum was in the headwaters of the Buckhannon River near Helvetia and Pickens. The third area of heaviest rain was around Philippi of Barbour County.

The worst flooding from this episode was from the small streams, not the rivers. The hardest hit county was Lewis. The Stonecoal Creek caused 3 to 4 feet of water in downtown Weston. Willow Street was devastated according to the emergency manager. Three vehicles were swept down Willow Street at the height of the storm in Weston. The city police chief said, "The water was tossing the vehicles like toys." A fireman was injured in town when he fell down a hillside during a rescue. Around the Weston vicinity, Polk Creek flooded homes along Route 33 West. Maxwell Run had 2 to 3 feet of water in businesses, with private bridges washed out. Elsewhere in Lewis County, Leading Creek flooded the Pickle Street vicinity. Hackers Creek flooded Jane Lew with 1 foot of water on the streets. The West Fork River crested near 18 feet in Weston.

In Harrison County, several roads were closed, mainly in the southern and western portion of the county. Ten Mile Creek was one such stream that blocked roads. In Barbour County, Anglins Run flooded in Philippi. One business and one home received water damage. Several county roads were blocked. In Randolph County, streams feeding the headwaters of the Tygart Valley and Middle Fork Rivers flooded. One house on the Middle Fork was surrounded by water. Route 219 was closed south of Huttonsville. In Webster County, the upper Elk River overflowed around Bergoo, causing evacuations downstream into Braxton County. However, the crest dampened as it reach the tailwaters of Sutton Lake. In Doddridge and Tyler Counties, the Middle Island Creek flooded. The heaviest rains in Doddridge County were between West Union and Big Isaac. Some private bridges were damaged. The county attempted a few evacuations.

<b>Wood County Williamstown</b>	<b>22</b>	<b>1927EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
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Several trees were knocked down, some fell across power lines.

<b>Mingo County Matewan</b>	<b>24</b>	<b>1520EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
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Trees fell across Route 49.

<b>Taylor County Thornton</b>	<b>26</b>	<b>1410EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
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Trees were knocked down across Route 50.

<b>Doddridge County 3 NW West Union</b>	<b>26</b>	<b>1415EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
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Fallen trees blocked Route 18.

<b>Harrison County Pine Bluff</b>	<b>26</b>	<b>1415EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>		<b>Thunderstorm Wind</b>
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<b>Tyler County Friendly</b>	<b>26</b>	<b>1715EST</b>			<b>0</b>	<b>0</b>	<b>10K</b>		<b>Hail (1.50)</b>
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<b>Tyler County Countywide</b>	<b>26</b>	<b>2115EST</b>			<b>0</b>	<b>0</b>	<b>15K</b>		<b>Thunderstorm Wind</b>
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<b>Doddridge County West Union</b>	<b>26</b>	<b>2120EST</b>			<b>0</b>	<b>0</b>	<b>5K</b>		<b>Thunderstorm Wind</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Pleasants County</b>									
St Marys	26	2125EST			0	0	5K		Thunderstorm Wind
<b>Ritchie County</b>									
Pennsboro to Pullman	26	2130EST			0	0	10K		Thunderstorm Wind
<b>Gilmer County</b>									
Glenville	26	2135EST			0	0	5K		Thunderstorm Wind
<b>Lewis County</b>									
Camden to Weston	26	2140EST			0	0	10K		Thunderstorm Wind
<b>Wood County</b>									
Parkersburg	26	2143EST			0	0	10K		Thunderstorm Wind
<b>Upshur County</b>									
Buckhannon	26	2200EST			0	0	10K		Thunderstorm Wind
<b>Barbour County</b>									
Countywide	26	2205EST			0	0	20K		Thunderstorm Wind
<b>Braxton County</b>									
Chapel to Falls Mill	26	2215EST			0	0	5K		Thunderstorm Wind
<b>Webster County</b>									
Bergoo	26	2215EST			0	0	1K		Thunderstorm Wind
<b>Randolph County</b>									
Elkins	26	2230EST			0	0	5K		Thunderstorm Wind
<b>Pocahontas County</b>									
Bartow	26	2245EST			0	0	2K		Hail (1.25)
<b>Ritchie County</b>									
Harrisville	26	2255EST			0	0	2K		Thunderstorm Wind
<b>Ritchie County</b>									
Cairo to Harrisville	26 27	2315EST 0130EST			0	0	550K		Flash Flood
<p>Serious flash flooding occurred. Outbuildings, mobile homes, and vehicles washed down Addis, Bear, and Buky Runs. A few wooden homes were moved off their foundations. A mother and her 3 teenage daughters were rescued by the Harrisville Volunteer Fire Department by boat after their mobile home started floating in the flood waters of Addis Run. The home was stopped and held by the block of their air condition unit. The mother later said, "I was in the living room hugging my kids with water up to our knees. We really thought we were about to meet our maker." Roads were extensively damaged. About 20 people were without shelter. One volunteer fireman said, "It's the worst I've seen, and I've lived here 24 years."</p>									
<b>Calhoun County</b>									
Grantsville	27	0025EST			0	0	2K		Thunderstorm Wind
<p>Trees were down along Routes 16 and 5.</p>									
<b>Gilmer County</b>									
Glenville	27	0030EST			0	0	2K		Thunderstorm Wind
<b>Braxton County</b>									
Tesla	27	0042EST			0	0	1K		Thunderstorm Wind
<b>Gilmer County</b>									
Tanner	27	0130EST 0300EST			0	0	15K		Flash Flood
<p>Tanner Creek flooded Route 7.</p>									
<b>Tyler County</b>									
Sistersville to Friendly	27	0925EST			0	0	30K		Thunderstorm Wind
<p>Trees were down along Route 2. Minor damage occurred to a few dwellings.</p>									
<b>Harrison County</b>									
3 NW Clarksburg	27	0945EST			0	0	3K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WEST VIRGINIA, West

Trees were down along Route 9 and Gregory Run.

<b>Doddridge County</b> Leopold	27	0955EST			0	0	2K		<b>Thunderstorm Wind</b>
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Trees fell along Route 18 and Carter Camp Road.

The first of three consecutive nights of thunderstorms caused mostly minor damage, associated with the wind gusts. The most significant event this night was the flash flood in Ritchie County.

<b>Wood County</b> Parkersburg to Williamstown	27	1935EST			0	0	450K		<b>Thunderstorm Wind (G63)</b>
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The same bow configuration that caused substantial damage in the Marietta vicinity hit the Parkersburg to Williamstown corridor. A spotter's anemometer recorded at 73 mph wind gust in Williamstown. The Williamstown mayor estimated 1000 trees down in the town. An 80 foot tent collapsed and damaged many Fenton Glass items that were on display.

<b>Pleasants County</b> Willow Is to St Marys	27	1940EST			0	0	75K		<b>Thunderstorm Wind</b>
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Trees were down on one house in Belmont. Several trees were uprooted or snapped at their base along Cow Creek and at the entrance to Polecat Hollow.

<b>Tyler County</b> Josephs Mills	27	1940EST			0	0	20K		<b>Thunderstorm Wind</b>
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Trees were down along Route 18 and 74.

<b>Ritchie County</b> Cairo to Pullman	27	1955EST			0	0	10K		<b>Thunderstorm Wind</b>
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Trees knocked down power lines.

<b>Wirt County</b> Elizabeth	27	1955EST			0	0	3K		<b>Thunderstorm Wind</b>
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Trees were down along Route 5.

<b>Calhoun County</b> Mt Zion	27	2015EST			0	0	2K		<b>Thunderstorm Wind</b>
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<b>Gilmer County</b> Countywide	27	2020EST 2025EST			0	1	10K		<b>Thunderstorm Wind</b>
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Trees were down in scattered locations through the county.

<b>Doddridge County</b> West Union	27	2025EST			0	0	5K		<b>Thunderstorm Wind</b>
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Fallen trees caused power outages.

<b>Braxton County</b> Burnsville to Gassaway	27	2030EST			0	0	5K		<b>Thunderstorm Wind</b>
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Trees and power lines were blown down. A business window in Gassaway was shattered.

<b>Harrison County</b> West Milford to Lost Creek	27	2035EST			0	0	2K		<b>Thunderstorm Wind</b>
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<b>Lewis County</b> Countywide	27	2035EST 2045EST			0	0	20K		<b>Thunderstorm Wind</b>
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One fallen tree damaged a house on Second Street in Weston. Several trees were down along Smith Run, northeast of Weston.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Roane County</b> 3 W Spencer	27	2038EST			0	0	3K		Thunderstorm Wind
			Trees were down along Route 33.						
<b>Upshur County</b> Buckhannon to 2 E Buckhannon	27	2045EST			0	0	125K		Thunderstorm Wind
			Two houses were damaged by fallen trees,						
<b>Barbour County</b> Junior	27	2100EST			0	0	15K		Thunderstorm Wind
			Trees fell on 2 houses.						
<b>Nicholas County</b> Craigsville	27	2103EST			0	0	2K		Thunderstorm Wind
<b>Pocahontas County</b> Countywide	27	2110EST 2120EST			0	0	100K		Thunderstorm Wind
			A 75 year old barn was blown down at Lobelia. Fruit trees were lost in the Arbovale region.						
<b>Randolph County</b> Elkins	27	2115EST			0	0	20K		Thunderstorm Wind
			Power outages were caused by fallen trees.						
<b>Webster County</b> 6 N Webster Spgs	27	2115EST			0	0	2K		Thunderstorm Wind
<b>Tyler County</b> Countywide	28 29	0000EST 0900EST			0	0	250K		Flash Flood
<b>Pleasants County</b> Countywide	28 29	0100EST 2300EST			0	0	500K		Flash Flood
<b>Doddridge County</b> Countywide	28	0130EST 1500EST			0	0	250K		Flash Flood
<b>Ritchie County</b> Countywide	28	0200EST 0600EST			0	0	500K		Flash Flood
<b>Wood County</b> Countywide	28 29	0300EST 0100EST			0	0	4M		Flash Flood
<b>Wirt County</b> Countywide	28 29	0310EST 1500EST			0	0	200K		Flash Flood
<b>Nicholas County</b> 2 E Summersville	28	0345EST			0	0	2K		Thunderstorm Wind
<b>Calhoun County</b> Grantsville to Mt Zion	28	0400EST 0600EST			0	0	200K		Flash Flood
			A few evacuations took place along Philip Run.						
<b>Gilmer County</b> West Portion	28	0400EST 0600EST			0	0	100K		Flash Flood
<b>Clay County</b> Bomont	28	0530EST 1400EST			0	0	150K		Flash Flood
			Porter and Queen Shoals Creeks flooded.						

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WEST VIRGINIA, West</b>									
<b>Jackson County</b>									
Countywide	28	0530EST			0	0	4M		Flash Flood
	29	0800EST							
<b>Roane County</b>									
Countywide	28	0530EST			0	0	750K		Flash Flood
	29	1300EST							
<b>Kanawha County</b>									
Sissonville to Falling Rock	28	0545EST			2	0	5M		Flash Flood
	29	2300EST							
		M83PH, M11W							
<b>Roane County</b>									
Walton	28	2000EST			0	0	5K		Thunderstorm Wind
<b>Tyler County</b>									
Sistersville	28	2024EST			0	0	15K		Thunderstorm Wind
<b>Doddridge County</b>									
Countywide	28	2100EST			0	0	250K		Flash Flood
	29	1100EST							
<b>Pleasants County</b>									
Arvilla	28	2100EST			0	0	3K		Thunderstorm Wind
<b>Ritchie County</b>									
Countywide	28	2100EST			0	0	250K		Flash Flood
	29	0030EST							
<b>Calhoun County</b>									
Grantsville	28	2120EST			0	0	50K		Thunderstorm Wind
									A roof was blown off a house.
<b>Lewis County</b>									
Weston	28	2120EST			0	0	30K		Thunderstorm Wind
									Several trees were blown over.
<b>Wirt County</b>									
Countywide	28	2120EST			0	0	40K		Thunderstorm Wind
<b>Calhoun County</b>									
South Portion	28	2130EST			0	0	100K		Flash Flood
	29	0030EST							
<b>Clay County</b>									
Bomont	28	2130EST			0	0	150K		Flash Flood
	29	0030EST							
<b>Gilmer County</b>									
Countywide	28	2130EST			0	0	5K		Flash Flood
	29	0030EST							
<b>Harrison County</b>									
South Portion	28	2130EST			0	0	10K		Flash Flood
	29	0030EST							
<b>Lewis County</b>									
Countywide	28	2130EST			0	0	750K		Flash Flood
	29	0030EST							
<b>Wirt County</b>									
Countywide	28	2130EST			0	0	200K		Flash Flood
	29	0100EST							
<b>Braxton County</b>									
Sutton to Little Birch	28	2145EST			0	0	5K		Thunderstorm Wind
									Trees were down along old Route 19.
<b>Clay County</b>									
Clay to Ivydale	28	2145EST			0	0	15K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WEST VIRGINIA, West

Fallen trees blocked roads. A few dwellings had minor damage.

<b>Roane County</b> Reedy to Spencer	28	2150EST					0	0	10K	Thunderstorm Wind
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Trees were blown down across Routes 14 and 33.

<b>Clay County</b> Countywide	28	2220EST 2240EST					0	0	20K	Thunderstorm Wind
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<b>Upshur County</b> Buckhannon	28	2220EST					0	0	30K	Thunderstorm Wind
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<b>Webster County</b> Webster Spgs	28	2230EST					0	0	20K	Thunderstorm Wind
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Fallen trees knocked out the electricity and caused minor damage to a few dwellings.

<b>Fayette County</b> Countywide	28	2250EST					0	0	20K	Thunderstorm Wind
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Scattered locations had trees blown down. The most concentrated tree damage was around Gauley Bridge.

<b>Pocahontas County</b> 5 S Slaty Fork	28	2255EST					0	0	2K	Thunderstorm Wind
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Trees were blown down along Route 219 in the vicinity of Marys Chapel.

<b>Randolph County</b> Countywide	28	2255EST					0	0	25K	Thunderstorm Wind
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A large tree damaged a residential roof in Valley Bend. Scattered locations through the county had trees down.

<b>Braxton County</b> 1 N Gassaway	28 29	2300EST 0100EST					0	0	200K	Flash Flood
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Rush Fork destroyed one manufactured home and heavily damaged 13 others along County Route 20.

<b>Boone County</b> Countywide	28	2315EST					0	0	10K	Thunderstorm Wind
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<b>Raleigh County</b> Beckley	28	2330EST					0	0	5K	Thunderstorm Wind
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<b>Jackson County</b> Ravenswood	29	0019EST					0	0	5K	Thunderstorm Wind
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<b>Mason County</b> Point Pleasant	29	0035EST					0	0	10K	Thunderstorm Wind
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<b>Kanawha County</b> Charleston	29	0120EST					0	0	3K	Thunderstorm Wind
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<b>Cabell County</b> Huntington	29	0140EST					0	0		Hail (0.75)
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<b>WVZ007&gt;008-031</b>	29 30	<b>Mason - Jackson - Harrison</b> 0400EST 0700EST					0	0	15K	Flood
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<b>Putnam County</b> Liberty to Lanham	29	0600EST 2300EST					0	0	10K	Flash Flood
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Small streams overflowed near the Jackson County line, followed by flooding along the lower reaches of the Pocatalico River.

Three consecutive nights of thunderstorms left western and northern counties with wind damage and flooding. The first night was



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## WEST VIRGINIA, West

from Friday evening, the 26th, into early Saturday morning, the 27th. The convection on the second and third nights was further south than the first night, hitting the Parkersburg to Charleston corridor the hardest. Total rains were 6 to 10 inches across portions of Wood, Jackson, and northern Kanawha Counties, with 5 inches further northeast, into the Middle Island Creek basin.

The heaviest rain rates were with the second night of convection from late Saturday night, the 27th, into Sunday morning, the 28th. The cloudbursts swept southeast from eastern Ohio, hitting Jackson, southern Roane, and northern Kanawha before dawn on Sunday. Ripley of Jackson County measured 6.8 inches in the 4 hours from 0430 to 0830E.

Serious flash flooding occurred. Two people were killed in Kanawha County, along Little Sandy Creek in the Frame vicinity. A woman tried to carry her 4 month old baby out of a flooded mobile home. The baby was swept out of her arms. An elderly blind man was swept off his front porch by the rising water, after a failed attempt by 4 men to carry the 200 pound man across a strong current. Several private bridges and a small 100 year old church were swept away along the Little Sandy Creek basin. Other nearby creeks had flooding also, such as Jordan Creek near Falling Rock.

A federal disaster declaration for individual and public assistance was declared for 15 counties in West Virginia, 14 of which were in this section of the state. They included, Kanawha, Clay, Roane, Jackson, Braxton, Calhoun, Wirt, Gilmer, Wood, Pleasants, Ritchie, Doddridge, Lewis, and Taylor. About 240 dwellings were destroyed, the most being from Wood, Kanawha, Roane, and Jackson Counties. Nearly 500 homes had major damage, the most from Kanawha and Ritchie counties. Around 100 dwelling had minor water damage. These figures included mobile homes, many of which were located in areas most susceptible to stream flooding.

In Jackson County, the Northern Mobile Home Park, in the northern sections of Ripley, sat at the junction of Syramore Creek with its Left Fork. About 12 mobile homes were washed into the creek just after dawn on the 28th. The trailers were smashed against the Route 21 bridge, about 50 yards down the stream. All total, 21 of the 23 trailers at this mobile home park were destroyed. Luckily, everyone escaped uninjured. One resident found only one item from their destroyed mobile home. It was a book, describing the West Virginia flood of 1985. Near Interstate 77, east of Ravenswood, Straight Fork heavily damaged Abels Mobile Home Park. Along the Left Fork of Sandy Creek, the Dewey Thomas Hill Bridge was destroyed. The 100 year old steel bridge washed into the stream, leaving only its concrete supports. Further down the creek near Odaville, the Sarvis Fork Covered Bridge passed the test of time. The high water mark was some 3 to 4 feet on the upstream outer wooden shell. This bridge survived. It was built around 1889. The Lockhart Church, near the Route 21 and Medina Road intersection, had 4.5 to 5 feet of water inside. The crest was even over the podium that was on the stage. Local lifelong residents of the upper reaches of the Left Fork of Sandy Creek said it was the highest water levels they have ever seen. One man was 89 years old. Another man had accounts passed down to him of the famous 1889 cloudburst. He said the water was even higher in 1889.

In Wood County, Neal Run destroyed about 50 mobile homes in 2 trailer parks in South Parkersburg on the morning of the 28th. One resident said, "It was unreal how fast the water came up." Little Tygart Creek caused severe flooding just south of Mineralwells, including the Lincolnshire development and Slate Creek Village. Along Lee Creek, a mobile home with 2 occupants was washed downstream, until becoming lodged in trees. The occupants escaped uninjured. Stillwell and Pond Creeks also had significant flooding in Wood County.

Besides the fatal flash flood along Little Sandy Creek in Kanawha County, the small streams feeding the Pocatalico River near Sissonville flooded on Sunday morning, the 28th. People were rescued by boat. This included the Haines Branch region. The river at Sissonville rose some 25 feet between 1100E and 1500E on the 28th from the rains early Sunday morning. As the small streams were starting to recede, and the Pocatalico River was starting to crest out, the third night of convection started during Sunday evening, the 28th. The rain maximum this third night was in southern Roane to southern Jackson County. This caused more small stream flooding and resulted in a record crest of 35.5 feet on the Pocatalico River around 1000E on Monday the 29th. The Sissonville Middle School had 2 feet of water in the library.

In Ritchie County, after the initial flash flood near Cairo Friday night, more flash flooding occurred. Bunnell Run flooded Pennsboro, about 50 people had to be evacuated. Two manufactured homes were destroyed, and 6 homes had major damage in Pennsboro. One resident said, "It has never been like this. My whole house was flooded. Everything I have is ruined." The Pennsboro Fire Chief said, "There was no time to do anything. Some of my men didn't even make it out of their homes when the water hit." A Pontiac car dealership in Pennsboro had several cars flooded.

In Roane County, most of the severe flooding was from the Cicerone-Kettle area on toward Cotton. One house on Green Creek was swept away, prompting the emergency director to say, "It must have been some force, because it took everything and there was nothing left but the ground."

In Gilmer County, Normantown had homes and businesses flooded by Steer Creek. Private bridges were destroyed.

In Wirt County, a small bridge was washed out near Elizabeth.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## WEST VIRGINIA, West

In Doddridge and Pleasant County, after the initial small stream flooding, high water lingered along the Middle Island Creek. People were evacuated from Arvilla of Pleasants County. The Pricetown firehouse was flooded by Polk Creek.

Prolong power outages occurred in Wirt, Doddridge, Tyler, Pleasants, Ritchie, and Pocahontas Counties.

In the aftermath of the small stream flooding, only minor river flooding occurred. The West Fork River crested about 3 to 4 feet above flood stage on the forecast point near Clarksburg. The level was 16.5 feet. Flooding was confined to streets. On the Ohio River, a crest at or just over flood stage occurred from near Ravenswood on through Point Pleasant.

### **Braxton County Wilsie**

	<b>30</b>	<b>1652EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>	<b>Thunderstorm Wind</b>
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A metal sheet roof was blown off one structure. Trees were knocked down.

### **Clay County Fola**

	<b>30</b>	<b>1710EST</b>			<b>0</b>	<b>0</b>	<b>2K</b>	<b>Thunderstorm Wind</b>
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## WISCONSIN, Extreme Southwest

NONE REPORTED.

## WISCONSIN, Northeast

### **WIZ038-038-038>039- 039 Outagamie - Brown**

	<b>06</b>	<b>0500CST</b>			<b>0</b>	<b>0</b>		<b>Record Cold</b>
	<b>08</b>	<b>0500CST</b>						

Record low temperatures were set in Green Bay two mornings in a row, and in Appleton on three mornings. A low of 37 degrees F was reached on the morning of June 7. The next morning, the mercury dropped to 36 degrees F. Appleton reached 39 degrees on three successive mornings June 6-8.

### **Marinette County 5 W Middle Inlet**

	<b>12</b>	<b>1712CST</b>			<b>0</b>	<b>0</b>		<b>Hail (1.75)</b>
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### **Marathon County Athens**

	<b>12</b>	<b>2013CST</b>			<b>0</b>	<b>0</b>		<b>Hail (0.88)</b>
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Isolated thunderstorms dropped hail during the evening of June 12. Golf ball size hail covered the ground 5 miles west of Middle Inlet (Marinette co.).

### **Oneida County Woodboro**

	<b>15</b>	<b>1453CST</b>			<b>0</b>	<b>0</b>	<b>1K</b>	<b>Thunderstorm Wind</b>
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A thunderstorm wind gust blew a filled 12 foot swimming pool across a backyard. The storm also produced small hail which covered the ground.

### **Waushara County 3 WNW Coloma**

	<b>16</b>	<b>1500CST</b>	<b>0.1</b>	<b>20</b>	<b>0</b>	<b>0</b>		<b>Tornado (F0)</b>
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### **Waushara County 7 NW Wautoma**

	<b>16</b>	<b>1525CST</b>			<b>0</b>	<b>0</b>		<b>Hail (1.00)</b>
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Two small thunderstorms affected Waushara county during the afternoon of June 16. One produced a brief tornado (a "landspout") in the western part of the county, but no damage was reported. The other storm produced 1 inch hail northwest of Wautoma.

### **Waushara County 4 S Wautoma**

	<b>18</b>	<b>1240CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G50)</b>
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Several trees were blown down by thunderstorm winds south of Wautoma.

### **Winnebago County 2 S Omro**

	<b>20</b>	<b>2044CST</b>			<b>0</b>	<b>0</b>	<b>1K</b>	<b>Thunderstorm Wind</b>
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### **Winnebago County Oshkosh**

	<b>20</b>	<b>2045CST</b>			<b>0</b>	<b>0</b>		<b>Lightning</b>
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### **Winnebago County Oshkosh**

	<b>20</b>	<b>2050CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G52)</b>
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A thunderstorm produced winds to 60 mph, knocking down trees in Winnebago county. Lightning struck an apartment building in Oshkosh, setting the roof on fire.

### **Outagamie County (Atw)Appleton Arpt**

	<b>24</b>	<b>0419CST</b>			<b>0</b>	<b>0</b>		<b>Thunderstorm Wind (G55)</b>
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### **Manitowoc County Maribel**

	<b>24</b>	<b>0425CST</b>			<b>0</b>	<b>0</b>		<b>Hail (0.88)</b>
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Northeast</b>									
Early morning thunderstorms produced strong winds and hail across east-central Wisconsin. No damage was reported.									
<b>Wood County</b>									
Nekoosa	24	2225CST			0	0	1K		Thunderstorm Wind
<b>Wood County</b>									
2 SW Port Edwards	24	2225CST			0	0	2K		Thunderstorm Wind
<b>Waupaca County</b>									
2 W Big Falls	24	2330CST			0	0	5K		Thunderstorm Wind
<b>Waupaca County</b>									
Clintonville	24	2345CST			0	0	1K		Thunderstorm Wind
<b>Shawano County</b>									
2 SE Bonduel	24	2355CST			0	0			Thunderstorm Wind (G60)
<b>Shawano County</b>									
2 NW Briarton	24	2355CST			0	0	8K		Thunderstorm Wind (G61)
<b>Shawano County</b>									
Hofa Park	24	2358CST			0	0	3K		Thunderstorm Wind
<b>Shawano County</b>									
4 E Bonduel	25	0000CST			0	0			Hail (1.00)
<b>Shawano County</b>									
4 SE Angelica	25	0005CST			0	0	8K		Thunderstorm Wind
<b>Brown County</b>									
1 NW Anston	25	0010CST			0	0	3K		Thunderstorm Wind
<b>Waupaca County</b>									
Ogdensburg	25	0016CST			0	0	1K		Thunderstorm Wind
<b>Brown County</b>									
Suamico	25	0017CST			0	0	10K		Thunderstorm Wind
<b>Brown County</b>									
3 NE Howard	25	0020CST			0	0	1K		Thunderstorm Wind
<b>Brown County</b>									
Suamico	25	0024CST			0	0			Thunderstorm Wind (G61)
<b>Brown County</b>									
De Pere	25	0030CST			0	0			Lightning
<b>Brown County</b>									
Holland	25	0030CST			0	0			Lightning
<b>Waupaca County</b>									
Waupaca	25	0035CST			0	0	1K		Thunderstorm Wind
<b>Door County</b>									
5 WNW Sturgeon Bay	25	0040CST			0	1			Thunderstorm Wind (G55)
<b>Door County</b>									
8 W Sturgeon Bay	25	0040CST			0	0	150K		Thunderstorm Wind
<b>Door County</b>									
2 S Sturgeon Bay	25	0045CST			0	3	150K		Thunderstorm Wind (G65)
<b>Kewaunee County</b>									
4 N Casco	25	0100CST			0	0	1K		Thunderstorm Wind
<b>Winnebago County</b>									
Oshkosh	25	0113CST			0	0			Thunderstorm Wind (G55)
<b>Marathon County</b>									
5 SW Marathon	25	0245CST			0	0			Lightning
<b>Marathon County</b>									
Wien	25	0247CST			0	0	10K		Thunderstorm Wind
<b>Marathon County</b>									
Wausau	25	0305CST			0	0	3K		Thunderstorm Wind
<b>Wood County</b>									
Rudolph	25	0305CST			0	0	50K		Thunderstorm Wind (G65)
<b>Oconto County</b>									
Klondike	25	0315CST			0	0	50K		Lightning

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Northeast</b>									
<b>Portage County</b>									
10 NNW Stevens Pt	25	0320CST			0	0			Hail (0.75)
<b>Shawano County</b>									
Wittenberg	25	0338CST			0	0	2K		Thunderstorm Wind
<b>Portage County</b>									
Rosholt	25	0345CST			0	0	20K		Thunderstorm Wind
<b>Menominee (C)</b>									
Keshena	25	0355CST			0	0	2K		Thunderstorm Wind
<b>Oconto County</b>									
Oconto Falls	25	0420CST			0	0	1K		Thunderstorm Wind
<b>Door County</b>									
11 WSW Sturgeon Bay	25	0445CST			0	0			Lightning
<b>Door County</b>									
1 E Sturgeon Bay	25	0500CST			0	0	2K		Thunderstorm Wind
<b>Outagamie County</b>									
Kaukauna	25	0530CST			0	0			Lightning
Numerous thunderstorms packing winds over 60 mph swept across much of central and east-central Wisconsin late on June 24 and into the early morning hours of June 25.									
Door county was particularly hard hit, as thunderstorms hit a park and campground west and south of Sturgeon Bay. Three people suffered minor injuries at a camping resort south of Sturgeon Bay as winds at least 75 mph knocked over camping trailers and trees. Another person was injured at Potawatomi State Park as a tree fell on his tent. Three barns were destroyed, over 20 houses sustained damage, and the grandstand at Door County Fair Park was damaged. A little later in the morning, lightning struck a house in the town of Gardner. Total damage in Door county alone topped \$150,000.									
The town of Rudolph (Wood co.) was hard hit, too, as winds reached over 70 mph, damaging buildings and uprooting or splitting trees. A roof was torn off of a trailer home, a barn was flattened, a silo was damaged and many trees were knocked down. The same storm produced damage at a camp in Rosholt (Portage co.), toppling over 500 trees on the 440-acre campus. Several of the trees damaged roofs of buildings. None of the 150 campers and 60 counselors were injured. A storm that hit Wien (Marathon co.) blew a 115 foot wooden steeple off a church.									
Lightning struck a storage building in Cassel township (Marathon co.), causing damage to the building's contents. In Oconto county, the steeple of a church in Klondike was struck by lightning and set on fire. Lightning started two fires in Brown county. One occurred at a tubing plant in De Pere; another lightning strike hit a residence near Holland, causing damage to a wall in the house. In Outagamie county, lightning struck a 100-year old school, damaging the cupola and roof.									
<b>Forest County</b>									
10 SE Crandon	25	1330CST			0	0	20K		Thunderstorm Wind
<b>Langlade County</b>									
Pickerel	25	1412CST			0	0	2K		Thunderstorm Wind
<b>Marathon County</b>									
15 S Wausau	25	1420CST			0	0			Hail (1.75)
<b>Portage County</b>									
12 NW Stevens Pt	25	1420CST			0	0			Hail (0.75)
<b>Wood County</b>									
Nekoosa	25	1425CST			0	0			Hail (0.88)
<b>Wood County</b>									
Wisconsin Rapids	25	1425CST			0	0			Hail (0.75)
<b>Wood County</b>									
Rudolph	25	1430CST			0	0	2K		Thunderstorm Wind (G50)
<b>Shawano County</b>									
Wittenberg	25	1440CST			0	0			Thunderstorm Wind (G50)
<b>Marinette County</b>									
Goodman	25	1445CST			0	0	1K		Thunderstorm Wind
<b>Menominee (C)</b>									
12 N Keshena	25	1455CST			0	0	2K		Thunderstorm Wind
<b>Waupaca County</b>									
Clintonville	25	1535CST			0	0	10K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Northeast</b>									
<b>Oconto County</b>									
Gillett	25	1540CST			0	0	1K		Thunderstorm Wind
<b>Oconto County</b>									
7 SW Oconto Falls	25	1545CST			0	0	1K		Thunderstorm Wind
<b>Marinette County</b>									
5 W Peshtigo	25	1550CST			0	0	2K		Thunderstorm Wind
<b>Brown County</b>									
Suamico	25	1625CST			0	0	1K		Thunderstorm Wind
<b>Door County</b>									
Gills Rock	25	1630CST			0	0	2K		Thunderstorm Wind
<b>Door County</b>									
Jackson Port	25	1729CST			0	0			Hail (1.00)
<b>Door County</b>									
1 N Sturgeon Bay	25	1751CST			0	0			Hail (0.75)
<b>Door County</b>									
Valmy	25	1758CST			0	0			Hail (1.00)
For the second time in less than 24 hours, severe thunderstorms pounded parts of northeast and central Wisconsin, producing damaging winds and hail. The town of Rudolph (Wood co.) was hit again with winds of over 60 mph, which uprooted trees. Clintonville (Waupaca co.) was hit hard as winds uprooted numerous trees on the south side of town. Houses and barns received damage in Clintonville, as did the roof of the town's utilities office.									
<b>Marathon County</b>									
10 E Wausau	26	2330CST			0	0			Thunderstorm Wind (G50)
<b>Outagamie County</b>									
2 NW Appleton	26	2330CST			0	0	1K		Thunderstorm Wind
<b>Langlade County</b>									
Antigo	26	2335CST			0	0			Lightning
<b>Wood County</b>									
2 S Babock	27	0018CST			0	0			Thunderstorm Wind (G52)
<b>Outagamie County</b>									
South Portion	27	0030CST 0300CST			0	0			Flash Flood
<b>Portage County</b>									
North Portion	27	0030CST 0300CST			0	0			Flash Flood
<b>Wood County</b>									
Nekoosa	27	0038CST			0	0	5K		Thunderstorm Wind (G52)
<b>Wood County</b>									
North Portion	27	0045CST 0245CST			0	0			Flash Flood
<b>Portage County</b>									
5 W Stevens Pt	27	0110CST			0	0			Thunderstorm Wind (G50)
<b>Manitowoc County</b>									
Kiel	27	0415CST			0	0	20K		Lightning
<b>Waupaca County</b>									
Fremont	27	0600CST			0	0			Lightning
<b>Waupaca County</b>									
Iola	27	0715CST			0	0			Lightning

Scattered thunderstorms moved across central Wisconsin yet again, this time producing wind gusts to 60 mph and flooding rains. The strong winds knocked trees down onto roofs of homes in Nekoosa (Wood co.). The storms also dumped heavy rain on top of saturated ground, producing some local flooding in Wood and Portage counties. Campers in North Wood County Park had to be moved the night of the 26th because of rising waters. Numerous roads were flooded in southern Outagamie county from the heavy rains, and Mud Creek went over its banks, scattering logs and debris for 50 yards on each side of the stream.

Lightning hit a home in Antigo (Langlade co.) leaving several small burn marks across the entire exterior of the house and melting wires within the home. Lightning struck a house in Kiel (Manitowoc co.), causing \$20,000 in damage to walls and the electrical system. A little later in the morning, a thunderstorm over Waupaca county produced lightning which hit a house in Fremont, causing a small fire. Another storm in the county produced lightning that struck a hay barn in Iola.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WISCONSIN, Northeast

**WIZ005-010-018>019-030-037>040-045-048>050 Vilas - Oneida - Lincoln - Langlade - Marathon - Waupaca - Outagamie - Brown - Kewaunee - Waushara - Winnebago - Calumet - Manitowoc**

	27	2300CST		0	0	30K	High Wind (G61)
	28	0420CST					

**Winnebago County  
Menasha**

	28	0300CST 0315CST		0	0		Seiche
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**Winnebago County  
Oshkosh**

	28	0300CST 0315CST		0	0		Seiche
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Strong winds, which developed as a result of a strong pressure difference in the wake of a departing thunderstorm complex, produced damage across parts of central and east-central Wisconsin. Trees and power lines were knocked down in many locations. The strongest winds occurred in southern Outagamie and northern Winnebago counties, where gusts were clocked to 70 mph in Little Chute (Outagamie co.) and 65 mph in Menasha (Winnebago co.). Significant wind damage to structures appeared to be limited to Outagamie and Brown counties. In Outagamie county, trees fell onto a house and an apartment, and a shed was blown onto a road. In West De Pere (Brown co.), a storage building collapsed and the roof was taken off about half of another storage building. A tree fell onto a house in De Pere (Brown co.), crashing through a bedroom window. Other measured wind gusts included 55 mph in Green Bay (Brown co.) 50 mph in Hortonville (Outagamie co.), 46 mph in Manitowoc (Manitowoc co.), and 41 mph in Antigo (Langlade co.).

The strong pressure difference created a large wave on Lake Winnebago, known as a seiche. The water rose four feet in 15 minutes on the western shores of the lake. The wave damaged boats, piers and boat lifts from Menasha to Oshkosh. At least \$100,000 in damage occurred along the lakeshore due to the seiche.

**Langlade County  
Antigo**

	29	1845CST		0	0	3K	Thunderstorm Wind
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**Marathon County  
Rothschild**

	29	1955CST		0	0		Hail (0.75)
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**Oconto County  
4 S Oconto**

	29	2010CST		0	0	2K	Thunderstorm Wind
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A small line of thunderstorms produced isolated wind damage and hail across northeast and central Wisconsin. The hail and high winds stripped leaves and branches off of trees, littering the ground near Lily (Langlade co.). Trees were blown down in Antigo (Langlade co.) and south of Oconto (Oconto co.).

## WISCONSIN, Northwest

**Douglas County  
Poplar**

	01	1635CST		0	0		Thunderstorm Wind (G61)
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**Douglas County  
Maple**

	01	1640CST		0	0		Thunderstorm Wind (G55)
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Trees up to 8 inches in diameter were blown down. The wind speed is estimated.

**Bayfield County  
Iron River**

	01	1700CST		0	0		Thunderstorm Wind (G55)
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Power lines were blown down. Wind speed is estimated.

**Bayfield County  
Washburn**

	01	1725CST		0	0		Thunderstorm Wind (G50)
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Trees were blown down. Wind speed is estimated.

**Washburn County  
3 W Trego**

	15	1815CST		0	0		Hail (0.75)
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**Washburn County  
Spooner**

	15	1826CST 1831CST		0	0		Hail (2.00)
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**Washburn County  
10 NW Spooner**

	15	1836CST		0	0		Hail (0.88)
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**Burnett County  
13 E Webster**

	15	1858CST		0	0		Hail (1.00)
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**Sawyer County  
10 S Hayward**

	20	0815CST		0	0		Hail (0.75)
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**Ashland County  
Butternut**

	25	1520CST		0	0		Thunderstorm Wind (G61)
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# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## WISCONSIN, Northwest

<b>WIZ009</b>	<b>Price</b>								
	27	2215CST			0	0			<b>High Wind (G52)</b>
		2330CST							

Strong non-thunderstorm winds gusting to 60 mph (52 knots) blew down trees and power lines. Some trees were 15 to 20 inches in diameter. A 50-foot windmill near Prentice was also toppled.

## WISCONSIN, Southeast

<b>Washington County</b>									
<b>Kewaskum</b>	12	1900CST			0	0	7K		<b>Thunderstorm Wind</b>
<b>Iowa County</b>									
<b>3 SE Helena to   5 SW Helena</b>	18	1100CST			0	0	9K		<b>Thunderstorm Wind</b>
<b>Dane County</b>									
<b>Verona</b>	18	1145CST			0	0			<b>Hail (0.75)</b>
<b>Sauk County</b>									
<b>Lake Delton</b>	18	1145CST			0	0	0.20K		<b>Thunderstorm Wind</b>
<b>Green County</b>									
<b>Browntown</b>	18	1200CST			0	0	5K		<b>Thunderstorm Wind</b>
<b>Columbia County</b>									
<b>Portage</b>	18	1210CST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Sauk County</b>									
<b>Baraboo</b>	18	1226CST			0	0			<b>Thunderstorm Wind (G53)</b>
<b>Green Lake County</b>									
<b>Green Lake</b>	18	1230CST			0	0	1K		<b>Thunderstorm Wind</b>
<b>Dane County</b>									
<b>Madison</b>	18	1245CST			0	0	0.70K		<b>Lightning</b>
<b>Marquette County</b>									
<b>Oxford</b>	18	1250CST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Rock County</b>									
<b>Clinton to   2.5 NE Clinton</b>	18	1515CST			0	0	57K		<b>Thunderstorm Wind</b>
<b>Rock County</b>									
<b>Edgerton</b>	18	1530CST			0	0	11K		<b>Thunderstorm Wind</b>
<b>Walworth County</b>									
<b>1.5 N Darien</b>	18	1530CST			0	0	2K		<b>Thunderstorm Wind</b>
<b>Walworth County</b>									
<b>2.5 N Elkhorn</b>	18	1600CST			0	0	3K		<b>Thunderstorm Wind</b>
<b>Sauk County</b>									
<b>Reedsburg</b>	18	1605CST			0	0	1K		<b>Thunderstorm Wind</b>
<b>Iowa County</b>									
<b>3 SW Helena</b>	18	1630CST			0	0	950K		<b>Thunderstorm Wind</b>
<b>Lafayette County</b>									
<b>1 N Benton</b>	18	1630CST			0	0	1K		<b>Thunderstorm Wind</b>
<b>Waukesha County</b>									
<b>Nashotah</b>	18	1630CST			0	0	5K		<b>Lightning</b>
<b>Iowa County</b>									
<b>1 E Montfort Jct to   Cobb</b>	18	1635CST 1640CST			0	0	3K		<b>Thunderstorm Wind</b>
<b>Iowa County</b>									
<b>.5 E Montfort Jct</b>	18	1640CST			0	0	4K		<b>Thunderstorm Wind</b>
<b>Iowa County</b>									
<b>Clyde to   5 SE Clyde</b>	18	1655CST 1700CST			0	0	7K		<b>Thunderstorm Wind</b>
<b>Sauk County</b>									
<b>La Valle to   3 S Reedsburg</b>	18	1658CST 1705CST			0	0	40K		<b>Thunderstorm Wind (G56)</b>

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southeast</b>									
<b>Rock County</b> Janesville	18	1700CST			0	0	19K		Thunderstorm Wind (G52)
<b>Dane County</b> Middleton to Fitchburg	18	1715CST 1720CST			0	0	200K		Thunderstorm Wind
<b>Lafayette County</b> Elk Grove	18	1730CST			0	0			Urban/Sml Stream Fld
<b>Jefferson County</b> Jefferson to Ft Atkinson	18	1750CST			0	0	6K		Thunderstorm Wind
<b>Washington County</b> West Bend	18	1802CST			0	0			Thunderstorm Wind (G52)
<b>Waukesha County</b> 3.5 W Dousman to Waukesha	18	1825CST 1855CST			0	0	30K		Thunderstorm Wind
<b>Walworth County</b> Countywide	18	1830CST 1900CST			0	0	27K		Thunderstorm Wind
<b>Rock County</b> Footville	18	1835CST			0	0	5K		Thunderstorm Wind
<b>Rock County</b> Janesville	18	1857CST			0	5			Lightning
<b>Milwaukee County</b> Milwaukee	18	1900CST			0	0			Thunderstorm Wind (G55)
<b>Washington County</b> Slinger	18	1900CST			0	0			Thunderstorm Wind (G52)
<b>Kenosha County</b> Trevor	18	1915CST			0	0	2K		Thunderstorm Wind
<b>Milwaukee County</b> Fox Pt	18	1915CST			0	0	3K		Lightning
<b>Sheboygan County</b> Sheboygan	18	1930CST			0	0			Thunderstorm Wind (G52)
<b>Sheboygan County</b> Sheboygan	18	1959CST			0	0	1K		Thunderstorm Wind
<p>Scattered thunderstorms developing around the noon hour became more numerous and intensified to severe levels over southern Wisconsin by evening. Hardest hit was Rock County where two gustnadoes roared through the Clinton area producing winds estimated at 70 to 80 mph, toppling trees and power lines, and causing damage to 15 homes. Residents of Beloit and Janesville, also in Rock County, were left without electricity overnight due to widespread tree and power line damage from thunderstorm winds. Elsewhere, scattered tree and power line damage was reported with numerous wind gusts between 60 and 70 mph raking southcentral and southeast Wisconsin. A great financial and historical loss was suffered at Taliesin (Iowa Co.) where a 220 year old oak tree crashed into the studio wing of the architectural landmark. So many trees were toppled in Tower Hill State park near Taliesin that the park was closed to the public for several days. Lightning and torrential rains played havoc in isolated areas with a home fire reported in Nashotah of Waukesha county and 5 people incurring temporary electrical shock in Janesville of Rock county. A few rainfall totals included 2.6 inches near Cuba city in Lafayette county and 2.67 inches measured at the Madison's Dane County Regional Airport. At one point 4 inches of standing water was reported in the streets of Madison that evening.</p>									
<b>Sauk County</b> 3 S Reedsburg	20	1815CST			0	0			Thunderstorm Wind (G55)
<b>Sauk County</b> Baraboo	20	1900CST			0	0	1K		Thunderstorm Wind
<b>Dane County</b> De Forest	20	1928CST			0	0			Hail (1.00)
<b>Waukesha County</b> Waukesha	24	0500CST			0	0	6K		Lightning
<p>Lightning ignited a fire in the attic of a home.</p>									
<b>WIZ066</b> Milwaukee	25	0600CST 2200CST			0	21			Excessive Heat



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southeast</b>									
High levels of heat and humidity over Milwaukee County, amplified by the "urban heat-island" effect, resulted in 21 people being treated at area hospitals for heat-related injuries/exhaustion. The Mitchell International Airport morning low was 72 and the daytime maximum was 95, while minimum relative humidities were only 40 to 45 percent, yielding heat index values of 100 to 104. Dewpoints were around 70 degrees.									
Iowa County Clyde	25	1545CST			0	0	2K		Thunderstorm Wind
Iowa County Ridgeway	25	1800CST			0	0	2.5K		Thunderstorm Wind
Rock County 2.3 WNW Leyden to 1 NNE Leyden	25	1805CST 1820CST	2.5	100	0	0	845K	3K	Tornado (F2)
Green County 3 NE Albany	25	1810CST			0	0			Funnel Cloud
Green County 2 NW Brodhead	25	1815CST			0	0	0.50K		Hail (1.00)
Rock County Janesville to Milton	25	1818CST 1820CST			0	0		1K	Hail (1.00)
Rock County Janesville	25	1848CST			0	0		3K	Hail (2.00)
Jefferson County Palmyra	25	1900CST			0	0	2K		Thunderstorm Wind
Rock County Janesville to Emerald Grove	25	1925CST 1930CST			0	0	4K		Thunderstorm Wind (G56)
Walworth County 3 W Elkhorn	25	1944CST			0	0			Thunderstorm Wind (G60)
Green County Juda	25	1945CST			0	0	5K		Thunderstorm Wind
Walworth County Lake Geneva	25	1950CST			0	0	3K		Thunderstorm Wind
Kenosha County Kenosha Muni Arpt	25	2005CST			0	0			Thunderstorm Wind (G50)
Kenosha County Silver Lake to Paddock Lake	25	2005CST 2010CST			0	0	50K		Thunderstorm Wind
Racine County Burlington to Kansasville	25	2010CST 2020CST			0	0	75K		Thunderstorm Wind
Kenosha County Bristol to Kenosha	25	2025CST 2030CST			0	0	200K		Thunderstorm Wind
Racine County 2 N Racine	25	2030CST			0	0	3K		Lightning
Severe thunderstorms packing winds between 60 and 70 mph and producing hail between 1 and 2 inches in diameter caused significant damage to property and crops. Kenosha and Racine counties experienced some of the worst destruction with 40,000 homes and businesses left without power due to the high number of trees and power lines downed. In the city of Racine a tree fell on a home and another tree crushed an automobile. In Kenosha county, siding was ripped off the side of a Bristol business and metal signs were blown down on Interstate 94. Hidden among the thunderstorms was a lone F2 tornado that took aim on northern Rock county, destroying 3 homes and damaging 4 others. A barn and 2 sheds were also destroyed. Three garages and 3 cars were damaged and a 20 foot beam was found anchored in the ground at a 45-degree angle in the storms aftermath. Fortunately there were no deaths or injuries. This tornado touched down just southwest of a railroad track 2.3 miles west/northwest of Leyden and lifted just east of Highway 184, 1 mile north/northeast of Leyden. Eyewitness reports suggest that this slow moving tornado had a second vortex at one time, and at another time it was nearly stationary for a couple minutes. The slow movement enhanced the destruction. At least 3 individuals video-taped it. Maximum winds were estimated to be about 150 mph.									
Walworth County Sharon	26	0200CST 0800CST			0	0			Urban/Sml Stream Fld

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southeast</b>									
The Little Sharon Creek overflowed due to heavy a rainfall of 3.5 inches in it's watershed overnight and flooded nearby Highway 67 with 1 foot standing water.									
Marquette County Oxford	27	0118CST			0	0			Thunderstorm Wind (G52)
Marquette County 2.5 SW Westfield	27	0130CST 0230CST			0	0			Urban/Sml Stream Fld
Sauk County Baraboo	27	0155CST			0	0	3K		Thunderstorm Wind
Green Lake County Green Lake	27	0201CST			0	0	3K		Thunderstorm Wind
Columbia County Portage	27	0220CST			0	0	2K		Thunderstorm Wind
Fond Du Lac County 2 N Eldorado	27	0230CST			0	0	5K		Thunderstorm Wind
Dane County Madison	27	0302CST			0	0	3K		Thunderstorm Wind (G60)
Washington County West Bend	27	0307CST			0	0	5K		Thunderstorm Wind
Rock County Evansville	27	0415CST			0	0	3K		Thunderstorm Wind
Early morning thunderstorms, some of them severe, rolled east across southcentral and southeast Wisconsin. Straight-line downburst winds of 60 to 70 mph associated with the severe storms pushed over large trees and toppled some power lines. Heavy rains of 1.08 inches in 28 minutes ending at 0142CST resulted in urban /small stream flooding southwest of Westfield in Marquette County. The powerful winds, blinding rain, and high waters forced a rescue of 61 campers on a Wisconsin River sandbar east of Portage on the Sauk County side of the river. In West Bend (Washington Co.), about 1500 customers lost electricity due to toppled powerlines.									
Sauk County Baraboo	27	2036CST			0	0	2K		Thunderstorm Wind (G50)
Sauk County La Valle	27	2041CST			0	0	0.10K		Thunderstorm Wind (G51)
Sauk County Loganville	27	2126CST			0	0	3K		Thunderstorm Wind (G56)
Columbia County Poynette	27	2130CST			0	0	4K		Thunderstorm Wind
Marquette County Montello	27	2130CST			0	0	5K		Thunderstorm Wind
Dane County 1 E De Forest	27	2150CST			0	0	2K		Thunderstorm Wind
Green Lake County Berlin to Green Lake	27	2200CST 2215CST			0	0	6K		Thunderstorm Wind
Iowa County Dodgeville	27	2200CST			0	0	3K		Thunderstorm Wind
Dane County Belleville	27	2210CST			0	0	3K		Thunderstorm Wind (G56)
Rock County 2 E Janesville	27	2315CST			0	0	1.5K		Thunderstorm Wind
Walworth County Elkhorn to Lake Geneva	27	2335CST 2345CST			0	0	4K		Thunderstorm Wind (G52)
Waukesha County Elm Grove	28	0000CST			0	0	10K		Lightning
Milwaukee County St Francis	28	0030CST			0	0	20K		Lightning
Lafayette County Belmont	28	0045CST			0	0	2K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WISCONSIN, Southeast

<b>Lafayette County</b> Lamont	28	0100CST 0115CST			0	0	3K		Thunderstorm Wind
<b>Dane County</b> Belleville	28	0130CST			0	0	2K		Thunderstorm Wind
<b>Green County</b> Monroe	28	0145CST			0	0	20K		Thunderstorm Wind
<b>Dane County</b> 2 E Cottage Grove	28	0150CST			0	0	1K		Lightning
<b>Dane County</b> Albion	28	0415CST			0	0	100K		Lightning

Additional rounds of severe thunderstorms possessing damaging straight-line winds of 60 to 65 mph struck southcentral and southeast Wisconsin for the second time on the same day. In this episode, the severe storms extended into the early morning hours of the next day. The bulk of the damage consisted of numerous large trees pushed over by the powerful winds. Some powerlines were also toppled. In Sauk County, the winds pushed in a window of a home in La Valle. About 600 homes lost electricity due to downed powerlines. In Dane County, a Belleville home suffered damage to its soffits. In Green County, a fallen tree in Monroe crushed a pickup truck and also damaged a car. A golf country club near Monroe was closed for 6 hours on the 28th in order for work crews to clean up tree debris. In Dane County, lightning struck a home east of Cottage Grove and left some smoke damage, but there was no fire. Another lightning strike in Albion (Dane Co.) started a fire that burnt a pole shed to the ground. The fire destroyed a mobile home, 2 field tractors, a garden tractor, and tools that were in the shed. In Waukesha County, lightning struck the Elm Grove Village Hall, knocking out its 911 system and damaging office PC's. There was no fire. In Milwaukee County, lightning struck a St Francis home, resulting in an attic fire and water damage.

<b>Lafayette County</b> Shullsburg	29	1515CST			0	0	4K		Lightning
<b>Rock County</b> Orfordville	29	1630CST			0	0	15K		Lightning

Scattered late afternoon thunderstorms over southcentral Wisconsin generated lightning strikes that resulted in damage. In Lafayette County, lightning struck a Shullsburg church steeple's lightning rod and jumped to a nearby telephone pole. The church steeple was scorched, but there was no fire. The telephone pole was shattered and then 2 TV sets in nearby homes were damaged. In Orfordville, lightning struck a fuse box on a pole, reducing voltage to 4 nearby businesses and one home. A couple phone lines, home PC's, and a satellite dish were damaged.

## WISCONSIN, Southwest

<b>Grant County</b> Lancaster	18	1032CST			0	0	0.20K		Thunderstorm Wind
The county Emergency Manager reported large trees down.									
<b>Crawford County</b> Prairie Du Chien	18	1545CST			0	1	18K		Thunderstorm Wind (G56)
A woman suffered a broken leg when a tree fell on the lodge she was staying in.									
<b>Grant County</b> Bagley	18	1545CST			0	0	95K		Thunderstorm Wind (G56)
Jellystone Campground was hit with many campers damaged.									
<b>Vernon County</b> 1.5 NE Retreat to 5 N Westby	18	1607CST 1630CST	1.5	120	0	0	100K	50K	Tornado (F1)
<b>Grant County</b> Lancaster	18	1610CST 1612CST	0.1	35	0	1	200K	20K	Tornado (F0)
<b>La Crosse County</b> 5 S La Crosse	18	1618CST			0	0	15K		Thunderstorm Wind (G52)
<b>Crawford County</b> Wauzeka	18	1620CST			0	0	40K		Thunderstorm Wind (G58)
<b>Grant County</b> Lancaster	18	1620CST			0	0	150K	30K	Thunderstorm Wind (G58)
<b>La Crosse County</b> 3 E La Crosse	18	1620CST			0	0			Thunderstorm Wind (G52)
<b>La Crosse County</b> New Amsterdam	18	1623CST			0	0	3K		Thunderstorm Wind

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southwest</b>									
<b>La Crosse County</b>									
West Salem	18	1623CST			0	13	20K		Thunderstorm Wind (G54)
			Circus tent collapsed at fairgrounds. 500 people were in tent. 13 injured.						
<b>Grant County</b>									
Montfort	18	1625CST			0	0	40K		Thunderstorm Wind (G57)
<b>La Crosse County</b>									
St Joseph	18	1625CST			0	0			Thunderstorm Wind (G56)
<b>Vernon County</b>									
Westby	18	1625CST			0	0	60K		Thunderstorm Wind (G60)
			Roof blown off bowling alley						
<b>Grant County</b>									
Blue River	18	1630CST			0	0	18K	30K	Thunderstorm Wind (G53)
<b>La Crosse County</b>									
Middle Ridge	18	1630CST			0	0	0.30K		Thunderstorm Wind (G52)
			Large trees blown down.						
<b>Trempealeau County</b>									
1 SW Trempealeau	18	1635CST			0	0	3.5K		Thunderstorm Wind (G52)
			A boat capsized on the Mississippi River from strong wind gusts.						
<b>Monroe County</b>									
Cashton	18	1645CST			0	0	1M		Thunderstorm Wind (G60)
			Elementary school roof blown off						
<b>Richland County</b>									
Viola	18	1647CST			0	0	0.70K		Thunderstorm Wind
			Large trees and power lines blown down.						
<b>Monroe County</b>									
Tomah	18	1655CST			0	0	10K		Thunderstorm Wind (G53)
<b>Richland County</b>									
Richland Center	18	1657CST			0	0	30K		Thunderstorm Wind (G55)
<b>Monroe County</b>									
5 S Tomah	18	1658CST			0	0			Thunderstorm Wind (G50)
<b>Juneau County</b>									
3 NW Camp Douglas	18	1700CST			0	0	20K		Thunderstorm Wind (G57)
<b>La Crosse County</b>									
10 N La Crosse	18	1700CST			0	0	6K		Thunderstorm Wind (G53)
<b>Monroe County</b>									
3 N Oakdale	18	1700CST			0	0	1.2K		Thunderstorm Wind
<b>Monroe County</b>									
Oakdale	18	1700CST			0	0			Thunderstorm Wind (G52)
<b>Richland County</b>									
Bloom City	18	1705CST			0	0	15K	10K	Thunderstorm Wind (G57)
<b>Juneau County</b>									
Mauston	18	1710CST 1712CST			0	0	45K		Thunderstorm Wind (G61)
<b>Adams County</b>									
Dellwood	18	1725CST			0	0			Thunderstorm Wind (G52)
<b>Adams County</b>									
1 E Adams	18	1735CST			0	0	12K		Thunderstorm Wind (G52)
			A line of severe thunderstorms accompanied by straight-line winds up to 70 mph caused extensive damage across southwest Wisconsin.						

A short-lived tornado hit a dairy barn near Retreat (Vernon Co.), killing five cows and injuring one person. The F1 tornado skipped along the ground and stacked trees together after its passage.

A second smaller tornado hit Lancaster (Grant Co.) causing damage to several homes and knocking down hundreds of trees in the city.

Other notable damage consisted of a roof blown off the elementary school in Cashton (Monroe Co.) and a bowling alley in Westby

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southwest</b>									
(Vernon Co.). In West Salem (La Crosse Co.), a large circus tent, with 500 people inside, collapsed during one of the performances. Thirteen people were injured. There were numerous other reports of trees or power lines down.									
<b>Vernon County</b>									
Genoa	20	1621CST			0	0			Hail (0.75)
<b>Vernon County</b>									
Genoa	20	1640CST			0	0	25K		Hail (1.50)
<b>Crawford County</b>									
Gays Mills	20	1654CST			0	0		20K	Hail (0.75)
<b>Vernon County</b>									
Retreat	20	1655CST			0	0	15K		Thunderstorm Wind (G52)
<b>Vernon County</b>									
Viroqua	20	1655CST			0	0	40K	30K	Hail (1.75)
<b>Vernon County</b>									
Viroqua	20	1655CST			0	0			Thunderstorm Wind (G52)
<b>Crawford County</b>									
Mt Sterling	20	1659CST			0	0			Hail (0.75)
<b>Vernon County</b>									
Westby	20	1702CST			0	0			Funnel Cloud
<b>Grant County</b>									
Boscobel	20	1713CST			0	0	35K	45K	Hail (1.75)
<b>Grant County</b>									
Blue River	20	1730CST			0	0			Hail (0.75)
<b>Richland County</b>									
Port Andrew	20	1734CST			0	0		25K	Hail (0.75)
<b>Grant County</b>									
Blue River	20	1737CST			0	0	15K	35K	Hail (1.25)
<b>Richland County</b>									
Cazenovia	20	1816CST			0	0			Hail (0.75)
A clusters of storms hit southwest Wisconsin with damaging wind gusts and large hail. Numerous large trees were blown down and there was minor damage sustained to farm buildings. Hail up to golf ball size was also reported.									
<b>Vernon County</b>									
Genoa	24	1940CST			0	0	18K		Hail (1.50)
<b>Vernon County</b>									
Westby	24	2005CST			0	0	30K	30K	Hail (1.75)
<b>Vernon County</b>									
Westby	24	2007CST			0	0	15K	20K	Hail (1.50)
<b>Monroe County</b>									
10 N Sparta	24	2016CST			0	0			Hail (0.75)
<b>Jackson County</b>									
2 S Black River Falls	24	2048CST			0	0			Hail (0.75)
<b>Buffalo County</b>									
Cochrane	24	2140CST			0	0	10K		Hail (0.75)
<b>La Crosse County</b>									
3 E Holmen	24	2143CST			0	0			Hail (0.75)
<b>Buffalo County</b>									
3 S Alma	24	2200CST			0	0			Hail (0.75)
<b>Trempealeau County</b>									
4 NE Arcadia	24	2206CST			0	0		15K	Hail (1.00)
<b>Monroe County</b>									
8 N Tomah	24	2230CST			0	0	20K	25K	Hail (1.00)
<b>Monroe County</b>									
1 W Warrens	24	2230CST			0	0	15K	30K	Hail (0.75)
Spotters and law enforcement officials reported hail ranging in size from dimes to golf balls.									
<b>Adams County</b>									
New Rome	25	0035CST			0	0	8K		Thunderstorm Wind (G54)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southwest</b>									
<b>Buffalo County</b>									
Mondovi	25	0120CST			0	0	5K		Thunderstorm Wind (G53)
<b>Trempealeau County</b>									
Ettrick	25	1243CST 1248CST			0	0			Hail (0.75)
<b>Crawford County</b>									
4 SW Wauzeka	25	1448CST			0	0		25K	Hail (1.00)
<b>Crawford County</b>									
Bridgeport	25	1455CST			0	0	8K		Hail (0.75)
<b>Grant County</b>									
Woodman	25	1502CST			0	0		20K	Hail (0.75)
<b>Grant County</b>									
Castle Rock	25	1537CST			0	0		40K	Hail (1.00)
<b>Grant County</b>									
Muscodia	25	1608CST			0	0	50K		Hail (1.75)
<b>Trempealeau County</b>									
Arcadia	26	1950CST			0	0			Hail (0.75)
<b>Buffalo County</b>									
Nelson	26	2205CST			0	0	30K		Thunderstorm Wind (G61)
<b>Jackson County</b>									
Alma Center	26	2227CST			0	0			Thunderstorm Wind (G52)
<b>Buffalo County</b>									
Mondovi	26	2232CST			0	0	0.80K		Thunderstorm Wind
<b>Trempealeau County</b>									
Eleva	26	2238CST			0	0			Thunderstorm Wind (G52)
<b>Buffalo County</b>									
Mondovi	26	2252CST			0	0	55K	70K	Thunderstorm Wind (G60)
<b>La Crosse County</b>									
Midway	26	2315CST			0	0			Thunderstorm Wind (G52)
<b>La Crosse County</b>									
Holmen	26	2318CST			0	0	30K		Thunderstorm Wind (G61)
<b>Jackson County</b>									
Melrose to Black River Falls	26	2325CST			0	0	40K	40K	Thunderstorm Wind (G61)
<b>La Crosse County</b>									
New Amsterdam	26	2327CST			0	0			Thunderstorm Wind (G52)
<b>La Crosse County</b>									
St Joseph	26	2345CST			0	0	35K	25K	Thunderstorm Wind (G61)
<b>Juneau County</b>									
1 N Finley	27	0020CST			0	0			Thunderstorm Wind (G52)
<b>Monroe County</b>									
Sparta	27	0030CST			0	0	25K		Thunderstorm Wind (G52)
<b>Vernon County</b>									
Viroqua	27	0032CST			0	0			Thunderstorm Wind (G52)
<b>Adams County</b>									
Adams	27	0047CST			0	0	0.30K		Thunderstorm Wind
<b>Monroe County</b>									
Tomah	27	0057CST			0	0	25K		Thunderstorm Wind (G55)
<b>Monroe County</b>									
Sparta	27	0058CST			0	0	35K		Thunderstorm Wind (G55)
<b>Crawford County</b>									
Mt Sterling	27	0122CST			0	0	55K	70K	Thunderstorm Wind (G60)

Two clusters of thunderstorms brought large hail, damaging wind, and excessive rain to the region. Wind gusts to 70 mph knocked down trees and power lines but there was no widespread property damage reported.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southwest</b>									
<b>Trempealeau County</b>									
Whitehall to	26	2030CST			0	0	60K	50K	Flash Flood
Arcadia	27	0600CST							
<b>Jackson County</b>									
Hatfield to	26	2215CST			0	0	70K	70K	Flash Flood
Black River Falls	27	0600CST							
<b>Buffalo County</b>									
Alma	26	2242CST			0	0	13K		Flash Flood
	27	0242CST							
<b>Clark County</b>									
Chili	26	2243CST			0	0	50K	40K	Flash Flood
	27	0600CST							
<b>La Crosse County</b>									
La Crosse	27	0015CST 0230CST			0	0	20K		Flash Flood
<b>Monroe County</b>									
1 NW Tomah	27	0057CST 0200CST			0	0	20K		Flash Flood
<b>Vernon County</b>									
Viroqua	27	0130CST 0330CST			0	0	12K		Flash Flood
Excessive thunderstorm rains produced flash flooding and relatively rapid rises on the larger tributaries in west and southwest Wisconsin. There was at least two feet of water over some roadways across southern Clark County and northern Jackson County, along with flash flooding in some of the steeper terrain of Trempealeau County. A car was washed off the road northwest of Tomah (Monroe Co.).									
<b>Buffalo County</b>									
Buffalo City	27	1855CST			0	0	3K	1.5K	Thunderstorm Wind
<b>Buffalo County</b>									
Cochrane	27	1855CST			0	0	2K	1.3K	Thunderstorm Wind
<b>Buffalo County</b>									
Fountain City	27	1855CST			0	0	6K	0.80K	Thunderstorm Wind
<b>Trempealeau County</b>									
Trempealeau	27	1925CST			0	0	12K	3K	Thunderstorm Wind (G61)
<b>Trempealeau County</b>									
Arcadia	27	1930CST			0	0	950K	13K	Thunderstorm Wind (G70)
<b>Trempealeau County</b>									
Ettrick	27	1939CST			0	0	15K	6K	Thunderstorm Wind (G76)
<b>La Crosse County</b>									
La Crosse	27	1942CST			0	0	200K	75K	Thunderstorm Wind (G61)
<b>La Crosse County</b>									
2 E La Crosse	27	1945CST			0	0			Thunderstorm Wind (G53)
<b>Vernon County</b>									
2 N Stoddard	27	1945CST			0	0	200K	33K	Thunderstorm Wind (G73)
<b>Jackson County</b>									
North Bend	27	1949CST			0	0	85K	22K	Thunderstorm Wind
<b>Jackson County</b>									
Melrose	27	1953CST			0	0	32K	12K	Thunderstorm Wind (G83)
<b>Monroe County</b>									
2 W Sparta	27	1954CST			0	0	14K	6K	Thunderstorm Wind (G52)
<b>La Crosse County</b>									
La Crosse	27	1956CST 2100CST			0	0			Urban/Sml Stream Fld
<b>Vernon County</b>									
Stoddard	27	1956CST			0	0	200K	20K	Thunderstorm Wind
<b>La Crosse County</b>									
2 W St Joseph	27	1958CST			0	0	2K	0.50K	Thunderstorm Wind (G52)

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, Southwest</b>									
<b>Vernon County</b>									
Viroqua	27	1958CST			0	0	35K	10K	Thunderstorm Wind (G52)
<b>La Crosse County</b>									
2 S La Crosse	27	2001CST			0	0	40K	12K	Thunderstorm Wind (G52)
<b>Monroe County</b>									
3 W Cataract	27	2009CST			0	0	167K	66K	Thunderstorm Wind (G88)
<b>Monroe County</b>									
Cashton	27	2010CST			0	0	175K	25K	Thunderstorm Wind
<b>Crawford County</b>									
Mt Sterling	27	2012CST			0	0	200K	20K	Thunderstorm Wind (G55)
<b>Monroe County</b>									
Fort Mc Coy	27	2026CST			0	0	88K	20K	Thunderstorm Wind (G52)
<b>Richland County</b>									
Yuba	27	2029CST			0	0	20K	0.80K	Thunderstorm Wind
<b>Crawford County</b>									
Eastman	27	2030CST			0	0	30K	10K	Thunderstorm Wind
<b>Vernon County</b>									
Newry	27	2030CST			0	0	120K	30K	Thunderstorm Wind
<b>Juneau County</b>									
Elroy	27	2040CST			0	0	23K	11K	Thunderstorm Wind (G65)
<b>Juneau County</b>									
Union Center	27	2040CST			0	0	2K	4K	Thunderstorm Wind
<b>Monroe County</b>									
Tomah	27	2040CST			0	0	18K	100K	Thunderstorm Wind (G70)
<b>Monroe County</b>									
Tomah	27	2041CST			0	0	100K	43K	Thunderstorm Wind (G70)
<b>Monroe County</b>									
4 N Tomah	27	2042CST			0	0	190K	88K	Thunderstorm Wind (G78)
<b>Juneau County</b>									
Elroy	27	2045CST			0	0	14K	45K	Thunderstorm Wind (G65)
<b>Juneau County</b>									
Mauston	27	2045CST			0	0	9K	12K	Thunderstorm Wind
<b>Monroe County</b>									
4 E Warrens	27	2055CST			0	0	22K	12K	Thunderstorm Wind
<b>Vernon County</b>									
Hillsboro	27	2100CST			0	0	90K	33K	Thunderstorm Wind
<b>Adams County</b>									
Arkdale	27	2115CST			0	0	10K	2K	Thunderstorm Wind (G61)
<b>Richland County</b>									
Richland Center	27	2135CST			0	0	15K		Flash Flood
	28	0005CST							
<b>Crawford County</b>									
Mt Sterling	27	2145CST			0	0	20K		Flash Flood
	28	0015CST							
<b>Grant County</b>									
Lancaster	28	0100CST			0	0	200K	21K	Thunderstorm Wind

A line of intense thunderstorms swept in from Minnesota and caused widespread straight-line wind damage to many areas of central and western Wisconsin. This was one of the worst storms to hit the region in over 25 years. There were two main paths of concentrated damage where winds gusted between 90 and 120 mph.

The northern track of damage crossed the Mississippi River near Winona, MN and hit Arcadia, Ettrick, and northwest Monroe County hardest. Several buildings, chicken storage facilities, and grain bins in Arcadia were damaged or destroyed. There were trees down in many areas along with widespread property damage and prolonged power outages. Especially hit hard were areas of pine trees flattened between Melrose and Cataract where measured wind gusts of 101 mph were recorded before equipment failed. The damage path continued to the east-southeast crossing Interstate 90 near Tomah and knocking down wide swaths of trees.

The southern track of intense damage crossed the Mississippi River near the La Crosse-Vernon County line creating widespread



# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	

## WISCONSIN, Southwest

damage to Goose Island Campground and Chipmunk Coulee just south of La Crosse. Many campers were damaged and trees blown over in the campground. Barns were destroyed as well with large sections of trees sheared or blown over along the northern edge of Vernon County. In Grant County, numerous large trees and power lines were blown down.

Ten counties in western Wisconsin were declared Federal Disaster areas, including Buffalo, Clark, Crawford, Grant, Jackson, La Crosse, Monroe, Richland, Trempealeau, and Vernon. Damage estimates in Trempealeau County alone topped \$4 Million with damages exceeding \$1 Million in La Crosse, Vernon, and Jackson counties.

## WISCONSIN, West

<b>Rusk County</b> Hawkins	12	1550CST			0	0			Hail (0.88)
<b>St. Croix County</b> 1 E Roberts	15	1848CST			0	0			Hail (1.75)
Quarter to golfball size hail pummeled Badlands Golf course									
<b>St. Croix County</b> Hudson	15	1910CST			0	0			Hail (1.75)
<b>Barron County</b> Haugen	15	1925CST			0	0			Thunderstorm Wind (G50)
Trees down. Estimated windspeed.									
<b>Pepin County</b> Arkansaw	25	0050CST			0	0	200K		Thunderstorm Wind (G60)
Barn blown down trapping 57 cows. Garage shifted off foundation. Windows blown out of farmhouse.									
<b>Pierce County</b> 2 NE Diamond Bluff	25	0100CST			0	0	75K		Thunderstorm Wind (G61)
Damage estimate for entire county.									
<b>Pierce County</b> 2.5 E Esdaile to 2 NE Esdaile	25	0110CST			0	0			Thunderstorm Wind (G60)
Barn collapsed killing eight cows. Estimated windspeed.									
<b>Pierce County</b> 15 SE Ellsworth	25	0120CST			0	0			Thunderstorm Wind (G60)
Large trees blown down. Windows blown out. Estimated windspeed.									
<b>St. Croix County</b> Glenwood City	25	0126CST			0	0			Thunderstorm Wind (G55)
Trees and power lines down. Estimated windspeed.									
<b>Barron County</b> Turtle Lake	25	0128CST			0	0			Thunderstorm Wind (G55)
Trees and power lines down. Large hail also reported. Estimated windspeed.									
<b>Dunn County</b> Colfax	25	0130CST			0	0			Thunderstorm Wind (G50)
Trees blown down. Estimated windspeed.									
<b>Chippewa County</b> Eau Claire	25	0136CST			0	0			Thunderstorm Wind (G52)
<b>Chippewa County</b> Jim Falls	25	0136CST			0	0			Thunderstorm Wind (G60)
Campers and trees blown over. Estimated windspeed.									
<b>Barron County</b> Chetek	25	0140CST			0	0			Thunderstorm Wind (G55)
Large trees blown down. Shed destroyed. Boats flipped onto docks.									
<b>Dunn County</b> 4 N Menomonie	25	0145CST			0	0			Thunderstorm Wind (G55)
Trees blown down. Estimated windspeed.									
<b>Eau Claire County</b> Eau Claire	25	0145CST			0	0			Thunderstorm Wind (G52)
Trees and power lines down. Estimated windspeed.									
<b>Chippewa County</b> Eau Claire	25	0151CST			0	0			Thunderstorm Wind (G50)
Airport hangar destroyed at Chippewa Valley Airport.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WISCONSIN, West</b>									
<b>Chippewa County</b> 4 N Cadott	25	0200CST			0	0	40K		Thunderstorm Wind (G60)
									Pop-up campers destroyed at local music festival.
<b>Chippewa County</b> Stanley	25	0202CST			0	0			Thunderstorm Wind (G55)
									Farm damaged. Estimated windspeed.
<b>Rusk County</b> Conrath	25	0204CST			0	0			Thunderstorm Wind (G55)
									Large trees blown down. Estimated windspeed.
<b>Eau Claire County</b> Fall Creek	25	0210CST			0	0			Thunderstorm Wind (G55)
									Trees blown down. Estimated windspeed.
<b>St. Croix County</b> Hudson	26	2316CST			0	0			Thunderstorm Wind (G56)
<b>Eau Claire County</b> Eau Claire	27	2145CST			0	0			Thunderstorm Wind (G50)
									Branches down. Estimated windspeed.
<b>WYOMING, Central and West</b>									
<b>WYZ002&gt;003-006-008-011&gt;013</b>			<b>North Absarokas - South Abasarokas - Teton/Moutains - Owl Creek Mountains - Wind River Mtns East - Lander Foothills - Wind River Basin</b>						
	03	0700MST			0	0			Heavy Snow
	04	1000MST							Late spring storm dropped 1 to 3 feet of snow on Beartooth Highway in northwest Park Co...10 inches of snow in the Owl Creek Mountains near Thermopolis and 7 to 9 inches of snow in the Wind River Mountains and Lander Foothills. Power outages in Fremont County due to downed power lines.
<b>Lincoln County</b> 5 E Kemmerer Muni Arprt	08	1010MST			0	0			Funnel Cloud
									3 Funnel clouds reported by airport employee.
<b>Lincoln County</b> 3 N Fontenelle	08	1308MST			0	0			Funnel Cloud
									Reported near Fontenelle Dam.
<b>Sweetwater County</b> Rock Spgs	08	1650MST			0	0			Funnel Cloud
									Reported south and west of Rock Springs near I-80.
<b>Natrona County</b> 8 NW Powder River	09	1330MST			0	0			Funnel Cloud
									Reported 5 miles north of Hell's Half Acre.
<b>Natrona County</b> 5 N Powder River	09	1355MST	0	20	0	0	0		Tornado (F0)
									Brief touchdown on ranch. Eyewitness saw 2 stock feeders lifted in the air.
<b>Johnson County</b> 22 S Buffalo	11	1040MST			0	0			Funnel Cloud
									Several funnel clouds.
<b>Johnson County</b> 15 NW Kaycee	11	1108MST	0	20	0	0	0		Tornado (F0)
									Spotter reported that 3 funnel clouds appeared to merge into 1 and briefly touched down.
<b>Johnson County</b> 10 NW Sussex	11	1148MST			0	0			Funnel Cloud
<b>Fremont County</b> 1 SE Crowheart	12	1647MST			0	0			Hail (1.00)
<b>Park County</b> Powell	13	1400MST			0	0			Flash Flood
									Flash Flooding in the Powell area, especially Garland Flats and golf course. At least one home flooded. No damage estimates available. Caused by slow-moving thunderstorm producing very heavy rain.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	

## WYOMING, Central and West

### **Big Horn County** 10 NE Lovell

13	1420MST				0	0			<b>Flash Flood</b>
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Flash flooding on Crooked Creek, near Horseshoe Bend area of Bighorn Canyon National Recreation Area. Mud slides across Hiway 37. Also, Lovell canal overflowed. Caused by slow-moving thunderstorms producing heavy rain.

### **Hot Springs County** 15 W Thermopolis Arpt

13	1500MST				0	0			<b>Funnel Cloud</b>
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Reported by pilot.

### **Fremont County** 2 S Riverton

13	1737MST				0	0			<b>Hail (1.00)</b>
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### **WYZ022** Rock Springs/Green River

19	0700MST				0	0			<b>Flood</b>
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0800MST  
Minor flooding reported on the Blacks Fork at Granger.

### **Sweetwater County** 22 SW Green River

21	1355MST				0	0			<b>Hail (0.75)</b>
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Reported near Buckboard Marina.

### **Washakie County** 1 SE Worland

22	1348MST				0	0			<b>Funnel Cloud</b>
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### **Fremont County** 35 SE Riverton

22	1530MST				0	0			<b>Thunderstorm Wind (G57)</b>
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At Sweetwater Station. Gusts to 65 mph estimated by Sheriff's Deputy, estimated to 80 mph by public.

### **Johnson County** Kaycee

22	1559MST				0	0			<b>Hail (0.75)</b>
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### **Johnson County** Kaycee

22	1610MST				0	0			<b>Funnel Cloud</b>
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Funnel cloud reported near Kaycee.

### **Park County** 30 NW Pahaska Tepee

26	0050MST				0	0			<b>Thunderstorm Wind (G50)</b>
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Trees blown down and mud slides across road in Yellowstone National Park.

## WYOMING, Extreme Southwest

NONE REPORTED.

## WYOMING, North Central

### **WYZ098**

#### **Northeast Bighorn Mountains**

02	2100MST				0	0			<b>Heavy Snow</b>
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04 0500MST  
A slow moving low pressure system over the Great Basin spread moisture over an unseasonably cold airmass which was in place over North Central Wyoming from the evening of June 2 through the morning of June 4. The result was a heavy snowfall in the Big Horn Mountains with 4 to 8 inches falling above 5000 feet.

### **Sheridan County** Sheridan

19	1930MST				0	0			<b>Funnel Cloud</b>
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2010MST  
Several funnel clouds were spotted during a thunderstorm in the Sheridan area.

### **Sheridan County** Sheridan

23	1520MST				0	0	10K		<b>Thunderstorm Wind</b>
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Wind gusts from a strong thunderstorm in Sheridan downed power lines and numerous trees.

## WYOMING, Northeast

### **WYZ057**

#### **Wyoming Black Hills**

02	2100MST				0	0			<b>Heavy Snow</b>
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03 0700MST  
A late season snow event resulted in three to eight inches of snow in the Wyoming Black Hills.

### **Weston County** 20 NW Newcastle

11	1120MST	0	.5		0	0			<b>Tornado (F0)</b>
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Atmospheric conditions over eastern Weston county resulted in some cold air funnels with brief touchdowns near the Newcastle area. No damage or injuries were reported with the tornadoes.

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time	Path	Path	Number of		Estimated		Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property	Crops	
<b>WYOMING, Northeast</b>									
<b>Crook County</b> 9 SE Sundance	13	1530MST 1535MST			0	0			Hail (1.00)
<b>Crook County</b> 9 SE Sundance to 10 SE Sundance	13	1530MST 1537MST	1.5	20	0	0	20K		Tornado (F1)
Damage was sustained to a three car garage, several bam roofs, several campers, and a home satellite dish.									
<b>Campbell County</b> Weston	22	1550MST			0	0			Hail (1.00)
<b>Campbell County</b> Weston	22	1550MST			0	0			Thunderstorm Wind (G52)
<b>Campbell County</b> 10 NE Weston	22	1555MST			0	0			Hail (1.75)
<b>Campbell County</b> Weston	22	1700MST 2000MST			0	0			Flash Flood
General flooding was reported near Weston with stock ponds overflowing and roads being threatened.									
<b>Crook County</b> 12 SW Sundance	22	1713MST			0	0			Hail (2.75)
<b>WYOMING, Southeast</b>									
<b>WYZ062-064&gt;066- 068&gt;070</b>	<b>North Carbon - North Laramie Range - Laramie Valley - Laramie Range - Goshen - Cheyenne Foothills - Pine Bluffs</b>								
	01	0730MST 1235MST			0	0			High Wind (G51)
Strong winds persisted across the Laramie Range and adjacent plains. At 934 am, a peak gust of 59 mph was reported at the Cheyenne Airport. Sustained west winds of 30 to 45 mph were reported across the rest of the area.									
<b>WYZ066</b>	<b>Laramie Range</b>								
	05	0200MST 1200MST			0	0	0	0	Winter Storm
A late season snow event dropped up to 7 inches of snowfall over the southern Laramie Range.									
<b>WYZ068</b>	<b>Goshen</b>								
	06	2330MST			0	0	0	150K	Extreme Cold
	07	1200MST							
Unseasonably cold temperatures occurred across Goshen County. Reports by the University of Wyoming Research Department said that the temperature dropped down to 26 degrees. 400 acres of corn were lost around the Torrington area due to the extrem e cold.									
<b>Goshen County</b> Torrington	07	1746MST 1748MST			0	0	0.50K	0	Thunderstorm Wind (G50)
A thunderstorm produced 58 mph wind gusts in Torrington, which broke 6 to 7 inch diameter tree limbs.									
<b>Platte County</b> 10 SW Chugwater to .5 SW Chugwater	09	1204MST 1237MST	11.5	10	0	0	0	0	Tornado (F0)
A tornado moved across open country south of Chugwater and dissipated. The sheriffs office said that the tornado only churned up some grass and dirt. A pilot who was flying 25 miles northwest of Cheyenne also observed the tornado on the ground.									
<b>Laramie County</b> 25 NW Cheyenne	09	1205MST 1213MST			0	0	0	0	Hail (0.75)
<b>Laramie County</b> Albin	09	1452MST 1459MST			0	0	0	0	Hail (0.75)
<b>Converse County</b> 33 N Douglas	13	1040MST 1042MST	0.2	10	0	0	0	0	Tornado (F0)
A bief tornado touched down to the northeast of Bill, WY.									
<b>Laramie County</b> (Cys)Cheyenne Arpt	13	1212MST 1222MST			0	0	0	0	Funnel Cloud
A funnel cloud hovered over the west side of the Cheyenne Airport for 10 minutes before moving back up into the clouds.									

# Storm Data and Unusual Weather Phenomena

June 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>WYOMING, Southeast</b>									
<b>Goshen County</b> Ft Laramie	13	1303MST 1310MST			0	0	0	0	Hail (0.75)
<b>Goshen County</b> 35 N Torrington to 35 NE Torrington	13	1357MST 1417MST	4	15	0	0	0	0	Tornado (F0)
A tornado moved east across open country, north of Torrington.									
<b>Carbon County</b> 7 E Rawlins	14	1606MST			0	1	0	0	Lightning
A motorcycle rider was hit by lightning as he was riding west on Interstate 80. He was struck in the back of the neck and the strike caused him to lose control of his motorcycle and crash into the median. The motorcyclist recieved a ruptured eardrum and burns to his eyes, chest and shoulder. The victim was taken to the hospital for treatment and released.									
<b>WYZ063</b>									
		<b>Snowy Range</b>							
	17	0400MST 1700MST			0	0	0	0	Heavy Snow
Heavy snow up to 8 inches fell over the higher elevations of the Snowy Range. The snow stranded travelers on the Snowy Range Pass. Two snowplows slid off of curves and into ditches as they tried to plow the pass.									
<b>Goshen County</b> Lingle	22	1933MST 1941MST			0	0	0	0	Hail (0.75)
<b>Goshen County</b> Torrington	22	1950MST 1959MST			0	0	0	0	Hail (0.75)
<b>Laramie County</b> 20 NE Cheyenne	30	2155MST 2159MST			0	0			Thunderstorm Wind (G52)
A storm produced wind gusts up to 60 mph, 20 miles northeast of Cheyenne.									

## Reference Notes:

### Fatality Location Abbreviations:

<b>BF</b>	<b>Ball Field</b>	<b>MH</b>	<b>Mobile Home</b>
<b>BO</b>	<b>Boating</b>	<b>OT</b>	<b>Other</b>
<b>BU</b>	<b>Business</b>	<b>OU</b>	<b>Outside/Open Areas</b>
<b>CA</b>	<b>Camping</b>	<b>PH</b>	<b>Permanent Home</b>
<b>EQ</b>	<b>Heavy Equipment/Construction</b>	<b>SC</b>	<b>School</b>
<b>GF</b>	<b>Golfing</b>	<b>TE</b>	<b>Telephone</b>
<b>IW</b>	<b>In Water</b>	<b>UT</b>	<b>Under Tree</b>
<b>LS</b>	<b>Long Span Roof</b>	<b>VE</b>	<b>Vehicle</b>

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

### Definition of Fujita Tornado Scale ( F Scale )

(F0) Gale tornado (40-72 mph) : Light damage; Some damage to chimneys; break branches off trees; push over shallow-rooted trees; signs and billboards damaged.

(F1) Moderate tornado (73-112 mph): Moderate damage; The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.

(F2) Significant tornado (113-157 mph): Considerable damage; Roofs torn from frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage; Roofs and some walls torn from well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

(F4) Devastating tornado (207-260 mph): Devastating damage; Well-constructed houses leveled; structure with weak foundations blown off some distance; cars thrown and large missiles generated.

(F5) Incredible tornado (261-318 mph): Incredible damage; Strong frame houses lifted from foundation and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 meters; trees debarked; incredible phenomena will occur.

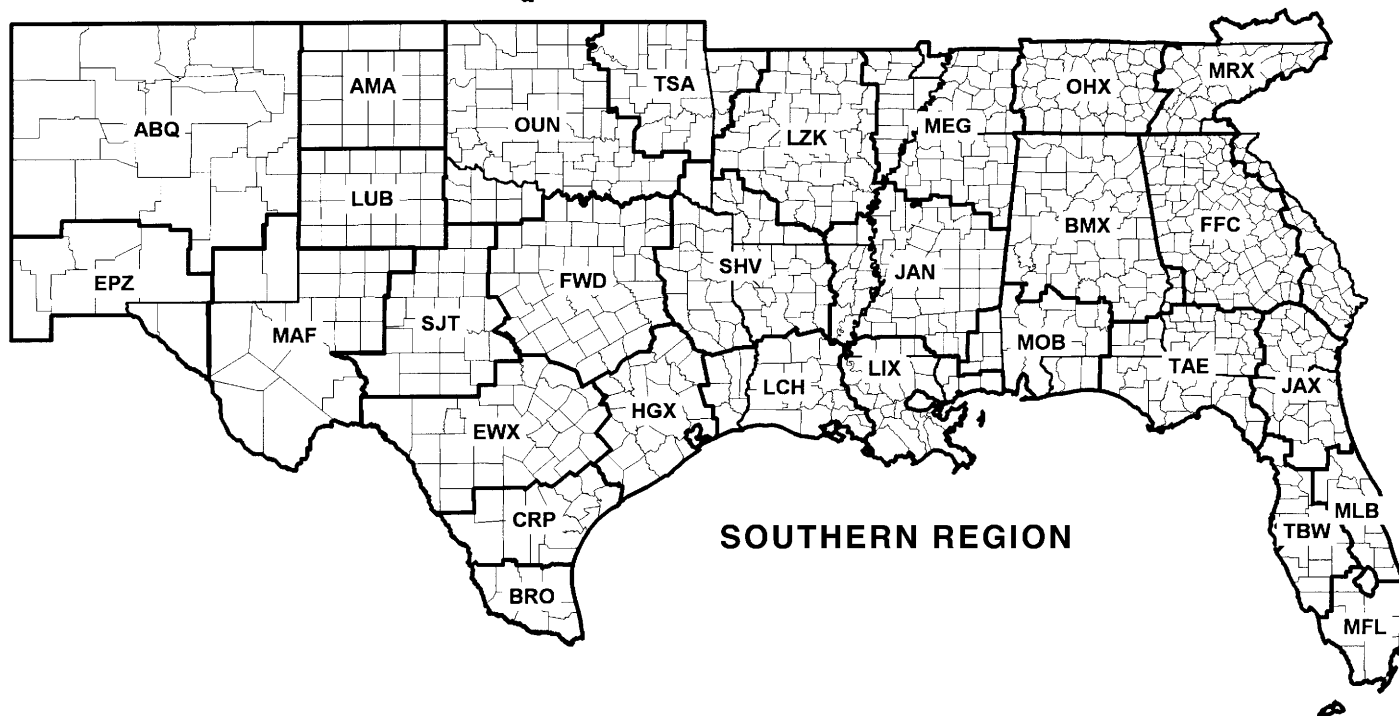
(F6-F12) (319 mph to Mach 1, the speed of sound): The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

*(F0+F1) Weak Tornado*  
*(F2+F3) Strong Tornado*  
*(F4+F5) Violent Tornado*

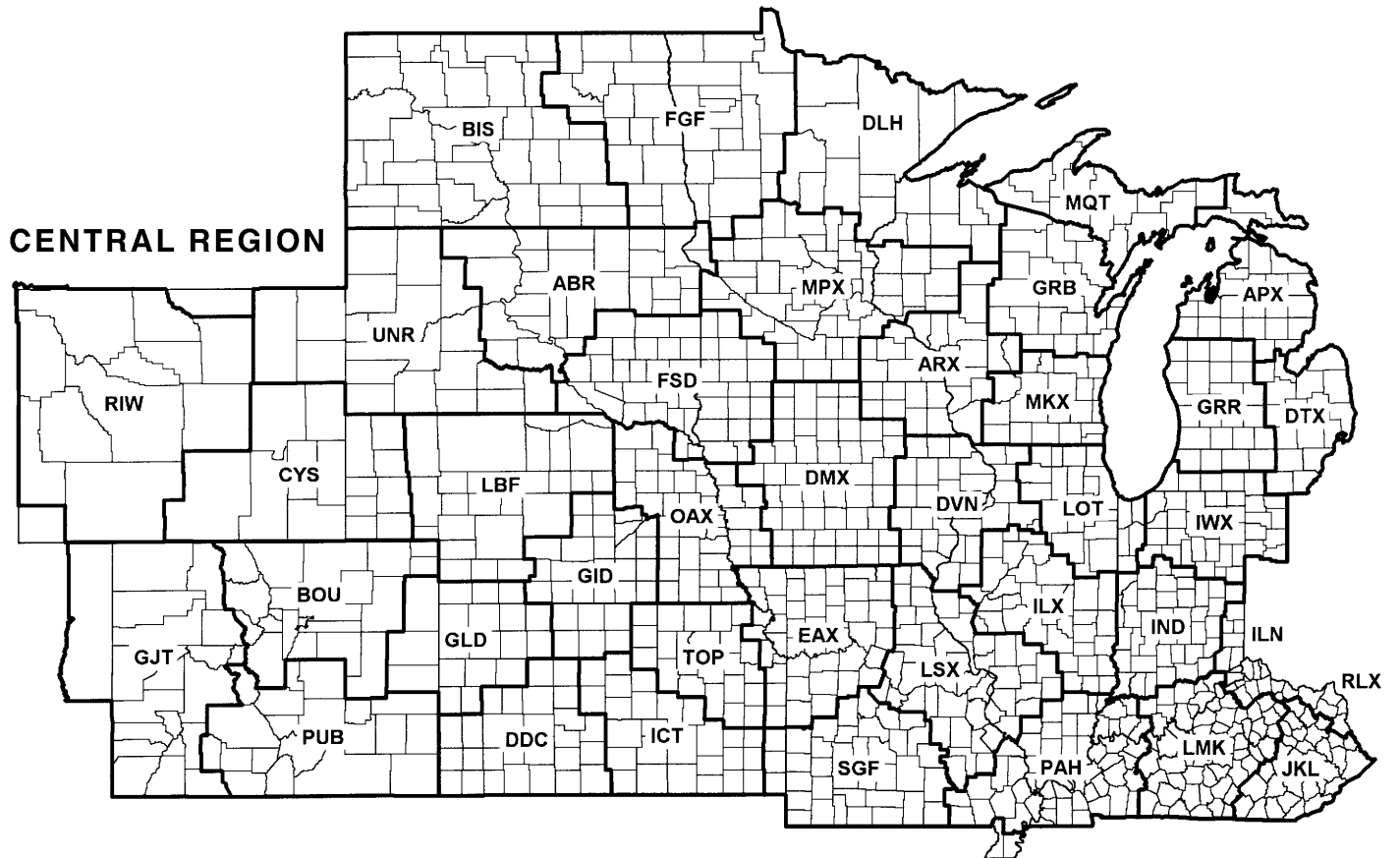
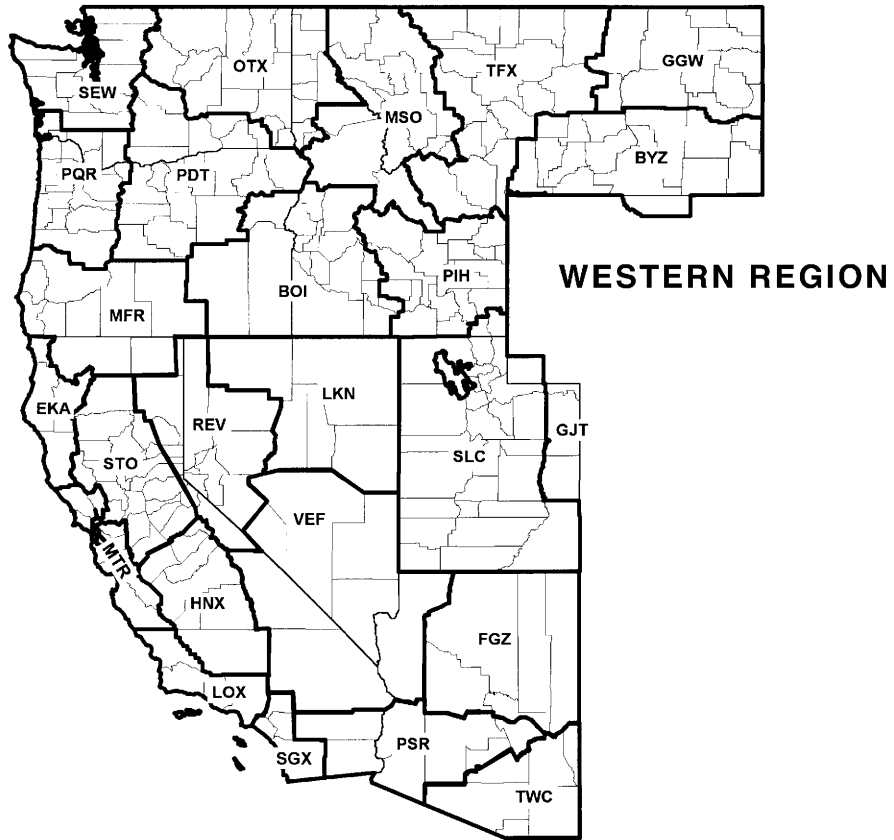


From J. Atmos. Sci., August 1981, p. 1517-1519

# COUNTY WARNING & FORECAST AREAS - MODERNIZED NWS

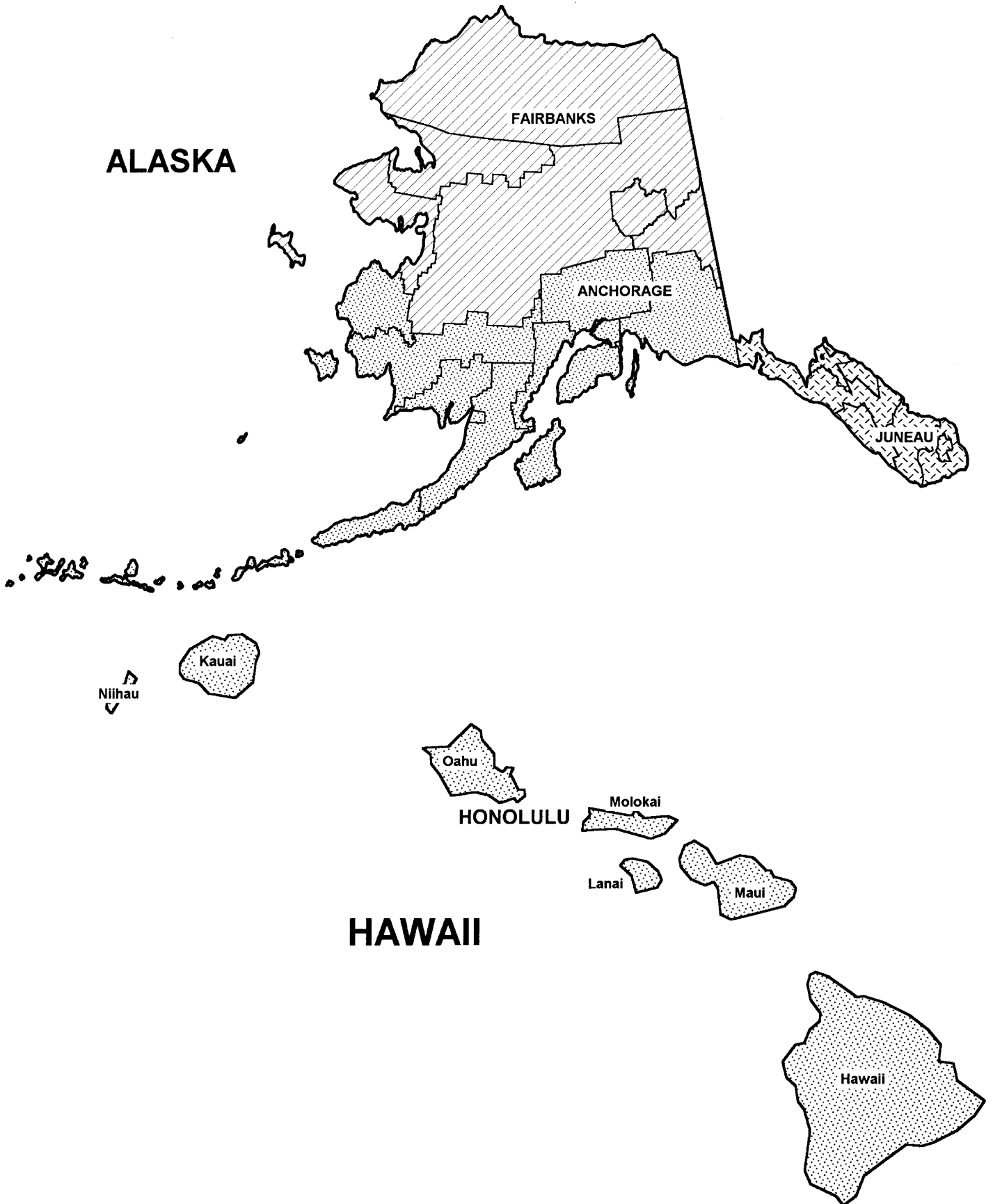


# COUNTY WARNING & FORECAST AREAS - MODERNIZED NWS





# MODERNIZED COUNTY WARNING AREAS



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