

Howard County South Portion

Countywide

Montgomery County

07

07

0230EST 0430EST

0230EST 0430EST

National Weather Service Storm Data and Unusual Weather Phenomena



Heavy Rain

Heavy Rain

Storm Data and Unusual Weather Phenomena June 2001 Time Local Path Length Path Number of Estimated Width Persons Damage DISTRICT OF COLUMBIA DCZ001 **District Of Columbia** 1200EST 1800EST 0 0 **Excessive Heat** High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the Mid Atlantic Region between June 12th and 13th. High temperatures soared to around 90 degrees and heat indices reached near 100 degrees through the period. District Of Columbia Countywide 1300EST 0 **Heavy Rain** The remnants of Tropical Storm Allison brought periods of heavy rainfall to the District between the afternoon of the 15th and the evening of the 16th. A total of 2.59 inches of rain fell in Georgetown. Three other spotters nearby reported between 2.00 and 2.25 **District Of Columbia** Countywide Flash Flood 22 2250EST 2359EST Rock Creek overflowed near East-West Highway. An area of showers and thunderstorms with very heavy downpours moved across the District during the late evening hours of the 22nd. The deluge of rain caused Rock Creek to overflow its banks near East-West Highway. DCZ001 **District Of Columbia** 27 30 1200EST 1800EST **Excessive Heat** High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the region between June 27th and 30th. High temperatures soared into the lower 90s and heat indices reached into the lower 100s through the period. MARYLAND, Central **Montgomery County** Poolesville 02 1720EST 15K **Thunderstorm Wind** Numerous trees were downed and a deck was damaged. A thunderstorm produced a localized area of high winds over the Westmond and Seneca Chase Subdivisions between 6 and 7 PM EDT on the 2nd. Almost every home on Dowden Circle lost trees and shrubs. Many large trees were snapped or uprooted and one homeowner lost siding and a deck. **Washington County** Countywide 07 0030EST 0300EST 0 0 **Heavy Rain Allegany County West Portion** 150K Flash Flood 07 Several roads and creeks were flooded and some structures were damaged. **Anne Arundel County** 0230EST 0430EST **North Portion** 07 0 **Heavy Rain**

0

0



North Portion

National Weather Service Storm Data and Unusual Weather Phenomena



June 2001

		Time Local/	Path Length	Path Width		ber of		nated nage		June 200
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	
MARYLAND, Cent	<u>ral</u>									
Prince George'S Count	tv									

MDZ009 Montgomery

07

0700EST Flood 1900EST

The Seneca Creek at Dawsonville crested at 7.95 feet. Bankful level is 7.5 feet.

An area of showers and thunderstorms with very heavy rainfall moved across western and central Maryland during the early morning hours of the 7th. The heaviest rain fell across western Allegany County where flash flooding was reported. The hardest hit area included Westernport, McCoole, Barton, and Rawlings. Streets and low lying areas became makeshift rivers as creeks overflowed their banks. Four homes received major damage and more than 40 basements were flooded. Flooded or damaged roads included Route 220 (McMullen Highway), Llewelyn Avenue, Tri-Towns Plaza Road, and George's Creek Road. A rock slide was reported on Route 135 in Westernport. The following streets in Westernport were damaged by flooding: Lincoln, Main, Central, McKinley, Wood, Poplar, Stoney Run, Potomac Hollow, Walnut, and Hickory. Several bridges leading to private property from McMullen Highway were washed out or damaged. Yard flooding, minor exterior damaged, or erosion was reported on properties along the following roads: Biddle Drive, McMullen Highway, Ketterman Lane, Abbey Lane, Red Rock Lane, McKinley Street, Gordon Street, Wood Street, Church Street, Greene Street, Creekside Drive, Mill Run Road, New George's Creek Road, Mt. Spring Road, and Donna Street. George's Creek near Westernport rose above the flood stage of 8.0 feet at 3:45 AM EDT, crested at 9.19 feet at 4:45 AM, and dropped below food stage by 600 AM. Rainfall totals included 4.9 inches at George's Creek near Westernport, 4.1 inches at McCoole Pumping Station, 3.2 inches at Biers Lane and Savage River Dam, 2.6 inches at the Oldtown Treatment Plant, 2.37 inches in Frostburg, and 2.3 inches at Wrights Crossing Pump Station.

Heavy Rain

In Washington County, rainfall totals included 3.41 inches in Knoxville and 2.63 inches in Sharpsburg. In Montgomery County, rainfall totals included 2.64 inches in Olney, 2.56 inches in Washington Grove, 2.42 inches in Gaithersburg, 2.22 inches in Potomac, 2.15 inches in Rockville, and 2.12 inches in Damascus. A spotter in Chevy Chase recorded nearly one half inch of rain in 5 minutes. The deluge caused Seneca Creek at Dawsonville to overflow its banks between 715 AM and 700 PM EDT. Bankful stage is 7.5 feet and the river crested at 7.95 feet around 9 AM. In Howard County, 2.60 inches was reported in Laurel and 2.20 inches fell in Columbia. In Anne Arundel County, heavy rain flooded Brock Bridge Road near Laurel, Fontron Drive in Selby on the Bay, King George Street in Annapolis, and Defense Highway near Parole. Rainfall totals included 2.16 inches at Davidsonville, 2.10 inches in Annapolis, and 1.76 inches at Baltimore-Washington International Airport. In Prince George's County, minor flooding was reported in Seat Pleasant and on Martin Luther King Highway. Rainfall totals include 2.22 inches in South Bowie and 2.00 inches in Greenbelt

MDZ002>007-009>011-013>014-016>018

Allegany - Washington - Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

1200EST 1800EST **Excessive Heat**

High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the Mid Atlantic region between June 12th and 13th. High temperatures soared to around 90 degrees and heat indices reached near 100 degrees through the period.

Carroll County Northeast Portion

0 5K Thunderstorm Wind A microburst estimated between 60 and 70 MPH downed trees and power lines.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed		Estimated Damage Property Crops	June 2001 Character of Storm
MARYLAND, Central								
Carroll County 4 SE Manchester	12 Dime	1850EST sized hail fell.			0	0		Hail(0.75)
Baltimore County North Portion	12 Trees	1900EST 1930EST were downed.			0	0	2K	Thunderstorm Wind
Baltimore County Countywide	Thund 12th. areas. sized	In Carroll Count Some residents i hail. In Baltimor lowned near the F	il, gusty wind y, a microburs in this area we e County, high	s, and freque st estimated a ere without po	nt lightning t 60 to 70 Nower for two ned trees on	MPH down days. A to Route 3	ned trees and power spotter just southeas 30 near the Carroll C	Lightning Maryland during the early evening of the lines in the Hampstead and Manchester tof Manchester reported marble to dime county line. Trees and power lines were rike took out a communications tower at
Calvert County Countywide	15	1300EST 2100EST			0	0		Heavy Rain
Charles County East Portion	15	1300EST 2100EST			0	0		Heavy Rain
Prince George'S County Countywide	15	1300EST 2100EST			0	0		Heavy Rain
St. Mary'S County Countywide	15th a at Jug 3.7 in down inches	and the evening of Bay Wetlands. In the ches of rain fell. Pour which floode	f the 16th. In In Calvert Cou A spotter be ed the Route 2	Prince Georg anty, between tween Waldo 231 and 5 inte	e's County, 1.5 and 3.5 orf and Hugersection. In	3.05 inches of hesville en St. Mary	es of rain was reported frain was measured stimated an inch of by's County, rainfall to	Heavy Rain Maryland between the afternoon of the ed near Brandywine and 2.27 inches fell Across Eastern Charles County, 1.5 to rain fell in only 20 minutes during one stals included 3.72 inches in Ridge, 2.45 bankful across the country, including the
Montgomery County Gaithersburg	20 Eight	1900EST y people were disj	placed after a	lightning fire	0 severely da	0 maged an	2M apartment complex.	Lightning The event time was estimated.
Baltimore City (C) Baltimore	20 Power	1930EST 1945EST r lines and 100 tre	es were down	ed.	0	0	10K	Thunderstorm Wind
Howard County Ellicott City	20 Trees	1930EST and power lines v	vere downed.		0	0	2K	Thunderstorm Wind
Baltimore County Catonsville Manor	20	1940EST			0	0		Lightning





Time Path Path Number of Estimated Docation

Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MARYLAND, Central

The roof of a house caught fire after lightning struck the building

Prince George'S County Lanham

Frederick County

20 2100EST 0 0 0.50K Thunderstorm Wind

Two downed trees blocked Cipriano Road.

Scattered thunderstorms that produced damaging winds, heavy rainfall, hail, and frequent lightning moved through the area between 8 and 11 PM EDT on the 20th. In Montgomery County, lightning struck an apartment complex in Gaithersburg and started a fire that displaced 80 people. The complex sustained 2 million dollars in damage. Pea sized hail was reported in Rockville. In Howard County, trees and power lines were downed in Ellicott City. In Baltimore County, high winds downed power lines and 100 trees across the city of Baltimore. Over 15,000 city customers lost power during the storm. In Cantonsville, lightning struck a home and started the roof on fire. In Prince George's County, two trees were downed across Cipriano Road. Marble sized hail was reported in Landau

Frederick County Frederick 21 1529EST 0 0 Lightning A house was damaged by a lightning strike. Prince George'S County Countywide 21 1630EST 0 0 Heavy Rain Indian Creek was swollen by heavy rains.	Frederick	21 Many to	1515EST rees were downed onto roads and wires.	0	0	2K	Thunderstorm Wind
A house was damaged by a lightning strike. Prince George'S County Countywide 21 1630EST 0 0 Heavy Rain	Frederick County						
Countywide 21 1630EST 0 0 Heavy Rain 1800EST	Frederick			0	0		Lightning
1800EST	Prince George'S County						
Indian Creek was swollen by heavy rains.	Countywide		1800EST	0	0		Heavy Rain
		Indian (Creek was swollen by heavy rains.				
Frederick County	Frederick County						
New Market 21 1700EST 0 0 Lightning Three homes and a correct year demand by lightning in the New Market and Green Velley areas.	New Market			0	-	rat and Cusan I	0 0
Three homes and a garage were damaged by lightning in the New Market and Green Valley areas.		Tillee II	ionies and a garage were damaged by right	iiig iii tile iv	ew Mair	tet and Green	valley aleas.
Frederick County	Frederick County						
New Market 21 1700EST 0 0 2K Thunderstorm Wind Many trees were downed onto roads and wires.	•			0	0	2K	Thunderstorm Wind
ivially trees were downed onto roads and wires.		Many u	rees were downed onto roads and wires.				
Prince George'S County							
Laurel 21 1710EST 0 0 0.50K Thunderstorm Wind A downed power pole blocked a road.	Laurel			0	0	0.50K	Thunderstorm Wind
• •	n: a lac		Farrage Range				
Prince George'S County Laurel 21 1717EST 0 0 Hail(1.00)		21	1717ECT	0	0		Usil(1 00)
Nickel to quarter sized hail fell.	Laurei			U	U		11an(1.00)
Howard County	Howard County						
West Friendship 21 1720EST 0 0 2K Thunderstorm Wind	West Friendship	21	1720EST	0	0	2K	Thunderstorm Wind
Trees were downed onto roads.		Trees w					

Thunderstorms that produced damaging winds, frequent lightning, large hail, and heavy downpours moved across central Maryland between 400 PM and 830 PM EDT on the 21st. In Frederick County, homes were damaged by lightning in Frederick, Green Valley, and New Market. High winds downed trees onto wires and roadways in the Frederick, Ballenger Creek, New Market, and Green Valley areas. In Howard County, trees were downed onto roads in West Friendship. In Prince George's County, nickel to quarter sized hail was reported in Laurel. A power pole was downed across the intersection of Cherry Lane and Van Dusen Road just north of Laurel Lake. Heavy rainfall caused Indian Creek to overflow its banks. Route 1 at Indian Creek was flooded. A culvert leading to Laurel Lake was also overwhelmed with runoff and overflowed.





		Time Local/	Path Length	Path Width	Numb Pers		Estimated Damage	June 2001
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm
MARYLAND, Central	<u> </u>							
Washington County								
Countywide	22	1500EST 1700EST			0	0		Heavy Rain
Frederick County								
Countywide	22	1515EST 1715EST			0	0		Heavy Rain
Frederick County								
Frederick	22 Nicke	1525EST l sized hail fell.			0	0		Hail(0.88)
Frederick County		4 < 4 0 27 0 27					0.5077	
5 NW Frederick	22 Trees	1610EST were downed in t	he Putman Ro	ad area.	0	0	0.50K	Thunderstorm Wind
Allegany County								
Southwest Portion	22	1630EST 1830EST			0	0		Flash Flood
	Flood	ing was reported	in Rawlings ar	nd on Route 2	220.			
Frederick County								
Kemptown	22 A piar	1715EST no shop was dama	aged by a light	ning fire.	0	0	20K	Lightning
Montgomery County								
Countywide	22	1800EST 2359EST			0	0		Flash Flood
	Nume	rous roads were f	looded and im	passable and	3 swift wat	er rescues	s were reported.	
Montgomery County								
Poolesville	22	1800EST			0	0	120K	Lightning
	A ligh	itning fire damage	ed a home and	one person w	as injured v	while tryii	ng to extinguish the	flames.
Carroll County								
Mt Airy	22	1900EST	_41		0	0		Lightning
	Lighti	ning started a fire	at a garage wi	nen contame	ı severai vii	mage cars		
Harford County East Portion	22	1900EST			0	0		Heavy Rain
East I of tion	22	2030EST			U	U		Heavy Kalli
Carroll County								
Countywide	22	2030EST 2300EST			0	0		Flash Flood
	A few	roads and low ly	ing areas were	e flooded and	rushing wa	ter downe	ed trees on Gillis Fall	ls Road.
Howard County								
Countywide	22	2100EST			0	0		Flash Flood
	Roads	2359EST rapidly flooded a	and several mo	otorists had to	be rescued	from thei	ir vehicles.	
Carroll County								
Westminster	23 A gara	0030EST age apartment wa	s damaged by	a lightning fi	o re.	0	70K	Lightning
	During moved contai heavie	g the afternoon of d very slowly ear ned very heavy rest rain fell across	of the 22nd, n st across north rainfall, freque the southwest	umerous sho hwest and no ent lightning, eern portion o	wers and the orth central and occasion the county	Marylandonally prov. Several	d through the pre-d oduced high winds a basements were floor	east of the Appalachian Mountains and awn hours of the 23rd. These storms and large hail. In Allegany County, the oded in Rawlings and parts of Route 220 Washington County, heavy downpours

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were covered in water. Heavy rainfall downed a tree onto a power line in Frostburg. In Washington County, heavy downpours downed trees in the western portion of the county. In Frederick County, nickel sized hail was reported on Route 40 west of Frederick. In Frederick pea sized hail fell and a wind gust of 50 MPH was estimated. Trees were downed by high winds in the Putman Road area 5 miles north-northwest of Frederick. Pea sized hail was reported in Poolesville. A spotter in Braddock Heights





Time Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MARYLAND, Central

reported 2 inches of rainfall in 20 minutes. At Point of Rocks, the railroad crossing on Route 28 was flooded. A three story mansion was struck by lightning and the resulting fire caused \$300,000 damage. Another lightning fire in Kemptown caused \$20,000 damage. In Carroll County, some roads and low lying area were flooded in the Westminster and Melrose areas. Rainfall totals included 4.05 inches in Manchester and 2.41 inches in Westminster. Gunpowder River overflowed west of Linesboro. Rushing water downed power lines in the northern part of the county. Lightning started a garage on fire and \$70,000 damage was reported.

In Montgomery County, heavy rainfall caused roads to flood so quickly that three people had to be rescued from their cars. The hardest hit areas were in the vicinity of Olney, Wheaton, and Brighton Dam. Numerous roads had to be closed until the water subsided including Brighton Dam Road, Emory Lane, Muncaster Mill Road, Route 97, and West Willow Road. Route 97 was closed after the Hawlings River overflowed just north of Brookville. Rainfall totals included 5.00 inches in Brookville, 4.72 inches in Olney, 4.67 inches in Aspen Hill, 4.00 inches at Brighton Dam, 3.27 inches in Layhill, 2.68 inches in Potomac, and 2.46 inches in Bethesda. In Poolesville, a man was burned on his face as he tried to put out a lightning fire in a three story mansion. A garage with several vintage cars also caught fire after lightning hit the structure. In Howard County, high water closed Brighton Dam Road, Guilford Drive, Route 108, Route 216, Sheppards Lane, Green Bridge Road, Woodstream Drive, Old Frederick Road, Carrs Mill Road, Bethany Lane, Cedar Lane, Route 29, and Old Columbia Road. North Trotter Road was washed out by the Middle Patuxent River. Several people had to be rescued from their vehicles after roads quickly flooded. A mudslide closed Marriottsville Road in Ellicott City. Rainfall reports included an estimate of 5 inches just northeast of Clarkesville, 4.10 inches in Clarkesville, and 3.30 inches in Cooksville. In Harford County, heavy rain fell mainly across the far eastern portion of the county. Up to 7 inches of rainfall was reported at the Conowingo Dam on the Susquehanna River. Minor flooding was reported near Havre de Grace.

MDZ002>007-009>011-013>014-016>018 Allegany - Washington - Frederick - Carroll - Northern Baltimore - Harford - Montgomery - Howard - Southern Baltimore - Prince Georges - Anne Arundel - Charles - St. Mary'S - Calvert

27 1200EST 1 0 Excessive Heat

High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the Mid Atlantic region between June 27th and 30th. High temperatures soared into the lower 90s and heat indices reached into the lower 100s through the period. Two deaths in Baltimore were related to the heat wave. On the 30th, a 34-year-old man died from a combination of heart problems, cocaine use, and exposure to the heat. On July 1st, when temperatures still reached near 90 degrees, a 51-year-old man died from heat exhaustion and heart problems. M510T

Anne Arundel County Severna Park

29 1337EST 0 0 150K Thunderstorm Wind

Four homes were damaged by downed trees.

A thunderstorm that produced damaging winds moved through northern Anne Arundel County during the afternoon of the 29th. The storm produced a brief downburst of winds in excess of 60 MPH over the Severn Heights and Belleview Estates area of Severna Park and Arnold. Four homes received a total of \$150,000 damage after large trees were downed onto them. One of the damaged homes was on Hillcrest Lane and the others were on Rio Lane. A 125-foot-tall tree was downed across Hillcrest Lane, blocking the only way out of the development. Other large trees and branches were felled across yards. Power outages plagued these communities for over 24 hours.

Allegany County Countywide

le 30 1605EST 0 0 5K Thunderstorm Wind

Numerous trees were downed.

Prince George'S County 2 SW Oxon Hill

30 1615EST 0 2 Lightning

Two men were struck by lightning while on a boat dock

Anne Arundel County Annapolis

30 1640EST 0 0 Thunderstorm Wind (G52)

A wind gust of 60 MPH was estimated.

Scattered thunderstorms with damaging wind and dangerous lightning moved across central Maryland between 4 and 6 PM EDT on the 30th. In Prince George's County, two men were hospitalized after being struck by lightning while on a private dock in Fort Washington. They had just come ashore and were securing their boat as the storm hit. Both men, ages 35 and 21, were knocked on their back by the bolt and were momentarily paralyzed. There were holes in their clothing where the electricity passed through.





Time Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MARYLAND, Central

They both had reddish streaks resembling sunburn stretching from their left armpit to their right leg. They were treated for 2nd degree burns at a local hospital. One of the victims had been struck by lightning once before in 8th grade while camping. In Anne Arundel County, numerous trees were downed by high wind. Poplar trees were downed by Annapolis Mall and power outages were reported. A wind gust of 60 MPH was estimated in Annapolis where pea sized hail fell. A wind gust of 45 MPH was reported in Rivera Beach where pea sized hail was also spotted. Thomas Point Lighthouse on the Chesapeake Bay recorded a wind gust of 44 MPH

VIRGINIA, North

Albemarle County						
Countywide	05	1630EST 1800EST	0	0		Heavy Rain
	Route	20 was flooded by heavy downpours.				
Nelson County						
Countywide	05	1630EST 1800EST	0	0		Heavy Rain
	A truc	k hydroplaned on a flooded roadway and lar	nded in a sw	ollen cre	ek.	
Waynesboro (C)						
Waynesboro	05	1630EST 1800EST	0	0		Heavy Rain
	Roady	way flooding was reported.				
Augusta County						
Dooms	05	1700EST	0	0		Lightning
	Lighti	ning sparked a garage fire.				
Augusta County						
East Portion	05 A pou	1700EST wer transformer was damaged by lightning.	0	0		Lightning
	A pov	ver transformer was damaged by fighting.				
Waynesboro (C)						
Waynesboro	05 A pov	1700EST ver line was downed.	0	0	0.50K	Thunderstorm Wind
	A pov	ver fine was downed.				
Nelson County						
Countywide	05 A tree	1745EST was downed onto Wilson Road.	0	0	0.50K	Thunderstorm Wind
N.I. C. A	111100	was downed onto wilson Hoad.				
Nelson County	05	1745EST	0	0	10077	Ti-banin -
Faber		atning fire destroyed a home.	0	0	100K	Lightning
Albemarle County		-				
Keene	05	1750EST	0	0	5K	Thunderstorm Wind
		1800EST	•	v		

Trees were downed about 10 to 15 miles from Keene.

Thunderstorms with heavy rainfall, gusty winds, and frequent lightning moved through the southern Shenandoah Valley during the evening of the 5th. In Augusta County, a power transformer was damaged by lightning resulting in the loss of power to 4600 residents. Another bolt started a garage fire near Dooms. In Waynesboro, a felled tree branch downed a power line. Heavy downpours flooded city streets. In Albemarle County, high winds downed trees between 10 and 15 miles from Keene. Pea sized hail was reported near Charlottesville. Heavy downpours flooded low lying areas and Route 20 was covered in water. In Nelson County, high winds downed a tree on Wilson Road. Heavy downpours caused small creeks to overflow their banks briefly. A trucker who drove across a flooded roadway hydroplaned and his vehicle flipped into a creek. No injuries were reported. A home in the Faber area was hit by lightning and the ensuing fire burned the structure to the ground.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Estimated Damage Property Crops	June 2001 Character of Storm
VIRGINIA, North								
Greene County Southeast Portion	06	1300EST 1430EST			0	0		Heavy Rain
Harrisonburg (C) Harrisonburg	06 Power	1413EST	ed.		0	0	2K	Thunderstorm Wind
Rockingham County Port Republic	06 Power	1415EST r lines were downer	ed.		0	0	2K	Thunderstorm Wind
Page County 5 E Shenandoah	06 A mic	1430EST roburst estimated	at 60-70 MPF	I damaged a	0 home, carp	0 port, shed,	20K car, and trees.	Thunderstorm Wind
	moved power MPH adjace proper thrown	d across Rockingler lines were down- damaged several ent to Jollett Road- rty where part of an east about 100 yeene County, hear	ham and extre ed in Harrison buildings in J (Route 759) j a roof was blo yards onto the	eme southern aburg and Po ollett Hollow just south of own off a ho roof of a ho	n Page Cou ort Republic v about 5 n Naked Cre me and a c ome. Sever	inty product. In Page niles east of the Baptist ar port was all trees we	ced winds in excess County, a microburs of Shenandoah. The Church. The damag s removed from its for ere uprooted and sever	O PM EDT on the 6th. One storm that of 55 MPH. In Rockingham County, at of wind estimated between 60 and 70 wind damage began at a small clearing ge path continued northeast onto private bundation. Pieces of the structure were aral outbuildings were destroyed nearby. To flood in the southeast portion of the
VAZ025>031-036>042- 050>057	Rappa King (12 13 High p 12th a Arling	Ahannock - Fauq George 1200EST 1800EST pressure in combinant 13th. High te ton National Cen	nation with so emperatures so netery, eight 1	utherly wind pared to arou 4-year-old to	• Culpeper 0 s brought h and 90 degreer ourists were	ot, hazy, arees and he	nd humid conditions eat indices reached ne by the heat and hum	Ibemarle - Greene - Madison - Arlington - Stafford - Spotsylvania - Excessive Heat to the Mid Atlantic region between June ear 100 degrees through the period. At midity during the afternoon of the 12th.
	Two s	tudents had to be	treated at an a	rea hospital	and six oth	ers were tr	eated on-site.	
Rockingham County West Portion	13	1200EST			0	0		Heavy Rain
	water		ls after the dov	vnpour. On	Dundore M	ern portion Iountain 2.	.13 inches of rain fell	nty between 100 and 330 PM. A bit of in one hour and by the end of the storm
Frederick County Southwest Portion	20 A hou	1615EST ase caught fire after	er being hit by	lightning.	0	0		Lightning
Frederick County Middletown	20 Electri	1620EST ical wires were do	owned onto M	ain Street.	0	0	0.50K	Thunderstorm Wind
Warren County Front Royal	20 Severa	1640EST al trees were down	ned.		0	0	1K	Thunderstorm Wind





		Time Local/	Path Length	Path Width		ber of sons	Estir Da	nated mage	June	2001
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	
VIRGINIA, North										
Madison County										
2 N Madison	20	1945EST			0	0	0.50K		Thunderstorm Wind	
	Two t	rees were downed	l onto Route 2	31.						
Greene County										
1 E Standardsville	20	2000EST			0	0			Hail(1.00)	
	Quarte	er sized hail fell.							, ,	
Albemarle County										
4 SE Crozet	20	2020EST			0	1			Lightning	
	A mar	n talking on a core	iless telephone	e in a baseme	ent was stru	ick by ligh	tning.		0 0	
Albemarle County										
West Portion	20	2100EST			0	0	5K		Thunderstorm Wind	
***************************************		2145EST			Ü	Ü			111111111111111111111111111111111111111	
	Down	ed trees and utilit	y lines blocked	d roads.						
Charlottesville (C)										
Charlottesville	20	2100EST			0	0	5K		Thunderstorm Wind	
		2145EST								

Trees and power lines were downed.

Scattered thunderstorms that produced damaging winds, hail, and frequent lightning moved through the area between 5 and 11 PM EDT on the 20th. In Frederick County, high winds downed electrical wires onto Main Street in Middletown. Between Middletown and Stephens City, a house on Meeting House Drive caught on fire after being struck by lightning. In Warren County, several trees were downed in Front Royal. A wind gust of 47 MPH was recorded at Catlett Mountain Road just southwest of town. In Madison County, two trees were downed across Route 231. In Greene County, quarter sized hail fell just east of Standardsville.

In Albemarle County, trees and power lines were downed onto roads from the city of Charlottesville westward. The Crozet, White Hall, Ivy Road, and Mount Eagle areas reported power outages. A lightning strike 8 miles west of Charlottesville struck a telephone wire outside a home, traveled inside the structure and struck a young man inside. The man was in his basement talking on a cordless phone when he was struck and was momentarily knocked unconscious. He woke up on the basement floor on his back and his damaged phone was found 5 feet away. The victim had trouble breathing when he regained consciousness and his ear hurt. He suffered short term memory loss up to 3 weeks after the accident. It is believed the victim was struck by the bolt as it passed through pipes in the basement floor.

Augusta County						
Countywide	21	1830EST 2100EST	0	0		Heavy Rain
Nelson County						
Countywide	21	1830EST 2100EST	0	0		Heavy Rain
	A total	of 2.99 inches of rain fell in one hour at Mont	ebello Fish			
Page County						
Countywide	21	1830EST 2100EST	0	0		Heavy Rain
Shenandoah County						
South Portion	21	1925EST 1935EST	0	0	10K	Thunderstorm Wind
	Numer	ous trees were downed.				
Shenandoah County						
Countywide	21	1930EST 2230EST	0	0		Flash Flood
	Severa	l roads were flooded.				



Orange County

Countywide

Winshasten (C)

National Weather Service Storm Data and Unusual Weather Phenomena



Flash Flood

Location	Date	Time Local/ Standard	Path Path Length Width (Miles) (Yards)		Number of Persons Killed Injured		Estimated Damage Property Crops		J Character of Storm	une 200.
VIRGINIA, North										
Rockingham County 2 N Grottoes	21 Most	2000EST of the tin roof of a	a mobile home	was ripped (0 off and tree	0 s were do	20K wned.		Thunderstorm Wind	
Albemarle County Northeast Portion	21 Utility	2030EST y lines were down	ed onto Proffit	Road.	0	0	5K		Thunderstorm Wind	
Warren County 2 SW Front Royal	21 Trees	2149EST were downed and	l an aircraft wa	s damaged.	0	0	2K		Thunderstorm Wind	

Roads were flooded in the town of Orange.

Thunderstorms that produced damaging winds and very heavy downpours moved across northern Virginia between 7 PM EDT on the 21st through 2 AM EDT on the 22nd. In Shenandoah County, numerous trees were downed in the southern portion of the county, including the community of Conicville. High winds ripped three quarters of a tin roof off a mobile home on Port Republic Road north of Grottoes. The remains of the tin roof were rolled into a ball and thrown 50 feet from the structure. A few trees were downed near the home but neighbors nearby did not report any damage. Heavy downpours flooded portions of Routes 611, 701, 724, 691, 672, 675, 1419, 667, 663, and 600. The Shenandoah River and Stoney Creek overflowed their banks in a few locations. A total of 3.04 inches of rain was reported at Jerome Gap. In Warren County, a wind gust of 53 MPH was recorded on Catlett Mountain Road. Trees were downed int the vicinity and a plane was damaged at the Warren County Airport nearby. In Page County, 3.67 inches of rain was reported at Rocky Branch, 2.14 inches was reported at Skyland, and 2.05 inches fell at Ida. In Augusta County, a total of 3.94 inches of rain fell at Montebello and 2.86 inches fell at Tom's Branch. In Nelson County, 2.87 inches of rain was recorded at Montebello Fish in 60 minutes. By the end of the storm the total grew to 3.70 inches. In Albemarle County, high winds downed utility lines on Proffit Road near Polo Grounds Road. Power outages were reported in Charlottesville. In Orange County, heavy rainfall flooded roads in the town of Orange. Between the 20th and 22nd, portions of the county received up to 4 inches of rain.

winchester (C)						
Winchester	22	1300EST 1530EST	0	0		Heavy Rain
Frederick County						
Gainesboro	22	1315EST	0	0		Hail(0.75)
	Dime	sized hail was reported 6 miles r	northwest of Winchester.			` ,
Frederick County						
5 S Gore	22	1315EST	0	0		Lightning
	An en	nergency services transmitter on	North Mountain was kno	cked of	f line by lightning.	0 0
Frederick County						
3 SW Hayfield	22	1330EST	0	0		Lightning
	Two l	nomes were damaged by lightnin	g.			88
Frederick County						
Countywide	22	1430EST	0	0	400K	Flash Flood
		1800EST	-			

Shawneeland's only access road was washed out, numerous roads were flooded, Back Creek and Hogue Creek overflowed, and the Camp Rock Enon area was evacuated.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crops	June 2001 Character of Storm
VIRGINIA, North								
Clarke County Countywide	22	1500EST 1700EST			0	0		Heavy Rain
Culpeper County West Portion	22 Two tr	1530EST ees were downe	d.		0	0	2K	Thunderstorm Wind
Shenandoah County Countywide		1530EST 2300EST rose rapidly on dges were flood					600K way, a home was v	Flash Flood washed off its foundation, numerous roads
Warren County Northwest Portion	22 Morga	1550EST 1700EST n's Ford Road a	nd Route 55 wo	ere closed by	0 flood water	0		Flash Flood
Fauquier County Marshall	22 Trees v	1605EST were downed.			0	0	1K	Thunderstorm Wind
Nelson County Lovingston	22 Roads	1645EST 1800EST near Nelson Co	unty High Scho	ool were floo	0 ded.	0		Flash Flood
Loudoun County Countywide	22 Numer	1655EST 2359EST rous roads and w	aterways flood	led, a roof pa	0 artially colla	0 psed, and	200K three swift water r	Flash Flood escues were reported
Loudoun County Ashburn	22 Hail gr	1715EST reater than dime	size was repor	ted.	0	0		Hail(0.80)
Loudoun County Arcola	22 Hundredestroy		re uprooted or	snapped, six	0 houses wer	0 e damage	75K d, and four barns/	Thunderstorm Wind machine sheds were severely damaged or
Loudoun County 4 W Ashburn	22 Power	1730EST lines were down	ned onto Belmo	ont Ridge Ro	0 ad.	0	0.50K	Thunderstorm Wind
Rockingham County North Portion	damag	ed a significant	amount of priv	ate property,	forced 20 e	vacuations		Flash Flood Flooding on Runion Creek and Fulks Run roads, and trapped several people in their s.
Falls Church (C) Falls Church	22	1900EST 2000EST			0	0		Heavy Rain
Manassas (C) Manassas	22	1900EST 2100EST			0	0		Heavy Rain





			Path Width	Number of Estimated Persons Damage			June 2001			
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	
VIRGINIA, North										
Manassas (C)										
Manassas	22 Quarter	1909EST r sized hail was r	reported.		0	0			Hail(1.00)	
Fairfax County										
Springfield	22 Two ho	1930EST omes caught fire	after being hit	by lightning	0	0			Lightning	
Prince William County										
Countywide	22	2000EST 2100EST			0	0			Flash Flood	
	Many r	oads were flood	ed.							
Fairfax County										
Countywide	22 23	2010EST 0230EST			0	0	25K		Flash Flood	
		gional parks wer amaged by flood		y flooding. A	About 100	campers v	were threate	ened by ris	ing water and cars in	the campground
Arlington County										
Arlington	22	2100EST 2200EST			0	0			Flash Flood	

Glebe Road was flooded.

During the afternoon of the 22nd, numerous showers and thunderstorms developed just east of the Appalachian Mountains. The storms trained to the North-Northeast along the mountain ridges before moving very slowly east through midnight. These storms contained very heavy rainfall, large hail, frequent lightning, and occasionally produced high winds. Widespread flooding was reported in several locations and the storms were responsible for over a million dollars in damaged across Northern Virginia. In Frederick County, the worst flash flooding occurred across the western portion of the county. The hardest hit areas were in the Back Creek and Hogue Creek watersheds between Gore and Shawneeland where rainfall estimates were as high as 6 inches. Camp Rock Enon near Gore had to be evacuated when Back Creek started to flood the property and Back Creek Road. Highways closed or damaged by floodwaters included Route 50 between 615 and 614, 600, 613, 612, 704, 603, 679, 608, and 617. The only access road to the Shawneeland development which contains over 600 homes was washed out when Wolf Spring, Keckey, and Bucher Runs overflowed. Boulders weighing as much as 200 pounds and 36-inch culverts were washed more than a quarter mile downstream from the access road. Due to the extent of countywide damage and road closures, a state of emergency was declared. A total of 2.21 inches of rain was reported in Gore. Dime sized hail was reported 6 miles northwest of Winchester on Route 522. In addition, two homes in Shawneeland were damaged by lightning. An emergency communications tower on North Mountain was also struck and disabled by lightning.

In Shenandoah County, severe flooding was reported after as much as an estimated 6 inches of rain fell. Over half a million dollars in damage was reported to roads and bridges across the county. Numerous communities were affected by flooding including Mt. Jackson, Boyce, Orkney, Mt. Clifton, Rinkerton, Macanie, and Woodstock. Waterways including the Shenandoah River, Stoney Creek, Swover Creek, and Mill Creek rose rapidly during and after the heavy rainfall. A house, outbuilding, and shed along Mill Creek near Route 263 were washed away and another house had its front porch removed. Four unoccupied cars were also washed downstream. Several acres of crops along the river were flattened and topsoil was washed away. Seven people in the area were evacuated and several homes reported flood damage. A propane tank was washed 100 yards down Mill Creek west of Mt. Jackson. Roads closed or damaged by floodwaters included Senedo Road, Routes 611, 691, 698, 701, 716-724, 729, and Route 263 between Routes 42 and 725. A total of 3.60 inches of rain was reported in Strasburg.

In Rockingham County, numerous roads and bridges were either flooded or washed out by flash flooding. Hardest hit areas were along Fulks Run between the communities of Bergton and Broadway where 20 evacuations took place. The Hanging Rock, Chimney Rock, and the Runions Creek area were also affected by flooding. Damage reports included one destroyed mobile home, numerous washed out private bridges and roads, parked cars washed into the river, and the bridge on Route 259 across Runions Creek at the North Fork of the Shenandoah River being completely washed away. The pavement was removed on Runions Creek Road (Route 612) isolating over 600 residents. Twenty evacuations took place along Runions Creek. Other flooded or damaged roads included Routes 259 and 42. Rainfall reports included a radar estimate of 6 inches in the Fulks Run basin, 3.50 inches between Burgess and Highview and 2.95 inches at Cootes Store.

In Warren County, Morgan's Ford Road and Freezeland Road were flooded in the northwest portion of the county. A total of 3.77 inches was recorded in Nineveh. In Loudoun County, heavy rain flooded roads so quickly that three people had to be rescued by boat from their cars. Roads affected by flooding included Route 7, Route 663, Route 15 at Route 662, Route 50, Lawson Road, Old Ox Road (Route 606), Goshen Road, Forest Mill Road, Ashburn Road, Waxpool Road, and Belmont Ridge Road (Route 659). Several basements and low lying areas were also flooded. Limestone Branch, Broad Run, and Tuscarora Creek overflowed their





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

VIRGINIA, North

banks. The rapidly rising water downed trees and flooded property and roads along the waterways. A spotter in Ashburn reported 5.10 inches of rainfall in 90 minutes in addition to pea to dime sized hail. A spotter in Arcola estimated up to 8 inches of rain fell in two hours. Additional totals included 5.94 inches near Ashburn, 4.70 inches in Ashburn Farm, 4.04 inches in Leesburg, 3.78 inches at the National Weather Service in Sterling, 3.25 inches in Sterling Park, and 2.09 inches at Dulles International Airport. Heavy rainfall that collected on the roof of the Sheriff's office in Leesburg was so heavy it caused a portion of the roof to collapse. A 60 MPH wind gust was estimated in Ashburn Farm where a few trees were uprooted or snapped. Near Arcola, winds estimated between 60 and 70 MPH downed power lines and hundreds of trees, damaged 6 homes, and destroyed 4 barns/machine sheds. The hardest hit areas were along Evergreen Mills and Belmont Ridge Roads, but downed trees were found across an area stretching from Route 606 to 621.

In Fairfax County, water covered Route 7 between Reston Parkway and Route 193. Difficult Run overflowed its banks in the Great Falls area. Two parks located in the southwest portion of the county were flooded after Bull Run and Cub Run overflowed. A campground in Bull Run Regional Park on the Prince William county line was inundated with water from Cub Run. Over 70 campers evacuated when they saw the water rising but a group of 25 scouts that were asleep and unaware of the flooding were awakened after water seeped into their tents after midnight. The group moved to higher ground and had to wait a few hours until the water receded enough to make a rescue possible. Five to seven cars in the campground parking lot were damaged by flooding. Rainfall totals included 3.80 inches in Centreville, 3.45 inches in Reston, 3.25 inches in Clifton, 2.40 inches in Herndon, and 2.34 inches in Great Falls. A home in Springfield was damaged by a lightning fire. In Arlington County, Glebe Road was flooded in Arlington. In Falls Church, 2.23 inches of rain was recorded. In Prince William County, several roads were flooded. A total of 2.68 inches fell in Manassas where quarter sized hail was also reported. In Fauquier County, high winds downed trees in the Marshall area. A wind gust of 40 MPH was estimated in Opal. Pea sized hail fell near Warrenton. In Culpeper County, two trees were downed by high winds in the western portion of the county. In Nelson County, roads near Nelson County High School in Lovingston were flooded. Rainfall totals included 4.98 inches at Montebello Fish and 2.85 inches in Lovingston.

VAZ025>031-036>042	-
050>057	

Augusta - Rockingham - Shenandoah - Frederick - Page - Warren - Clarke - Nelson - Albemarle - Greene - Madison - Rappahannock - Fauquier - Loudoun - Orange - Culpeper - Prince William - Fairfax - Arlington - Stafford - Spotsylvania - King George

27 1200EST 0 0 Excessive Hea 30 1800EST

High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the Mid Atlantic region between June 27th and 30th. High temperatures soared into the lower 90s and heat indices reached into the lower 100s through the period.

Fauquier County Countywide	30 Trees	1440EST were downed onto roads and a house.	0	0	10K	Thunderstorm Wind
Loudoun County Countywide	30	1500EST 1630EST	0	0		Heavy Rain
Frederick County Stephens City	30 Two t	1525EST rees were downed.	0	0	0.50K	Thunderstorm Wind

Scattered thunderstorms with heavy rainfall and damaging winds moved across northern Virginia between 3 and 5 PM EDT on the 30th. In Loudoun County, a 43 MPH wind gust was reported at the Leesburg Airport. A small tree was downed in the northeast part of town. A spotter in Leesburg reported 2.5 inches of rainfall in less than an hour. In Frederick County, two 6 inch diameter trees were downed in Stephens City. In Fauquier County, trees were downed onto a home on Morgansburg Road. Several other trees were downed onto roads nearby. In Rappahannock County, a 43 MPH wind gust was reported in Castleton.

WEST VIRGINIA, East

Berkeley County					
Countywide	07	0030EST 0300EST	0	0	Heavy Rain





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crops	Character of Storm	June 2001
WEST VIRGINIA,	<u>East</u>								
Hampshire County									
Countywide	07	0030EST 0300EST			0	0		Heavy Rain	
Morgan County Countywide	07	0030EST 0300EST			0	0		Heavy Rain	
Mineral County Countywide	07 Sever	0230EST 0400EST al roads were clos	sed by high wa	nter.	0	0		Flash Flood	
	An archours record Purgit total of	ea of showers an of the 7th. The ded in Pinto and a sville after satura	d thunderstorn heaviest rain in Routes 46 and ted soil was ut ll at Inwood in	ns with very fell across the 1 28 were flo nable to supp n Berkeley C	e Fort Ashboded. In Hoort the root county and a	y and Sho ampshire s. In Ben at Cacapo	ort Gap areas of Mine County, trees were d keley County, 3.00 in State Park in Morg	rn Panhandle during the ral County. A total of cowned across Route 9 ches was measured in an County. In Jeffers	3.41 inches was 56 and 200 near Martinsburg. A
WVZ048>053-055	12 13 High ₁		nation with so	outherly wind	0 s brought ho	0 ot, hazy, a	nd humid conditions t	Excessive Heat o the Mid Atlantic regi 100 degrees through th	
Morgan County									
Berkeley Spgs	12 Dime	1610EST sized hail fell.			0	0		Hail(0.75)	
Jefferson County									
Northeast Portion	12 A tree	1750EST was downed ont	o Route 230.		0	0	0.50K	Thunderstorm W	ind
	12th.							handle during the late refferson County, high	
Hardy County									
Moorefield	20	1335EST 1450EST			0	0		Heavy Rain	
Hampshire County Romney	20 Nicke	1445EST I sized hail fell.			0	0		Hail(0.88)	
Berkeley County Martinsburg	20 Trees	1545EST and power lines v	were downed o	onto roads, ca	0 ars, and a fer	0 nce.	25K	Thunderstorm W	ind
	20th.	In Hardy Count	ty, pea sized	hail was rep	orted. A to	tal of 1.9	9 inches of rain fell i	gh the area between 2 n just over an hour in excess of 60 MPH do	n Moorfield. In

Scattered thunderstorms that produced damaging winds, hall, and heavy rainfall moved through the area between 2 and 5 PM on the 20th. In Hardy County, pea sized hail was reported. A total of 1.9 inches of rain fell in just over an hour in Moorfield. In Hampshire County, nickel sized hail was reported in Romney. In Berkeley County, winds in excess of 60 MPH downed or snapped trees up to 2 feet in diameter and felled power lines in Martinsburg. Twenty trees at War Memorial Park were either snapped at the base or lost several large limbs. Six more trees had to be removed because the storm made them unstable. Other downed trees and power lines were strewn across city driveways, lawns, roads, and a few homes. A partial list of damaged areas included Locust Avenue, Louisiana Avenue, Delaware Street, and Martin Street.





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

WEST VIRGINIA, East	WEST
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Hardy County								
Countywide	21	1715EST 1845EST	0	0	Heavy Rain			
	A thunderstorm with heavy downpours moved across Hardy County during the evening of the 21st. A total of 3.16 inches of rainfall was recorded at Devils Hole.							
Grant County								
Countywide	22	1530EST 1730EST	0	0	Heavy Rain			
Hampshire County								
Countywide	22	1530EST 1730EST	0	0	Heavy Rain			
Pendleton County								
Countywide	22	1530EST 1730EST	0	0	Heavy Rain			
Mineral County								
Countywide	22	1545EST 1730EST	0	0	Flash Flood			
	New C	Creek overflowed onto Route 972.						
Berkeley County								
Countywide	22	1600EST 1800EST	0	0	Heavy Rain			
Jefferson County								
Countywide	22	1600EST 1800EST	0	0	Heavy Rain			
Morgan County								
Countywide	22	1600EST 1800EST	0	0	Heavy Rain			
Hardy County								
Countywide	22	1700EST 1900EST	0	0	Flash Flood			
Dente 250 and also the high materials and Dente and Dente and Dente								

Route 259 was closed by high water between Baker and Broadway.

During the afternoon of the 22nd, numerous showers and thunderstorms with heavy rainfall and frequent lightning developed just east of the Appalachian Mountains. These storms continued to affect the eastern panhandle through the evening hours and some roads, low water crossings, and waterways flooded. In Pendleton County, rainfall totals included 2.42 inches on Middle Mountain and 2.18 inches on Cow Knob Mountain. In Grant County, a total of 3.92 inches of rain fell at Cave Mountain. In Hardy County, high water closed Route 259 between Baker and Broadway. A total of 3.28 inches fell at Devils Hole. In Mineral County, New Creek overflowed onto Route 972. In Jefferson County, 2 inches of rain fell in one hour near Harpers Ferry. A total of 1.83 inches was recorded on Summit Point.

WVZ048>053-055 Grant - Mineral - Hampshire - Morgan - Berkeley - Jefferson - Hardy

27 1200EST 0 0 Excessive Heat 30 1800EST

High pressure in combination with southerly winds brought hot, hazy, and humid conditions to the Mid Atlantic Region between June 27th and 30th. High temperatures soared into the lower 90s and heat indices reached into the lower 100s through the period.

Jefferson County Charles Town

Charles Town 30 1624EST 0 0 0.50K Thunderstorm Wind

Trees were downed onto Huyett Road.

A thunderstorm with damaging winds moved across Jefferson County during the afternoon of the 30th. A tree was downed onto Huyett Road south of Charles Town.