



National Weather Service

Storm Data and Unusual Weather Phenomena



July 2006

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

Mchenry County

9 NNE Bantry	02	1740CST 1744CST			0	0			Thunderstorm Wind (EG52)
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Mchenry County

9 NE Bantry	02	1745CST 1749CST			0	0			Hail(0.75)
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Estimated 40 mph wind gusts.

Bottineau County

Willow City	02	1746CST 1749CST			0	0			Thunderstorm Wind (EG52)
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Pierce County

Rugby	02	1813CST 1816CST			0	0			Thunderstorm Wind (EG52)
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Morton County

Mandan	07	1415CST 1425CST			0	0	1.5K		Thunderstorm Wind (EG65)
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18 inch diameter 25 foot tall tree uprooted and windows broken in businesses on the west side of Mandan.

Stutsman County

5 N Jamestown	07	2258CST 2306CST			0	0			Thunderstorm Wind (EG52)
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NDZ017>018-020-031>034-040>045

Mckenzie - Dunn - Oliver - Golden Valley - Billings - Stark - Morton - Slope - Hettinger - Grant - Bowman - Adams - Sioux

12		1400CST			0	0			Wildfire
13		2100CST							

Dry thunderstorms developed in southwest North Dakota in the mid afternoon of July 12th, spreading into the south central part of the state by evening. Record-breaking heat along with strong southeast winds, low relative humidity values, and drought conditions set the stage for extensive lightning caused fire activity. Within a few hours on the evening of the 12th over 50 wildfires were reported. The largest of these fires burned nearly 1,200 acres of pasture and grassland to the south of Almont, ND, in Morton County, beginning at 2130 CST on the 12th, and continuing until 2100 CST on the 13th. The fire threatened several structures before being extinguished.

Ward County

14 S Minot	12	1510CST 1516CST			0	0			Thunderstorm Wind (EG52)
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Wind blew over a 600 pound motorcycle.

NDZ044

Adams

12		1530CST 2100CST			0	0			Wildfire
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Dry lightning started wildfires north and northeast of Hettinger. 700 acres and 16 straw bales burned.

Ward County

15 SW Sawyer	12	1545CST 1555CST			0	0			Thunderstorm Wind (EG56)
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12 acres of cut hay lined up in rows was blown completely away.

Mchenry County

Towner	12	1610CST 1615CST			0	0			Hail(0.88)
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Mainly pea size hail with some stones up to nickel size.

Mchenry County

Towner	12	1645CST 1700CST			0	0			Hail(0.88)
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<u>NORTH DAKOTA, Central and West</u>									
Golden Valley County									
Beach	12	1700CST 1707CST			0	0			Hail(1.00)
Hail ranged in size from pea size to quarter size.									
Mchenry County									
7 NW Towner	12	1710CST 1715CST			0	0	25K		Thunderstorm Wind (MG67)
Wind speed measured with an anemometer. Extensive crop damage occurred.									
Pierce County									
Balta	12	1715CST 1730CST			0	0	75K		Thunderstorm Wind (EG78)
Much damage to a recreational area with picnic shelters and tables ripped apart. Roof torn off of a barn, many trees blown over, and grain bins blown over. Roof damage to other buildings in town and damage to two single stall garages									
Morton County									
Glen Ullin	12	1724CST 1729CST			0	0			Hail(0.88)
Mercer County									
2 NW Beulah	12	1745CST 1755CST			0	0			Hail(1.00)
Gusty winds accompanied the storm with 0.44 inches of rain.									
Golden Valley County									
10 N Sentinel Butte	12	1800CST 1806CST			0	0			Thunderstorm Wind (EG52)
Oliver County									
Hannover	12	1800CST 1804CST			0	0			Hail(0.75)
Mercer County									
12 S Beulah	12	1805CST 1815CST			0	0	20K		Thunderstorm Wind (EG70)
Roof torn from barn.									
Mclean County									
8 S Riverdale	12	1812CST 1817CST			0	0			Funnel Cloud
Mclean County									
Coleharbor	12	1827CST 1838CST			0	2	3M		Thunderstorm Wind (EG109)



North Dakota Department of Transportation Environmental Sensor Station along highway 83 at Coleharbor, Mclean County, North Dakota. Photo



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NORTH DAKOTA, Central and West

by Edwin Ryan, NDDOT.

A National Weather Service storm damage survey was completed 0715 CST to 1500 CST the day following the event, July 13, 2006. NWS meteorologist was accompanied by the Mclean County Emergency Manager. Damage was extensive and severe. Nearly every building in the town of about 80 people was damaged. The degree of damage varied with heavier damage to structures and trees on the west side of the town, including to a school built in 1916 and used until the mid 1960s. Just across highway 83, on the west side of town, an empty railroad coal car was off the tracks and on its side. The structural and tree damage pattern, coupled with comments from eye witnesses and 88D RADAR data, led to the determination that the event was a wet microburst with wind speeds in excess of 100 mph. Storms were multicellular in structure. Witnesses described a shelf cloud approaching, followed by the high wind, and then very heavy rain. There were two very minor injuries and no fatalities. The two injuries were in a camper that was rolled by the wind and destroyed. Coleharbor covers an area about 1/4 mile by 1/4 mile. Damage covered an area just under 4 km or just under 2 1/2 miles on a side. Outside of town the damage included a barn, many trees, and moved straw or hay bales. The ND Department of Transportation had weather instrumentation along highway 83 on the west side of Coleharbor. The Environmental Sensor Station had an engineered wind resistance of 120 mph and was lying on the ground following the storm. See photo. See entry for Mclean County 1 E Coleharbor 1828 CST to 1837 CST July 12, 2006.

Mclean County
1 E Coleharbor

12	1828CST 1837CST				0	0	8K		Thunderstorm Wind (MG80)
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Measured with a Davis weather instrument. Severe criteria wind from 1828 CST to 1837 CST. Gust peaked at 92 mph. Damage to outbuilding garage door. A witness 1 E Coleharbor who is self taught in the science of meteorology described a shelf cloud approach followed by the high damaging wind.

Mclean County
3 NW Coleharbor

12	1840CST 1848CST				0	0	10K		Thunderstorm Wind (EG65)
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Roof blown off building and trees down.

Mclean County
5 S Ruso

12	1900CST 1904CST				0	0			Funnel Cloud
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Mchenry County
7 SSW Balfour

12	1922CST 1927CST				0	0			Funnel Cloud
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Sheridan County
7 W McClusky

12	1952CST 1958CST				0	0			Thunderstorm Wind (EG70)
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Very strong outflow winds from thunderstorms blew over hay bails.

Pierce County
Rugby

12	2030CST 2038CST				0	0			Thunderstorm Wind (EG70)
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Trees up to 3 feet in diameter snapped in half.

NDZ045

	Sioux								
18	1300CST				0	0			Wildfire
21	1800CST								

A fire began in the early afternoon of the 18th to the west of Fort Yates after smoldering for several hours following a morning lightning strike. The wildfire quickly grew out of control as a result of low relative humidity values, south winds that gusted to 40 mph, and ongoing drought conditions. The fire consumed approximately 10,500 acres of pasture and grassland, much of it in rough terrain that made firefighting efforts difficult. Nine homes were evacuated the afternoon of the 18th. The North Dakota National Guard's helicopters assisted firefighting efforts by dropping water on the fire, which was not declared 100 percent contained until the evening of the 21st.



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NORTH DAKOTA, Central and West

NDZ035	Burleigh	18	1400CST 1800CST		0	0			Wildfire
A fire 15 miles north of Bismarck quickly consumed 500 acres of vegetation after igniting in tall grass near a farmstead. The fire spread to the structures on the farm. Two barns, a granary, and corrals were lost to the fire before it was brought under control.									
Golden Valley County	Beach	20	1130CST 1145CST		0	0			Hail(1.00)
Golden Valley County	Beach	20	1152CST 1157CST		0	0			Hail(0.88)
Piles of hail.									
Grant County	3 SW New Leipzig	20	1332CST 1335CST		0	0			Hail(0.75)
Logan County	8 S Gackle	20	1530CST 1600CST		0	0	4K		Lightning
Lightning struck a granary roof, damaging the roof near a metal covered landing door and blowing wood off near the door. Lightning also started a fire in the nearby pasture.									
McLean County	2 E Coleharbor	24	0330CST 0400CST		0	0	15K		Lightning
75 year old barn was struck by lightning, caught fire, and was destroyed									
Morton County	Almont	24	1455CST 1502CST		0	0			Hail(0.88)
Brief very heavy rain and a few hailstones nickel size.									
Morton County	18 SE New Salem	24	1522CST 1528CST		0	0			Thunderstorm Wind (EG57)
Very heavy rain and a few pea sized hail stones accompanied the wind.									
Burleigh County	5 SW Bismarck	24	1600CST 1608CST		0	0			Hail(0.88)
50 mph wind gusts accompanied the hail.									
Bowman County	8 SW Bowman	24	2020CST 2026CST		0	0			Hail(0.75)
Bowman County	13 SE Bowman	26	1450CST 1455CST		0	0			Hail(0.75)
Lots of small hail. Largest stones were penny sized.									
Sioux County	10 W Ft Yates	26	1725CST 1731CST		0	0			Thunderstorm Wind (EG56)
Also very heavy rain.									
Sioux County	Ft Yates	26	1729CST 1735CST		0	0			Thunderstorm Wind (EG52)
La Moure County	12 WSW Edgeley	26	2100CST 2106CST		0	0			Thunderstorm Wind (EG52)



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					Killed	Injured	Property	Crops	

NORTH DAKOTA, Central and West

Mercer County

6 WSW Pick City	30	2015CST 2020CST			0	0			Hail(0.75)
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Williams County

20 W Ray to 2 N Ray	31	0125CST 0155CST			0	0	20K	30K	Hail(1.75)
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Spotters indicated that the most intense part of the hail swath from this storm began around 20 miles west of Ray, just to the south of Blacktail Dam, and was around 1 mile wide as it extended to approximately 2 miles north of Ray. The hail was accompanied by damaging thunderstorm winds in excess of 60 mph, which broke out windows and resulted in 100 percent crop loss in the hardest hit areas.

Quarter size hail was also reported in the town of Ray, and was also accompanied by strong thunderstorm winds. This was part of the same storm which resulted in damage to the west and north of Ray.