

Storm Data and Unusual Weather Phenomena - August 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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IOWA, Southwest

(IA-Z043) MONONA, (IA-Z055) HARRISON, (IA-Z056) SHELBY, (IA-Z069) POTTAWATTAMIE, (IA-Z079) MILLS, (IA-Z080) MONTGOMERY, (IA-Z090) FREMONT, (IA-Z091) PAGE

08/01/12 00:00 CST	0	Drought
08/31/12 23:59 CST	0	

This drought carried over from July when record setting heat and dryness brought increasingly worse drought conditions to the region into and beyond August. Rainfall which was already deficient for the season going into July, continued much below normal in July. Although rainfall in August was spotty over southwest Iowa, many locations saw 3 to over 6 inches which helped keep the drought from intensifying too much. High temperatures consistently rose above 95 degrees during the first and last weeks of August with some sites recording a few days above 100. The middle part of the month saw temperatures dip well below normal, thus many average temperatures for August ended up close to normal. The persistent hot and dry weather kept many rivers at very low flows and also caused some local wells to become dry or go to very low flow rates. The low river levels and irrigation pressure from underground water sources also caused some municipalities to institute voluntary or mandatory water restrictions. According to the U.S. Drought Monitor, drought intensities in southwest Iowa started August in the Severe category and finished the month mostly in the Extreme category. The exception was far southwest Iowa which remained in the Severe category due to some of the heavier rain totals observed there. The drought in Iowa and surrounding states caused some crop prices, especially corn and soybeans, to reach record or near record levels in July with high prices continuing into August. According to the USDA, a little over 50 percent of the corn crop and 36 percent of the soybean crop was considered poor or very poor in Iowa by the end of August. The drought continued into September.

POTTAWATTAMIE COUNTY --- 1.7 NW ASCOT [41.37, -95.92]

08/07/12 20:18 CST	0	Hail (1.25 in)
08/07/12 20:18 CST	0	Source: Public

The hail was reported near the Mormon Bridge on which I680 crosses the Missouri River into Iowa.

POTTAWATTAMIE COUNTY --- 4.2 W GRABLE [41.48, -96.00]

08/07/12 20:30 CST	0	Thunderstorm Wind (EG 52 kt)
08/07/12 20:30 CST	0	Source: Public

Thunderstorm wind gusts estimated at around 60 mph downed 4 power poles and flattened some crops in extreme western Pottawattamie county.

Thunderstorms, a few severe with large hail and damaging winds, developed during the late afternoon and evening along a weak cool front that stretched from east central Nebraska into southwest Iowa. Instability was modestly high as temperatures near the front climbed to around 100 degrees with dew point temperatures in the low to mid 60s. However, deep wind shear and convergence near the boundary was weak which limited the overall coverage of the storms and any associated severe weather.

MILLS COUNTY --- 2.9 SW PACIFIC CITY [41.02, -95.86]

08/08/12 17:17 CST	0	Thunderstorm Wind (EG 52 kt)
08/08/12 17:17 CST	0	Source: Trained Spotter

Thunderstorm winds estimated at around 60 mph knocked down dead trees near the Missouri River.

FREMONT COUNTY --- 0.7 S TABOR [40.89, -95.67]

08/08/12 17:42 CST	0	Thunderstorm Wind (EG 52 kt)
08/08/12 17:42 CST	0	Source: Law Enforcement

Thunderstorm wind gusts estimated at 60 mph blew over a tree near the school in Tabor. The winds also caused some crop damage and spotty power outages in the area.

FREMONT COUNTY --- 1.1 E ANDERSON [40.80, -95.58]

08/08/12 17:52 CST	0	Thunderstorm Wind (EG 52 kt)
08/08/12 17:52 CST	0	Source: Public

Outflow gusts from thunderstorms were estimated to have reached 60 mph. The winds were accompanied by pea-size hail.

FREMONT COUNTY --- 0.5 W FARRAGUT [40.72, -95.48]

08/08/12 18:00 CST	0	Thunderstorm Wind (EG 56 kt)
08/08/12 18:00 CST	0	Source: Trained Spotter

Thunderstorm wind gusts estimated at around 65 mph downed tree limbs in the area. The winds were accompanied by penny-size hail.

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FREMONT COUNTY --- FARRAGUT [40.72, -95.47]

	08/08/12 18:00 CST	0	0	Hail (0.75 in)
	08/08/12 18:00 CST	0	0	Source: Trained Spotter

Penny-size hail was accompanied by thunderstorm wind gusts estimated at 65 mph.

PAGE COUNTY --- 0.7 S SHENANDOAH [40.76, -95.37]

	08/08/12 18:02 CST	0	0	Thunderstorm Wind (EG 50 kt)
	08/08/12 18:02 CST	0	0	Source: Law Enforcement

Thunderstorm wind gusts around 60 mph caused some tree damage and downed a few power lines in town.

PAGE COUNTY --- 2.1 NNE BLANCHARD [40.61, -95.21]

	08/08/12 18:26 CST	0	0	Thunderstorm Wind (EG 57 kt)
	08/08/12 18:26 CST	0	0	Source: Public

The public estimated that thunderstorm wind gusts of 60 to 70 mph downed a 6 inch diameter tree limb near Blanchard. The wind was accompanied by dime-size hail.

Scattered thunderstorms, a few severe, developed on a weak boundary in eastern Nebraska during the afternoon of August 8th. The boundary extended nearly north to south from east of Norfolk to east of Lincoln and Beatrice its position aided by earlier convection that tracked across northeast Nebraska and western Iowa. Temperatures west of the boundary climbed to around 100 degrees with west to northwest winds. Meanwhile, readings east of it were several degrees cooler with southeast winds. The storms were further strengthened by an upper level disturbance that tracked southeast out of South Dakota which pushed a cool front south across the region. The storms developed along the north to south boundary in Nebraska and produced pockets of strong winds and hail, some of it large, as they pushed into far southeast Nebraska and southwest Iowa.

POTTAWATTAMIE COUNTY --- LAKE MANAWA [41.22, -95.85]

	08/15/12 23:04 CST	0	0	Hail (1.25 in)
	08/15/12 23:04 CST	0	0	Source: Broadcast Media

MILLS COUNTY --- 2.9 SW PACIFIC CITY [41.02, -95.86]

	08/15/12 23:24 CST	0	0	Hail (0.75 in)
	08/15/12 23:24 CST	0	0	Source: Trained Spotter

MONONA COUNTY --- 0.5 E MAPLETON [42.17, -95.79]

	08/16/12 00:56 CST	0	0	Hail (1.00 in)
	08/16/12 00:56 CST	0	0	Source: Trained Spotter

Isolated severe thunderstorms developed on a cold front that pressed across eastern Nebraska and western Iowa during the evening of August 15th. The storms produced a few reports of large hail.

NEBRASKA, East

	(NE-Z011) KNOX, (NE-Z012) CEDAR, (NE-Z015) THURSTON, (NE-Z016) ANTELOPE, (NE-Z017) PIERCE, (NE-Z018) WAYNE, (NE-Z030) BOONE, (NE-Z031) MADISON, (NE-Z032) STANTON, (NE-Z033) CUMING, (NE-Z034) BURT, (NE-Z042) PLATTE, (NE-Z043) COLFAX, (NE-Z044) DODGE, (NE-Z045) WASHINGTON, (NE-Z050) BUTLER, (NE-Z051) SAUNDERS, (NE-Z052) DOUGLAS, (NE-Z053) SARPY, (NE-Z065) SEWARD, (NE-Z066) LANCASTER, (NE-Z067) CASS, (NE-Z068) OTOE, (NE-Z078) SALINE, (NE-Z088) JEFFERSON, (NE-Z089) GAGE, (NE-Z090) JOHNSON, (NE-Z091) NEMAHA, (NE-Z092) PAWNEE, (NE-Z093) RICHARDSON	0	0	Drought
	08/01/12 00:00 CST	0	0	
	08/31/12 23:59 CST	0	0	

This drought carried over from July when record setting heat and dryness brought increasingly worse drought conditions to the region into and beyond August. Rainfall which was already deficient for the season going into July, continued much below normal in July and was 1 to 3 inches below normal in August over many parts of the area. The exception was far southeast Nebraska where rainfall was more in the 3 to 6 inch range which helped stem the droughts worsening effects. In addition, high temperatures consistently rose above 95 degrees during the first and last weeks of August with some sites recording a few days above 100. The middle part of the month saw temperatures dip well below normal thus many average temperatures for August ended up close to normal. The persistent hot and dry weather kept many rivers at very low flows, including the Platte River which remained dry upstream of the Loup River. The drought also caused some local wells to become dry or go to very low flow rates. The low waters prompted the Nebraska Department

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of Natural Resources to issue irrigation halts for selective waterways including the Loup, Big Blue and Elkhorn Rivers as well as Salt Creek which persisted into August. The low river levels and irrigation pressure from underground water sources also caused some municipalities to institute voluntary or mandatory water restrictions. According to the U.S. Drought Monitor, drought intensities in northeast Nebraska started the month in the Extreme category, with Severe levels observed over the rest of eastern Nebraska. By the first week of August Extreme drought classification spread southeast to the area along and north of Interstate 80 and by the end of the month all but the southeast corner of Nebraska was at least in the Extreme category. The drought in Nebraska and surrounding states caused some crop prices, especially corn and soybeans, to reach record or near record levels in July with high prices continuing into August. A little over 40 percent of the corn and soybean crop was considered poor or very poor by the USDA by the end of August. The drought continued into September.

WAYNE COUNTY --- 0.7 N WAYNE [42.24, -97.02], 4.0 ENE WAYNE [42.25, -96.95]

08/01/12 21:55 CST			0	Thunderstorm Wind (MG 50 kt)
08/01/12 21:59 CST			0	Source: AWOS

Thunderstorm wind gusts were measured at 58 mph by the Awos at Wayne. The winds downed a few tree limbs a few miles east northeast of town.

Thunderstorms formed along a surface trough during the evening of the 1st within a zone of moderate to strong instability. The thunderstorms struggled to sustain themselves as they pressed east into a region lacking mid level moisture.

BOONE COUNTY --- 0.5 E ST EDWARD [41.57, -97.86]

08/07/12 17:26 CST			0	Hail (1.00 in)
08/07/12 17:26 CST			0	Source: Trained Spotter

CASS COUNTY --- 1.4 N CEDAR CREEK [41.05, -96.10]

08/07/12 18:24 CST			0	Thunderstorm Wind (EG 52 kt)
08/07/12 18:24 CST			0	Source: Public

Thunderstorm wind gusts estimated at around 60 mph were accompanied by dime-size hail.

CASS COUNTY --- 1.4 N CEDAR CREEK [41.05, -96.10]

08/07/12 18:28 CST			0	Hail (0.75 in)
08/07/12 18:28 CST			0	Source: Public

The hail was accompanied by thunderstorm wind gusts which were estimated at around 60 mph.

SARPY COUNTY --- 1.7 WSW FT CROOK [41.11, -95.98]

08/07/12 18:48 CST			0	Thunderstorm Wind (EG 52 kt)
08/07/12 18:48 CST			0	Source: Trained Spotter

Thunderstorm wind gusts estimated at around 60 mph broke some tree limbs west of Offutt Afb. The winds were accompanied by 1 inch hail.

SARPY COUNTY --- 0.9 SE FT CROOK [41.11, -95.94]

08/07/12 18:52 CST			0	Hail (1.00 in)
08/07/12 18:52 CST			0	Source: Trained Spotter

The hail was accompanied by thunderstorm wind gusts estimated to have approached 60 mph.

Thunderstorms, a few severe with large hail and damaging winds, developed during the late afternoon and evening along a weak cool front that stretched from east central Nebraska into southwest Iowa. Instability was modestly high as temperatures near the front climbed to around 100 degrees with dew point temperatures in the low to mid 60s. However, deep wind shear and convergence near the boundary was weak which limited the overall coverage of the storms and any associated severe weather.

DODGE COUNTY --- 4.3 S DODGE [41.66, -96.88], 4.3 WNW WEBSTER [41.63, -96.87]

08/08/12 15:36 CST			0	Tornado (EF0, L: 1.88 mi , W: 20 yd)
08/08/12 15:45 CST			0	Source: Emergency Manager

A narrow high-based funnel cloud eventually touched down in between Dodge and North Bend. The tornado was very narrow and most likely caused little or no damage. The funnel and/or tornado were observed and photographed from many different directions and from miles away. The funnel initially formed on a developing towering cumulus cloud on a boundary in the area.

JOHNSON COUNTY --- 2.8 S COOK [40.48, -96.16]

08/08/12 15:40 CST			0	Hail (1.00 in)
08/08/12 15:40 CST			0	Source: Public

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Hail up to 1 inch in diameter covered the ground near Cook.				
CASS COUNTY --- 0.9 NW GREENWOOD [40.98, -96.44]				
	08/08/12 15:50 CST		0	Hail (1.75 in)
	08/08/12 15:50 CST		0	Source: Trained Spotter
Hail, up to golf ball-size, covered the ground White near Greenwood.				
SAUNDERS COUNTY --- 4.6 SE MORSE BLUFF [41.39, -96.71]				
	08/08/12 16:14 CST		0	Hail (1.00 in)
	08/08/12 16:14 CST		0	Source: Trained Spotter
Hail up to 1 inch in diameter covered the ground white a little southeast of Morse Bluff.				
SARPY COUNTY --- 1.0 N SPRINGFIELD [41.09, -96.13], 0.8 NE SPRINGFIELD [41.09, -96.12]				
	08/08/12 16:50 CST		0	Thunderstorm Wind (EG 55 kt)
	08/08/12 16:50 CST		0	Source: Law Enforcement
Thunderstorm wind gusts estimated at over 60 mph downed power lines near 132nd and Platteview Road.				
CASS COUNTY --- 0.9 SE PLATTSMOUTH [41.01, -95.89]				
	08/08/12 17:12 CST		0	Thunderstorm Wind (MG 52 kt)
	08/08/12 17:12 CST		0	Source: AWOS
Thunderstorm wind gusts of 60 mph were measured by the Awos at Plattsouth.				
SARPY COUNTY --- 0.4 E (OFF)OFFUTT AFB [41.12, -95.91], 1.2 ESE GILMORE JCT [41.14, -95.91]				
	08/08/12 17:28 CST		0	Thunderstorm Wind (MG 51 kt)
	08/08/12 17:35 CST		0	Source: ASOS
Thunderstorm wind gusts were measured at 59 mph by the Asos at Offutt Afb. Other strong winds, estimated at 60 to 70 mph, were observed near Highway 370 and Galvin Rd. The winds were accompanied by hail that covered the ground and was as large as 2 inches in diameter.				
SARPY COUNTY --- 0.8 SSW GILMORE JCT [41.14, -95.93], 0.7 ENE GILMORE JCT [41.15, -95.92]				
	08/08/12 17:28 CST		0	Hail (2.00 in)
	08/08/12 17:38 CST		0	Source: Trained Spotter
Hail up to 2 inches in diameter fell across parts of the Bellevue area. In some areas the hail covered the ground white and briefly created locally hazardous driving conditions. Some of the larger hail stones were reported along Galvin Rd near Highway 370 and Harvel Street. The hail was accompanied by thunderstorm winds that were measured at 59 mph at Offutt and were estimated to have reached nearly 70 mph near Highway 370 and Galvin.				
DOUGLAS COUNTY --- 1.1 NNW ALBRIGHT [41.23, -95.98], (OMA)EPPLEY FLD OMAH [41.30, -95.90]				
	08/08/12 17:50 CST		0	Thunderstorm Wind (MG 56 kt)
	08/08/12 18:00 CST		0	Source: ASOS
Thunderstorm winds caused scattered tree damage across the eastern parts of Omaha. A gust of 64 mph was recorded by Asos at Eppley Airfield at 7 pm CDT and limbs as large as 8 inches in diameter were downed near 43rd and Vinton Streets in southeast Omaha between 650 and 7 pm. The strong winds caused a few power outages in town according to OPPD.				
Scattered thunderstorms, a few severe, developed on a weak boundary during the afternoon of August 8th. The boundary extended nearly north to south from east of Norfolk to east of Lincoln and Beatrice its position aided by earlier convection that tracked across northeast Nebraska and western Iowa. Temperatures west of the boundary climbed to around 100 degrees with west to northwest winds. Meanwhile, readings east of it were several degrees cooler with southeast winds. The storms were further strengthened by an upper level disturbance that tracked southeast out of South Dakota which pushed a cool front south across the region. The storms developed along the north to south boundary in Nebraska and produced pockets of strong winds and hail, some of it large, as they pushed into far southeast Nebraska and southwest Iowa.				
WASHINGTON COUNTY --- 0.9 SE BLAIR [41.54, -96.14]				
	08/15/12 22:14 CST		0	Hail (0.88 in)
	08/15/12 22:14 CST		0	Source: Law Enforcement
DOUGLAS COUNTY --- 2.0 SSE BENNINGTON [41.34, -96.16]				

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	08/15/12 22:25 CST		0	Hail (0.75 in)
	08/15/12 22:25 CST		0	Source: Trained Spotter

Near 156th and Military.

DOUGLAS COUNTY --- 1.7 WSW MC HUGH [41.29, -96.10]

	08/15/12 22:42 CST		0	Hail (1.00 in)
	08/15/12 22:42 CST		0	Source: Law Enforcement

Quarter-size hail was reported near 72nd and Highway 36. The hail was accompanied by winds estimated at 40 to 50 mph.

SARPY COUNTY --- 1.7 NE SPRINGFIELD [41.10, -96.11]

	08/15/12 22:55 CST		0	Hail (1.00 in)
	08/15/12 22:55 CST		0	Source: Trained Spotter

DOUGLAS COUNTY --- 1.4 S MOORHEAD [41.26, -96.05]

	08/15/12 22:57 CST		0	Hail (0.88 in)
	08/15/12 22:57 CST		0	Source: Broadcast Media

Hail up to nickel-size was reported near 35th and Farnam Streets.

CASS COUNTY --- 0.9 SE PLATTSMOUTH [41.01, -95.89]

	08/15/12 23:19 CST		0	Hail (1.00 in)
	08/15/12 23:19 CST		0	Source: Trained Spotter

Isolated severe thunderstorms developed on a cold front that pressed across eastern Nebraska and western Iowa during the evening of August 15th. The storms produced a few reports of large hail.