

# CLIMATE UPDATE

## Warmth and dryness dominated in June

The weather conditions this June left Nebraska in the warm and dry category. The average monthly temperature was 2.1 degrees above average at 70.7°F. This ranks in the top 25 percent of warmest temperatures for June. The strongest temperature departures of greater than 3 degrees above average occurred in the southcentral and northeast portions of the state. A handful of locations, mostly in the west, did wind up slightly cooler than normal for the month. Over the long-term (since 1895) June temperatures in Nebraska have increased by about one degree.

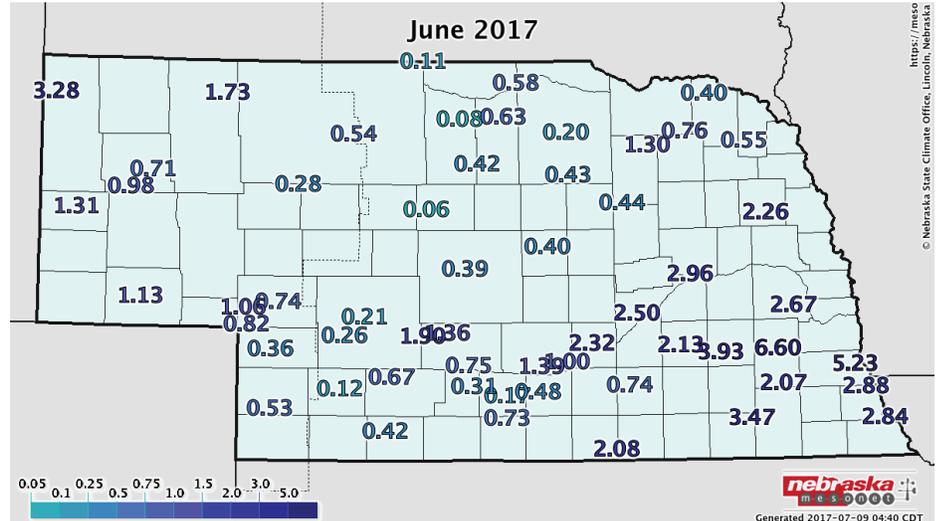
### Precipitation

Precipitation statewide ranked as the second driest on record at 1.44 inches. This amount is 2.31 inches below normal. Only June of 1933 has been drier, going back to 1895. The driest areas of the state occurred in a large swath in central Nebraska where only 25 percent of normal rainfall was observed. A few localized areas did benefit from convective precipitation events during the month. Areas with above-normal rainfall were in northern Sioux County and a few locations in southeast Nebraska. In fact, the Lincoln Airport recorded 7.35 inches, which is sixth wettest on record. Nebraska Mesonet monthly rainfall totals ranged from 0.06 inches at Dunning 6NW in the Sandhills to 6.84 inches in Lincoln. Statewide, there has been no appreciable long-term trend in June precipitation amount.

### Severe weather

Official storm reports show there were three days with tornadic severe weather outbreaks across Nebraska. On June 12, there were 16 tornado reports with the worst damage occurring at Bayard. June 16 brought severe weather to eastern Nebraska with nine tornado

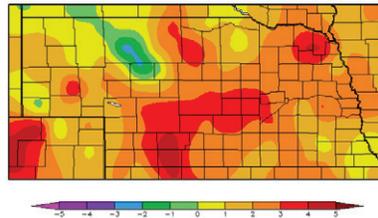
### LIQUID PRECIPITATION TOTALS (IN)



NEBRASKA STATE CLIMATE OFFICE

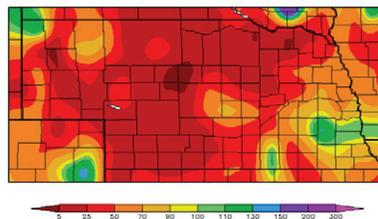
All maps generated using June provisional data.

### DEPARTURE FROM NORMAL TEMPERATURE (F)



HIGH PLAINS REGIONAL CLIMATE CENTER

### PERCENT OF NORMAL PRECIPITATION



HIGH PLAINS REGIONAL CLIMATE CENTER

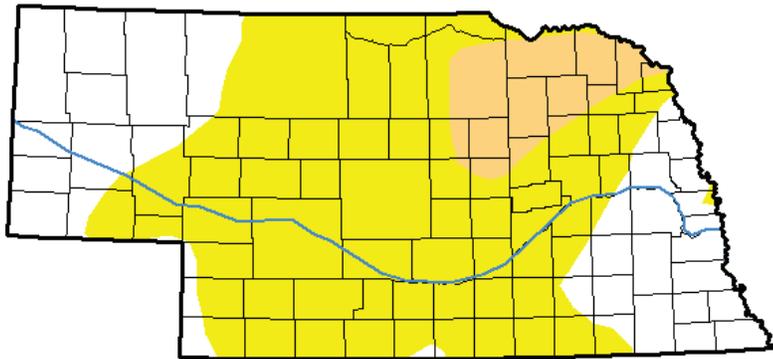
### May extremes

Nebraska's statewide weather network operated by the University of Nebraska Lincoln, the Nebraska Mesonet, cataloged the following extremes this June:

- Highest air temperature:** 106°F at 5 p.m. June 21 at Hayes Center 3N
- Lowest air temperature:** 36°F at 2 a.m. June 24 at Whitman 5NE
- Greatest 24-hour temperature change:** 30°F, 85°F on June 29 to 55° on June 30 at North Platte 3SW
- Highest 4-inch bare soil temperature:** 99°F on June 20 at Scottsbluff 6NW
- Lowest 4-inch bare soil temperature:** 53°F on June 14 at Harrison 4NW
- Highest 1-day precipitation:** 3.05 inches on June 16 at Lincoln 1700 N 10th
- Highest 5-second wind gust:** 74 mph on June 16 at West Point 2W

U.S. DROUGHT MONITOR | JULY 4, 2017

# NEBRASKA



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	32.04	67.96	8.69	0.00	0.00	0.00
<b>Last Week</b> 06-27-2017	32.04	67.96	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> 04-04-2017	74.30	25.70	3.77	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-03-2017	48.25	51.75	13.43	0.16	0.00	0.00
<b>Start of Water Year</b> 09-27-2016	77.29	22.71	1.59	0.16	0.00	0.00
<b>One Year Ago</b> 07-05-2016	70.18	29.82	2.22	0.00	0.00	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

DROUGHTMONITOR.UNL.EDU

reports, including within the cities of Lincoln and Omaha. The Nebraska Mesonet station at West Point observed a 74 mph wind gust at 6:33 p.m. on this day. June 29 saw activity in Cedar County with three tornado reports.

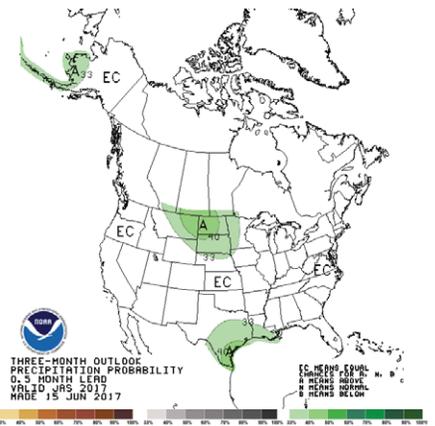
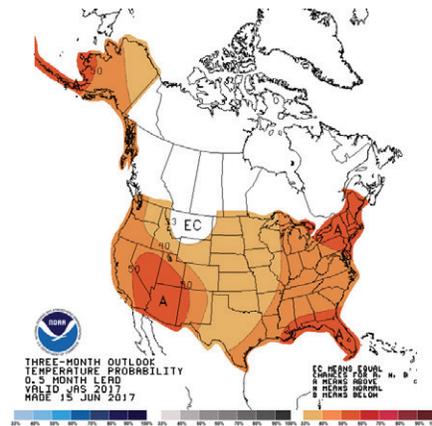
## Drought

According to the US Drought Monitor, Nebraska started June with a blank slate — no dryness or drought designation. However, given the lack of rainfall coupled with the warmth, nearly 68 percent of the state was abnormally dry at the start of July. In addition, D1 (moderate drought) has been introduced in northeast Nebraska, covering nearly 9 percent of the state. Drought conditions over the past month have also worsened to our north and east with areas of extreme drought (D3) in the Dakotas and eastern Montana. The greatest stress currently reported for crops in Nebraska is for those in sandier soils and pivot corners.

## Outlooks

The short-term climate outlooks from the Climate Prediction Center for

## 90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



mid- and late-July have the odds tilted toward warmth and dryness for all of Nebraska. The warmth covers much of the contiguous U.S., while the dryness is for central and northern portions of the lower 48. The three-month climate outlook for the July-to-September period also has an increased chance for above-normal temperatures, again for much of the contiguous U.S. Seasonal

precipitation conditions show the odds favoring above-normal precipitation for the northern Plains with the southern fringe of this wet pocket dipping into northern Nebraska. The majority of the state lies in an area of equal chances of below, near, or above-normal precipitation. If this wet pattern verifies, this could spell a bit of relief for drought-stricken areas of the northern Plains.



**NEBRASKA STATE CLIMATE OFFICE**

153 Hardin Hall | 3310 Holdrege St. | Lincoln, NE 68503-0931  
School of Natural Resources at University of Nebraska - Lincoln

**CONTACT US**

e) nsko@unl.edu | p) 402.472.5206

**ON THE WEB**

nsko.unl.edu

**FOLLOW US**

@mshulski3