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# CLIMATE UPDATE

A MONTHLY SUMMARY FROM THE NEBRASKA STATE CLIMATE OFFICE

## June sees continued warmth, plenty of rain

xcessive rainfall in many areas of
the state and a continued warm
trend from last month highlight June.
Thanks to large-scale convective storm
systems affecting the central U.S., much of
Nebraska received above-normal rain for
the month.

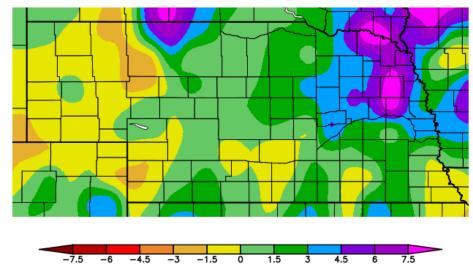
Aside from the Panhandle, monthly totals were 3.5 inches or greater. The highest totals were found in the eastern third of the state, particularly the northeast. More than 10 inches fell in locations such as Norfolk, Crofton, Concord and West Point, which is twice the normal amount for this time of year. Several locations experienced near record-setting rainfall totals for June. They included Lincoln Airport, which had 8.83 inches, the third highest since 1948; Norfolk Airport, which had 10.75 inches, the third highest since 1945; and Valentine Airport, which had 7.30 inches, the fifth highest since 1890.

Some impressive daily rainfall totals also occurred with these storms. There were several locations with totals greater than 4 inches in a 24-hour period with the highest daily totals observed near West Point (6.48 inches on June 25), Concord (6.43 inches on June 26 at the Nebraska Mesonet site) and Fairbury (8.54 inches ending at 8 a.m. on June 20).

The statewide precipitation total was 5.11 inches, which is 1.42 inches more than normal.

June was not without severe weather. June 17 was active for tornados with 10 official reports made, and a total of 26 for the month. High wind reports were scattered throughout June (222 in all) with most reports coming during the first week. Hail events totaled 127 and crop fields felt the impact. Corn fields near Holdrege were completely destroyed as stalks were broken off at about 3-feet high. For local resources on hail damage and assessments, visit: cropwatch.unl.edu/hailknow.

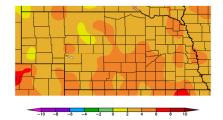
## PERCENT OF NORMAL PRECIPITATION



HIGH PLAINS REGIONAL CLIMATE CENTER

All maps generated using June provisional data.

## DEPARTURE FROM NORMAL TEMPERATURE

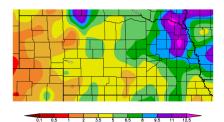


HIGH PLAINS REGIONAL CLIMATE CENTER

### **Temperature**

Temperatures averaged above normal during June across Nebraska. Departures from normal ranged from 2 degrees to 6 degrees F statewide. The Lincoln Airport station reported its fifth warmest June since 1948 at 77.3°F, and Omaha Airport was 77.6°F (fourth warmest since 1935). The statewide average for the month was 72.2°F, which is 3.9 degrees more than normal. The mercury hit 100 or above at a number of locations in southern tier

## TOTAL PRECIPITATION



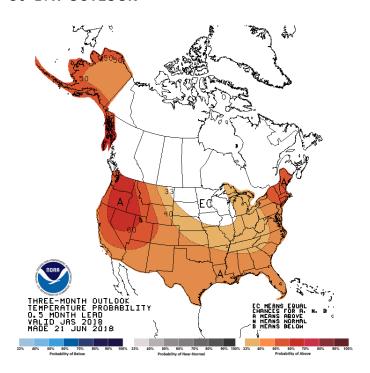
HIGH PLAINS REGIONAL CLIMATE CENTER

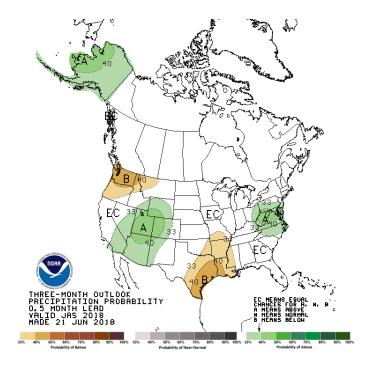
counties and across the Panhandle. The highest observed temperature statewide was 107°F at the Bridgeport cooperative station in Morrill County. In contrast, temperatures dipped into the 30s in the Panhandle at a number of locations. The lowest temperature was 34°F at Alliance. There were some warm evenings, however. Some locations in the east saw record high minimum temperatures with lows of 77°F and 78°F in Norfolk, Omaha and Lincoln on June 15.





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





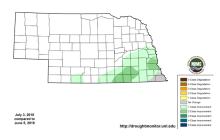
## Drought

Given the plentiful precipitation amounts during June, areas in southeast Nebraska saw alleviations in dryness and drought conditions, according to the U.S. Drought Monitor. At the start of the month, 13 percent of the state was abnormally dry and 5 percent was categorized as moderate drought (D1). Rainfall was enough to make up some deficits in much of this area, and by the start of July, dryness impacted a three-county area (Nemaha, Pawnee, and Richardson) in the far southeast corner of the state.

### Outlook

The Climate Prediction Center has issued an El Niño watch, meaning that conditions are favorable for an El Niño to develop this fall. As such, the seasonal climate outlooks reflect a trend indicative of this pattern. There is an increased chance for above-normal temperatures

## **U.S. DROUGHT MONITOR CHANGE MAP**



This map shows widespread improvement to drought conditions in Nebraska during the one-month period ending July 3.

for Nebraska and much of the U.S. for the July to September timeframe. For precipitation, the trend is an enhanced probability of wetter-than-normal conditions in the southwestern U.S., which just grazes the Nebraska Panhandle.

— Martha Shulski, state climatologist and NSCO director

## Nebraska Mesonet extremes

The following extremes were cataloged this June by Nebraska's statewide weather network:

Highest air temperature: 105°F on June 28 at Scottsbluff 6NW

Lowest air temperature: 37°F on June 3 at Whitman 5NE

Highest 4-inch bare soil temperature: 98°F on June 12 at Kearney 3E

Lowest 4-inch bare soil temperature: 56°F on June 20 at Harrison

Highest 5-second wind gust: 58 mph on June 24 at Oshkosh 6N

Highest precipitation: 6.43 inches on June 26 at Concord 2E

> Source: The Nebraska Mesonet at Nebraska State Climate Office, University of Nebraska-Lincoln



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