# CLIMATE UPDATE

A MONTHLY SUMMARY FROM THE NEBRASKA STATE CLIMATE OFFICE

## Warmth, dryness round out the fall season

ovember brought Nebraskans above-average temperatures and below-normal precipitation this year. Monthly temperatures across the state ranged from the high 30s in the north to the low 40s in the south. These temperatures were slightly above normal in eastern Nebraska to about 5 degrees above normal for the west and north-central portions of the state. Several locations in the west ranked in the top 10 warmest Novembers on record — McCook, North Platte, Scottsbluff, Sidney and Valentine.

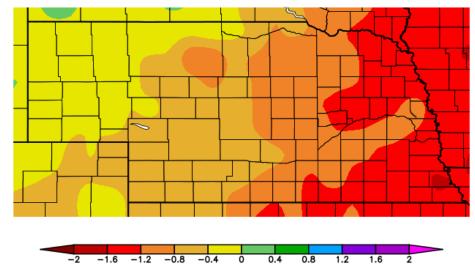
At a time of year when temperatures normally decrease over the course of the month, the highest temperatures occurred during the last week. Daily high temperature records were tied or broken for numerous locations during this time — particularly for Nov. 27 where highs in the low 80s and high 70s were reported. The Nebraska Mesonet high temperature was 83°F on the afternoon of Nov. 27.

The statewide average temperature was 40°F, which is 3.3 degrees above the most recent 30-year normal (1981 – 2010). This ranks as 18th warmest on record for Nebraska.

What are the soil temperatures looking like? High 30s in the west and north to low 40s in the southeast. This is under bare ground at the 4-inch depth. The highest and lowest observed soil temperatures were 60°F on the afternoon of Nov. 17 near Guide Rock and the low of 30°F occurred five days later near Fordyce.

### **Precipitation**

In November, we typically enter our dry season here in Nebraska. For the next several months, precipitation is generally at a minimum compared to other seasons. Precipitation totals were well below normal across Nebraska for **DEPARTURE FROM NORMAL PRECIPITATION (IN)** 



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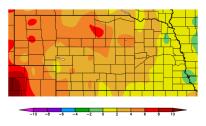
All maps generated using November provisional data.

#### WEEKLY AVERAGE 4-INCH BARE SOIL TEMPERATURE (F)



**NEBRASKA STATE CLIMATE OFFICE** 

### DEPARTURE FROM NORMAL TEMPERATURE (F)



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#### **November extremes**

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

**Highest air temperature:** 83°F on Nov. 27 (Ainsworth 2NE)

**Lowest air temperature:** 8°F on Nov. 22 (Oakland 4W)

**Greatest 24-hour temperature change:** 47°F, starting at 23°F on Nov. 21 and ending at 70°F Nov. 22 (Sparks 5NE)

**Highest 1-day precipitation:** 0.3 inches on Nov. 4 at Harrison 4NW

Highest 4-inch bare soil temperature: 60°F on Nov. 17 (Guide Rock 3F)

**Lowest 4-inch bare soil temperature:** 30°F on Nov. 22 (Fordyce 4N)

**Highest 5-second wind gust:** 51 mph on Nov. 24 (Dunning 6NW)







the month. Several locations, particularly in the eastern half of the state, reported less than a tenth of an inch of moisture, qualifying them for one of the top 10 driest Novembers on record. Monthly totals were less than a quarter inch in southern Nebraska and in the northeast. Higher amounts (more than three-tenths of an inch) were received in the northwest, Panhandle and portions of central Nebraska. The highest totals were found in locations near Valentine, Rushville, Gordon and Harrison, which saw around six-tenths of an inch. The Nebraska Mesonet station near Harrison reported 0.34 inches on Nov. 4.

The low totals in the east represent monthly precipitation deficits of an inch and a half. The departures decline westward to an inch in central Nebraska and less than a half inch in the west. On a statewide basis, monthly precipitation was 0.24 inches, which is 0.76 inches below normal, and ranks as the 19th driest November.

#### Drought

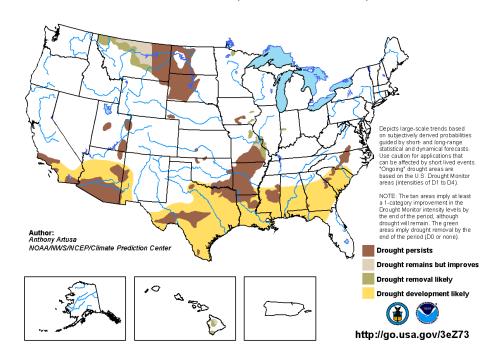
During the first week of November, rainfall received in the Panhandle was enough to eat away a bit at the dryness that has been in this area since late July. Otherwise, drought has remained steady, according to the U.S. Drought Monitor. Keep in mind, given the relatively low precipitation amounts this time of year, we typically don't see significant changes in drought conditions from week to week. At the end of November, the two pockets of concern remained, which collectively cover 8.6 percent of Nebraska (2 percent in D1 - moderate drought, 6.6 percent in D0 - abnormally dry). The seasonal drought outlook points to persistence of the current conditions for these areas.

#### Outlook

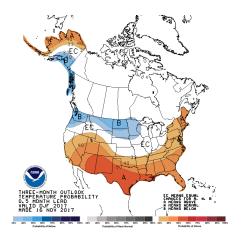
What can we expect for the upcoming winter season? The latest outlooks from the Climate Prediction Center

#### U.S. SEASONAL DROUGHT OUTLOOK

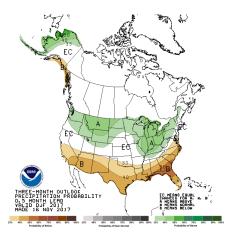
DROUGHT TENDENCY DURING VALID PERIOD (VALID NOV. 16 TO FEB. 28)



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



are showing a pattern indicative of La Nina type conditions across the U.S. For Nebraska, we happen to lie at a dividing line between a tendency for cool and wet conditions to our north and warm and dry conditions to our south. The guidance is favoring the cool and wet conditions



for the northeast and western portions of the state, respectively. The remainder of the state is in the equal chances category of above, near and below normal.

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