

CLIMATE UPDATE

May brings record warmth, triple-digit heat

After a cold and snowy April, Nebraska seemingly skipped spring and went right to summer. Average temperatures were above average about 2 degrees in the west, 4 to 6 degrees in central Nebraska, and 6 to 8 degrees in the east, particularly the southeast. Locations in the eastern third of the state reached triple-digit heat during the last week of the month (including Grand Island, Lincoln, Omaha Airports). On May 27, the highest maximum of 102°F was observed in Oakland and Tekamah.

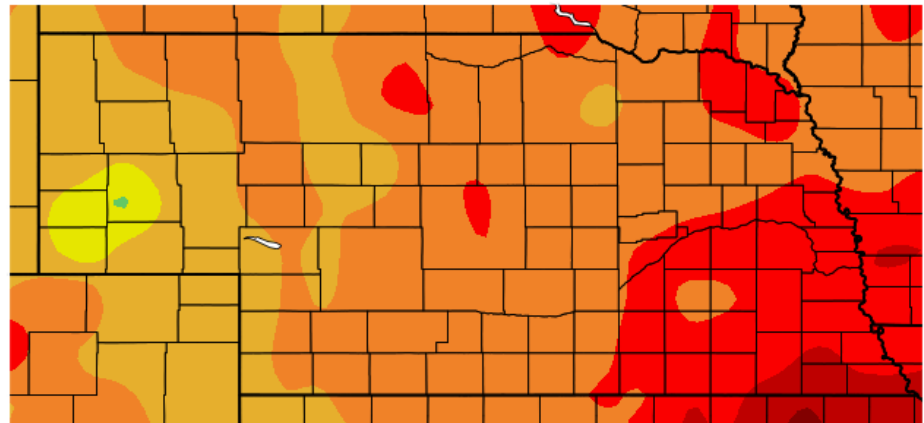
This May ranks in the top five warmest for a number of locations (see table at right).

On a statewide basis, May ranks as fourth warmest since 1895 with an average temperature of 63.7 degrees. Soil temperatures warmed significantly during the month as bare soil temperatures at the 4-inch depth averaged in the 70s. On the afternoon of May 26, the Kearney 3E Nebraska Mesonet station observed a 95°F bare soil temperature reading.

Precipitation

Overall, Nebraska was dry in the east and wet in the west. Monthly totals for the eastern third of the state were in the 2- to 3-inch range, which is about half the normal amount for May. The central and western portion of the state received anywhere from 4 to 8 inches for the month. This represents 150 percent to more than 200 percent of normal. Several daily rainfall records were broken associated with storm systems moving through during the month. One of the more significant events was rainfall in the Scottsbluff area where more than 3 inches was received in a 24-hour time period on May 19. On a statewide basis, the monthly total precipitation was 4.81 inches, which is about an inch above normal.

DEPARTURE FROM NORMAL TEMPERATURE (F)



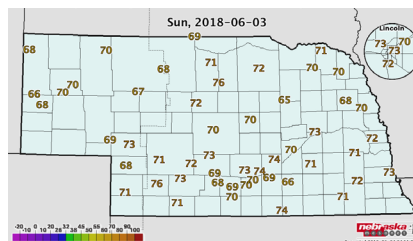
HIGH PLAINS REGIONAL CLIMATE CENTER

All maps generated using May provisional data.

May weather station temperature rankings

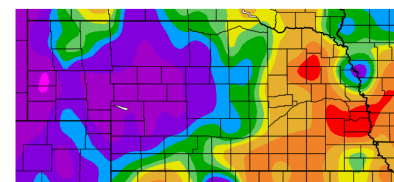
Location	Average Temperature	Ranking	Period of record
Ainsworth	64.9°F	4th	1906-present
Grand Island AP	67.0°F	3rd	1938-present
Lincoln AP	69.5°F	1st	1948-present
Norfolk AP	65.7°F	5th	1946-present
Omaha AP	70.6°F	1st	1936-present
Valentine AP	64.4°F	2nd	1890-present

DAILY AVERAGE SOIL TEMPERATURE (F)



NEBRASKA STATE CLIMATE OFFICE

PERCENT OF NORMAL PRECIPITATION



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Nebraska Mesonet extremes

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

Highest air temperature: 102°F on May 27 at Oakland 4W

Lowest air temperature: 31°F on May 2 at Whitman 5NE

Highest 4-inch bare soil temperature: 95°F on May 26 at Kearney 3E

Lowest 4-inch bare soil temperature: 42°F on May 2 at Harrison 4NW

Highest 5-second wind gust: 80 mph on May 17 at Mullen 30N

Highest precipitation: 3.79 inches on May 20 at Scottsbluff 2NW

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

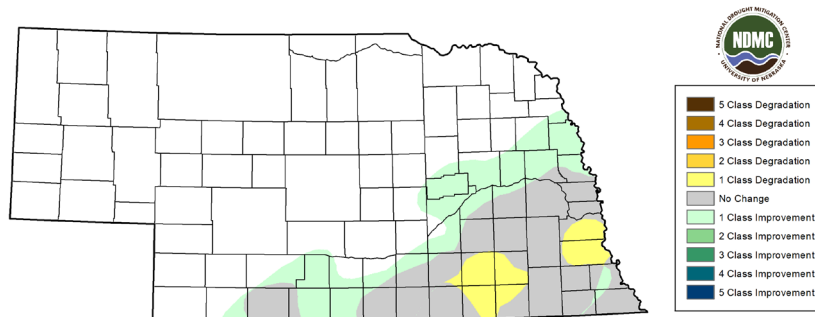
Drought

The southeastern third of Nebraska (covering 25 percent of the state) was in a D0, or abnormally dry, category to start May, according to the U.S. Drought Monitor. A few pockets along the southern edge were in the moderate drought category (D1).

Extension Educators indicated that pastures and alfalfa production in the areas listed as D1 were 30 percent to 50 percent off from normal for the first cutting. Row crops were still in good shape, but full crop water use was not expected to occur until the second half of June, based upon the outlook at the end of May.

At month's end, abnormal dryness had been removed for most areas south of the Platte River because of an excess in rainfall received. However, an expansion of moderate drought conditions occurred in a couple of pockets in extreme southeast Nebraska. By the start of June, moderate drought covered 5.4 percent of the state and abnormal dryness covered 13 percent.

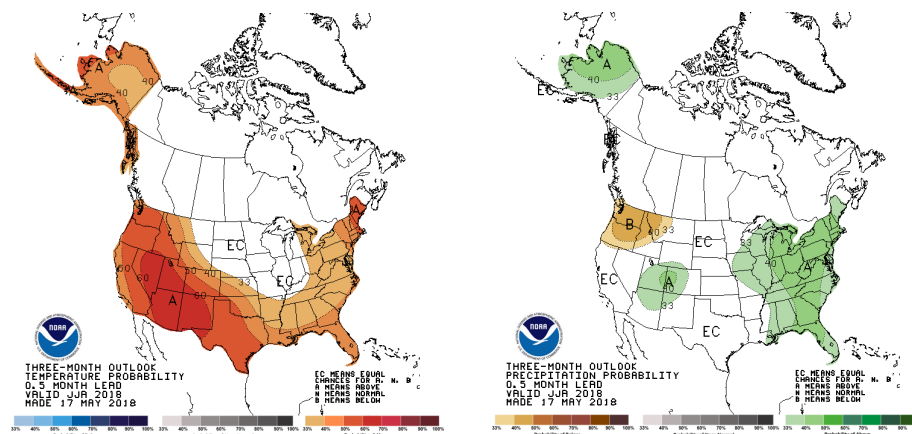
U.S. DROUGHT MONITOR | CHANGE MAP MAY 29 COMPARED TO MAY 1, 2018



NATIONAL DROUGHT MITIGATION CENTER

One-month change map provided by droughtmonitor.unl.edu.

90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



Outlook

For the month of June, the Climate Prediction Center's outlook puts Nebraska, and much of the U.S., in the above-normal temperature category. For precipitation, the monthly trend is calling for an increased chance of below-normal rainfall along a swath in southwest Nebraska. Equal chances for above-, near-, and below-normal precipitation are given for the remainder of the state. Going forward to the three months of June, July and August,

the seasonal outlooks do not offer a lot of guidance for temperature or precipitation as Nebraska lies in a zone of equal chances. The increased probability of above normal temperatures just grazes southwest Nebraska for the summer season. The precipitation outlook shows increased chance for wetter than normal conditions for the eastern portion of the U.S., with Iowa being on the western edge.

— Martha Shulski, state climatologist and NSCO director



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