

CLIMATE UPDATE

April marked by abnormally dry conditions

Nebraska had its sixth-driest April since modern record-keeping began (1895). The statewide monthly average of 0.71 inches was nearly an inch-and-a-quarter less than normal. The streak of dryness helped prompt U.S. Drought Monitor authors to expand abnormal dryness into a large swath of southern Nebraska counties. Temperatures ran relatively cool, particularly for nighttime lows, which averaged 30.5 degrees Fahrenheit and ranks as 12th coldest on record. Some significant snowfall amounts fell during the month but were short-lived.

Temperature

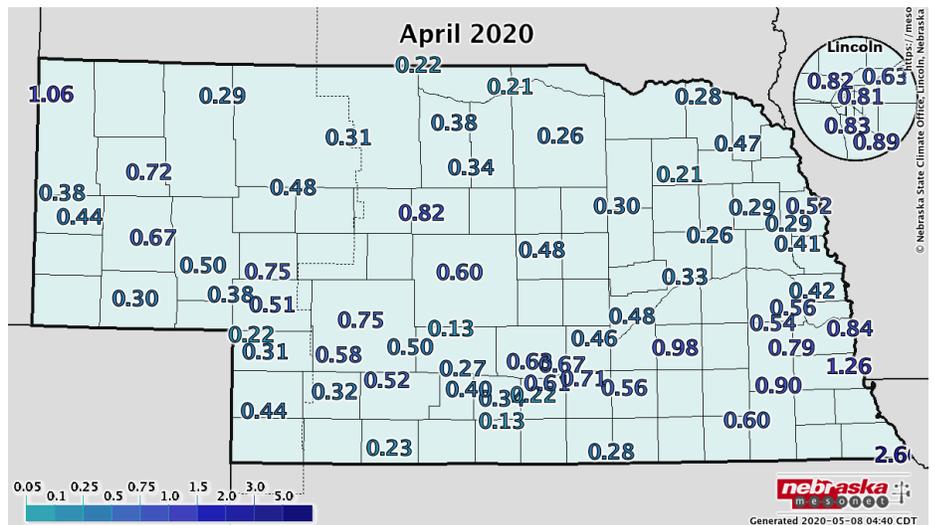
Temperatures ran hot and cold this April and daily high and low temperature records were set at various locations around Nebraska. Three record high temperatures were set on April 7 (Omaha, 86 degrees; Lincoln, 87 degrees; Grand Island, 86 degrees) in an early month warm spell and then on April 30 (Alliance, 87 degrees). The Chadron and Scottsbluff airports reached 90 degrees. Chadron also hit -10 degrees during the month, a 100-degree difference between highest and lowest temperature. (Nebraska, honestly, it's not for everyone).

Elsewhere, teens and single digits were the lowest observed temperatures. Record daily low temperatures were set in mid-April at locations from Omaha to Scottsbluff. Overall, low temperatures were quite cool compared to normal (12th coldest). The monthly statewide average temperature of 45.9 degrees was 2.4 degrees below normal.

Precipitation

April was punctuated by a few snowstorms leaving short-lived fingerprints on the spring landscape. Bushnell came

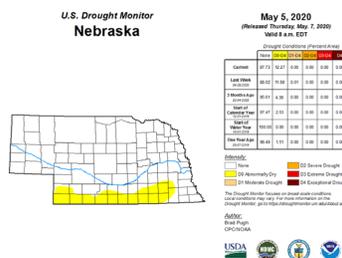
APRIL LIQUID PRECIPITATION TOTALS (IN)



NEBRASKA STATE CLIMATE OFFICE, NEBRASKA MESONET DATA

All maps generated using April provisional data.

U.S. DROUGHT MONITOR MAP OF NEBRASKA



in with nearly a 14-inch total for the month. Relatively heavy swaths occurred in the southwest, northeast, and around the Platte River in the eastern half of the state. Omaha (5 inches on April 16), Lincoln (4 inches on April 16) and Grand Island (3.8 inches on April 17) all had record daily snowfalls.

Aside from the far southeast corner, rainfall was scant this month in Nebraska. Total precipitation (liquid plus snow water equivalent) in the southeast was about 2 inches, with Auburn coming in

at 2.65 inches, the highest statewide. Elsewhere, totals were generally in the half inch to inch range. Statewide average precipitation was sixth-lowest on record (0.71 inches).

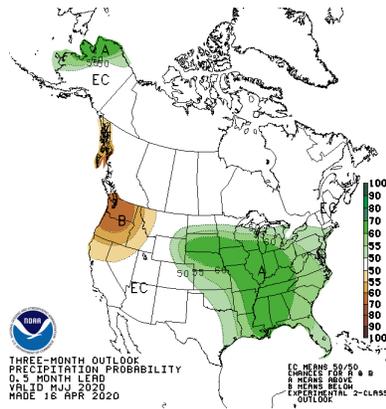
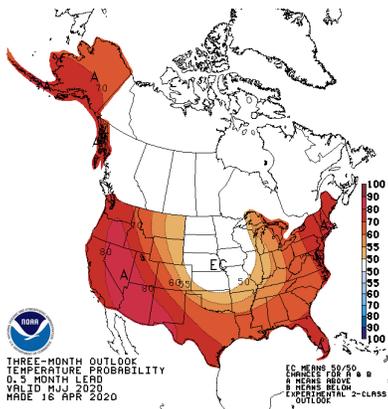
Soils and Impacts

April was split into three distinct periods that had major impacts on agricultural operations during the month. The month opened up warm and dry, only to see record cold, snow, high winds, and generally miserable conditions during the middle third of the month. Welcome warmth and below normal moisture the final third of the month resulted in widespread planting of summer crops.

Daily average soil temperatures from the Nebraska Mesonet reached the low 60s across southern Nebraska by April 7, with upper 40s reported across the northern quarter of the state. Significant snow and well below normal tempera-

90-DAY OUTLOOK

TEMPERATURE (LEFT) & PRECIPITATION



tures during the April 10-17 period dropped average daily soil temperatures into the low 30s north to low 40s south by April 17. Above normal temperatures the final 10 days of the month rapidly warmed soil temperatures into the acceptable corn planting range of 55 degrees or greater by April 21.

The dry conditions at the beginning of the month allowed producers to begin planting oats and start field preparation work, a welcome respite for cattle producers during the heart of calving season. Field activity came to a grinding halt with the outbreak of cold air and snow events, but the moisture that fell with the snow should have benefited producers in eastern and parts of southern Nebraska who were indicating that dry surface conditions were inhibiting herbicide applications. Most of this moisture missed south central and southwest Nebraska and producers were reporting that they were having to plant deeper to reach adequate moisture for germination.

The warm and drier than normal conditions the final third of the month promoted rapid planting, as precipitation events that did occur were insufficient to cause significant planting delays.

The last crop report release during April from the Nebraska Agricultural Statistical Service (NASS) indicated 20% of the corn had been planted as of April 26, ahead of last year's pace of 12% and the five-year average of 16%. Soybean planting stood at 8% completed, four times the five-year average. With the warm and dry conditions experienced the final four days of the month, it is entirely possible that over half of the corn acreage could be planted by the time NASS releases its first May planting progress statistics. The exception was across parts of central and north central Nebraska, where high water tables from excessive moisture the past three years were preventing producers from planting.

Outlook

The Climate Prediction Center's (CPC) two-week outlook for May released April 16 called for above normal temperatures along the U.S. coastal states, with equal chances of above, below, or normal temperatures for the interior. The updated May forecast now favors above normal temperatures across the western United States, including a slight chance for above normal temperatures over the

April extremes

Nebraska's statewide weather network operated by the Nebraska Mesonet at the University of Nebraska-Lincoln cataloged the following extremes this April:

Highest air temperature: 89°F on April 7 at Nebraska City 3NW

Lowest air temperature: -2°F on April 3 at Alliance 6NW

Greatest 12-hour temperature change: 54.5°F on April 10 at Champion 5SE

Lowest wind chill: -15°F on April 7 at Harrison 4NW

Highest 4-inch bare soil temperature: 82°F on April 27 at Guide Rock 3E

Lowest 4-inch bare soil temperature: 28°F on April 3 at Ainsworth 2NE

Highest 5-second wind gust: 62 mph on April 28 at Long Pine 20S

Source: [The Nebraska Mesonet](http://TheNebraskaMesonet.com) at Nebraska State Climate Office, University of Nebraska-Lincoln

southwestern third of Nebraska. Below normal temperatures were indicated for the Great Lakes and Northeastern states. For the remainder of Nebraska, there are equal chances of above normal, normal, or below normal temperatures.

The CPC precipitation outlook indicated a broad area of above normal precipitation from the northern Plains south-southeastward through the lower Mississippi River valley. The updated outlook issued at the end of April now depicts below normal precipitation for the Great Lakes region, with the southwestern flank of this region touching extreme northeastern Nebraska.



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