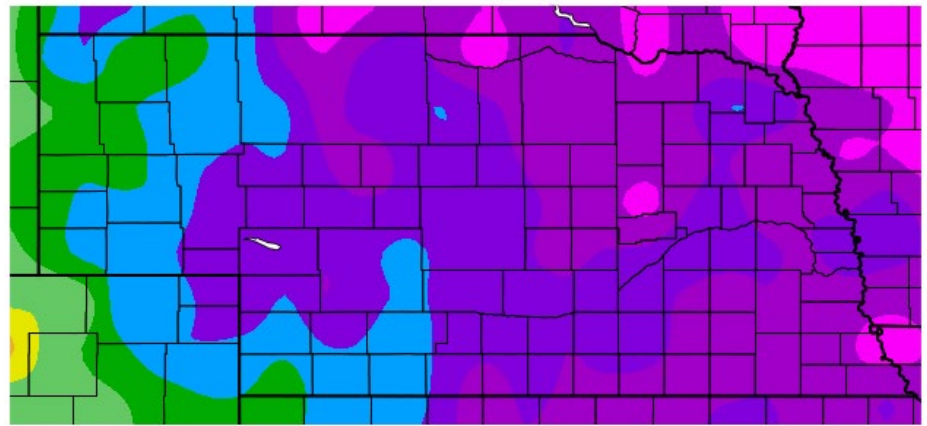


Spring blizzard, record cold highlight April

A mid-month blizzard marched its way across Nebraska, resulting in a foot or more of snow and sustained high winds. The timing of the storm (April 13 to 14) was such that calving was affected and, in some areas of the state, there was a shortage of shelter equipment. The strongest winds were from an east-northeast direction, which is not common for a blizzard. The Nebraska Mesonet station near Big Springs recorded a wind gust of 66 mph on April 13. Power losses occurred in portions of the state and a significant stretch of I-80 was closed for a time as the storm passed through the state. Snowfall totals were more than 8 inches in a large swath stretching from the southern Panhandle to north-central Nebraska. The highest totals were up to 2 feet of snow, near the South Dakota border. As the blizzard approached southeast Nebraska, the air temperature took a dive from 85 degrees on April 13 to a high of only 32 degrees on the afternoon of April 14.

Another key story was the persistence of cold weather for much of the month, aside from the blizzard. The strongest departures from normal were in the eastern two-thirds of the state. Temperatures averaged up to 10 degrees below normal in the east to about 3 degrees below normal in the Panhandle. Norfolk (41.3°F), Lincoln (44.4°F), and Grand Island (43.1°F) airports all reported the coldest April on record. Omaha (44.9°F), Hastings (42.3°F) and Columbus (42.9°F) came in at second coldest while Imperial and North Platte were sixth and eighth coldest, respectively. The statewide average temperature of 41.0 ranks as second coldest going back to 1895 and is 7.3 degrees below normal. A warm-up was felt during the last week of the month as temperatures moderated. The statewide high of 88°F was reached across portions of southern Nebraska on April 29 and 30.

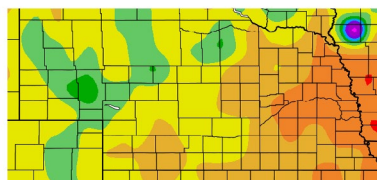
DEPARTURE FROM NORMAL TEMPERATURE (F)



HIGH PLAINS REGIONAL CLIMATE CENTER

All maps generated using April provisional data.

DEPARTURE OF NORMAL PRECIPITATION

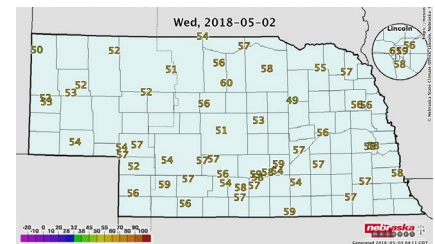


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Precipitation

Precipitation was heaviest in areas of the state that experienced the highest snowfall amounts. Liquid equivalent totals were more than 1.5 inches in these areas. Conditions were relatively dry in the east with less than an inch reported, which is a few inches less than normal for April. In fact, Omaha (0.27 inch), Lincoln (0.67 inch), and Columbus (0.50 inch) ranked as second, third, and seventh driest, respectively. The monthly statewide precipitation

WEEKLY AVERAGE 4-INCH BARE SOIL TEMPERATURE (F)



NEBRASKA STATE CLIMATE OFFICE

of 1.53 inches, which is 0.89 inches below normal and is in the top third driest Aprils.

Soil temperature

Soil temperatures were below freezing at the beginning of the month. It took until late April for temperatures to warm into the 50s. By month's end, the weekly average bare soil temperature was in the mid to high 50s across much of Nebraska. The diurnal temperature cycle is running

Nebraska Mesonet extremes

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

Highest air temperature: 88°F on April 29 at Champion 5SE

Lowest air temperature: -2°F on April 4 at Wausa 2SW

Greatest 24-hour temperature change: 53°F, starting at 85°F and ending at 32°F on April 14 at Nebraska City 3NW

Highest 4-inch bare soil temperature: 75°F on April 30 at Guide Rock 3E

Lowest 4-inch bare soil temperature: 31°F on April 4 at Ord 2N

Highest 5-second wind gust: 65 mph on April 13 at Big Springs 8NE

Highest precipitation: 0.60 inches on April 17 at Ragan 5W

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

in the low 40s at night and 60s to low 70s for afternoon highs. It got as high as 75°F under bare ground at O'Neill on April 30.

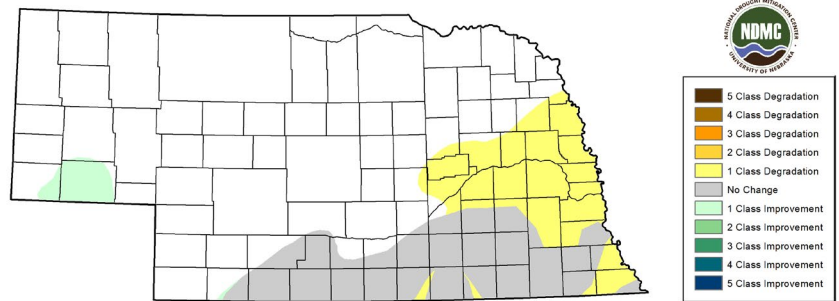
Drought

With the relative lack of precipitation in the east, the state saw a degradation in this area and the placement of abnormal dryness (D0), according to the U.S. Drought Monitor. The opposite occurred in the southern Panhandle, with an elimination of D0 in Cheyenne and Kimball counties. At the start of May, abnormal dryness covered 25 percent of the state and moderate drought (D1) 2 percent in the far southeast and south-central.

Rocky Mountain snowpack is continuing the trend from last month with generally below-normal conditions (75 percent of normal) for the North and South Platte basins. Above-normal snow amounts are

U.S. DROUGHT MONITOR | CHANGE MAP

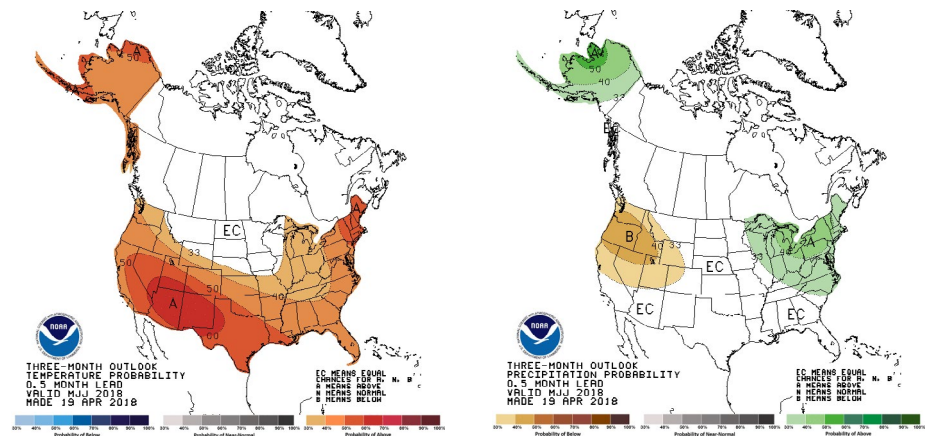
MAY 1 TO APRIL 3, 2018



NATIONAL DROUGHT MITIGATION CENTER

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

90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



confined to the highest elevations, whereas lower elevation snowpack conditions are normal to below normal.

Outlook

The Climate Prediction Center temperature outlook for April was certainly verified, with the cold conditions we experienced statewide. For May, the outlook is trending toward an increased

probability of warmer and wetter than normal conditions statewide. The seasonal outlooks for the May to July timeframe indicate increased chance for above-normal temperatures for southern Nebraska and equal chances of above, near, and below normal.

— Martha Shulski, state climatologist and NSCO director



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