

Midwest Ag-Focus Climate Outlook

July 31, 2025

Main Points

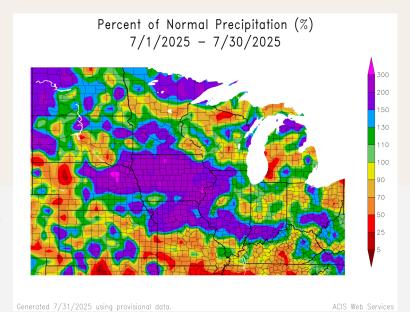
- July was warmer and wetter than average for much of the Corn Belt.
- Drought conditions largely improved.
- Crops remain in good condition.
- Warmer than average temperatures expected into early August – with somewhat less precipitation.

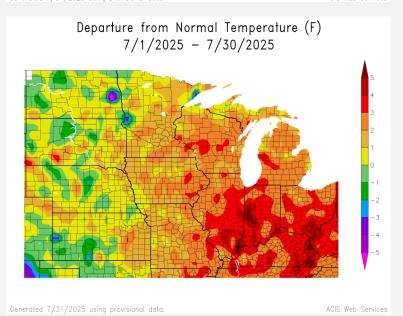
Current Conditions

Generally, July brought warmer than average temperatures to the North Central region. The eastern portion of the region was 2 to 4°F above normal, while pockets across the Northern Plains were near normal to 2°F below normal.

Much of the region experienced a wet July. Almost the entire state of Iowa, northern Missouri, eastern Nebraska, and northern Minnesota received 200-300% of normal precipitation over the last 30-days. Throughout July, central Iowa recorded over 11 inches of monthly rainfall where rainfalls were only beat out by records from the wet July of 1993. Yet, some pockets of dryness remain. Pockets of western Michigan, western Nebraska, southern Missouri, and northern Wisconsin received less than 50% of normal precipitation.

Since April 1st, growing degree day (GDD) accumulation ranges from 710 to 2530 GDD across the region. Producers and managers can access the <u>Corn Growing Degree</u> <u>Day</u> decision support tool to determine how their corn compares to average accumulation.





Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 07/31/2025.



Impacts

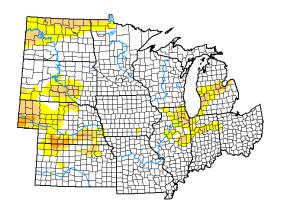
Drought

July rainfall has greatly reduced drought coverage in the region. As of July 29th, 79% of the region is classified as no drought intensity, 13% as abnormally dry (D0), 8% as moderate drought (D1), and 1% as severe drought (D2). Instances of moderate to severe drought persist across the Northern Plains and north central Illinois up through central Michigan. Compared to last month, drought conditions have generally improved by 1 to 2 classes. Some crop stresses and reduced specialty crop production have been noted in these drought areas.

Soil moisture conditions are generally good across the region, though some areas are experiencing challenges due to wet conditions, and other areas of isolated drought persist. As of the week ending July 27th, topsoil moisture ranges from 62 to 76% adequate. According to USDA-NASS, about 25% of topsoil moisture is short to very short across much of the Northern Plains, Michigan, and Indiana. On the other end of the spectrum, above average rainfall over the month of July has resulted in 21, 26, and 30% of topsoil in surplus across Missouri, Minnesota, and Iowa, respectively. Subsoil moisture ranges from 57 to 80% adequate across the region.

Soils, Crops and Livestock

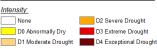
Corn and soybean progress have generally benefited from warmer and wetter than average conditions this past month. As of July U.S. Drought Monitor
North Central States



July 29, 2025 (Released Thursday, Jul. 31, 2025) Valid 8 a.m. EDT

Drought Conditions (Percent Area)





The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.asp



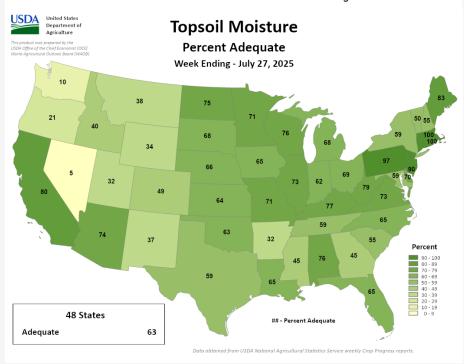
David Simeral



Western Regional Climate Center



droughtmonitor.unl.edu

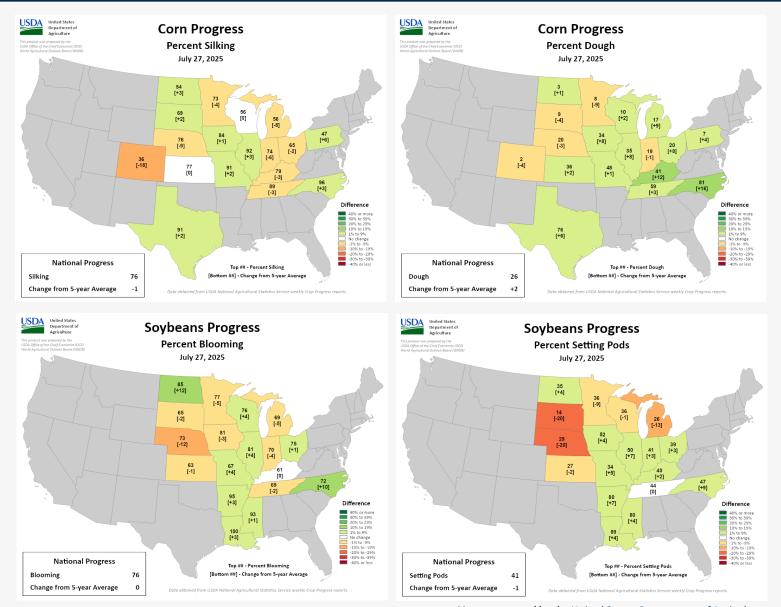


Maps generated by the National Drought Mitigation Center.

27th, 54 to 92% of corn is silking and 3 to 48% is at the dough stage. The eastern portion of the region is slightly behind the 5-year average for corn silking. Approximately 63 to 85% of soybeans are blooming, with North Dakota about 12% ahead of the 5-year average and Nebraska 12% behind the 5-year average. Across the Corn Belt, 14 to 52% of soybeans are setting pods. Both South Dakota and Nebraska are currently lagging 20% behind the 5-year average, likely a result of limited soil moisture throughout much of the early growing season.

Spring wheat has headed and harvest has begun in South Dakota, while winter wheat harvest is complete in much of the southern states of the region. Similar to spring wheat, at least 95% of barley has headed across North Dakota and Minnesota. About 2 to 59% of oats are harvested, with most states tracking below the 5-year average.





Maps generated by the <u>United States Department of Agriculture</u>.

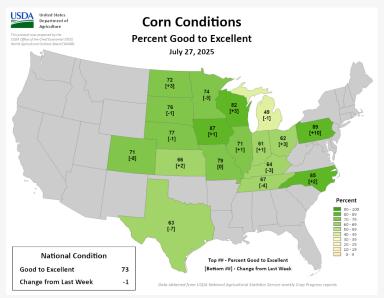
With warmer and wetter conditions this July, 49 to 87% of corn and 45 to 84% of soybeans are in good to excellent condition. Overall corn condition ratings are generally the best since 2016 with limited crop stress (so far) through critical reproductive periods. Similarly, 41 to 88% of pasture and rangeland are in good to excellent condition. However, livestock faced heat stress due to high temperatures and humidity this month.

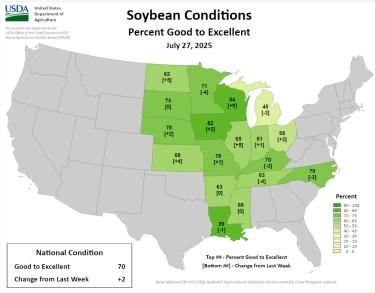
Rainfall over the month has provided ample soil moisture during a generally dry time of year, but diseases have become an issue. Northern Illinois reports some instances of Tar spot, southern rust has been found in Iowa, and there's a high risk of early blight across Wisconsin. General concerns about disease with the wetness have prompted spraying. Farmers and managers should continue regularly scouting fields. Pockets of excess wetness have been a problem.

River Levels

Above normal rainfall has resulted in action level to major flood forecasts across Iowa, according to the National Water Prediction Service. Action levels have also been observed along the Mississippi River through Missouri. While rivers have been running higher, flooding has been mostly minor.







Percent Good to Excellent

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[Bottom ##] - Change from Last Week

Pasture and Range Conditions

Map generated by the <u>United States Department of Agriculture</u>.

Severe Weather

July has brought high temperatures and humidity, resulting in multiple heat waves throughout the month, and at times, dangerous conditions. Thunderstorms and high winds impacted the Northern Plains and Upper Midwest this week, leading to downed trees and power outages across the region. A derecho that started along the South Dakota/Nebraska border moved into Iowa July 28-29. That along with some strong storms in Minnesota caused some crop and property damage. Winds in northwest Iowa gusted to over 90 mph.

Fire

Canadian wildfires have continued to impact air quality across the Midwest throughout July leading to worsening air quality as drier Canadian air has become more dominant for the first time in weeks. According to the National Interagency Fire Center August outlook, there is normal risk for wildland fires for the region.

Outlook

National Condition

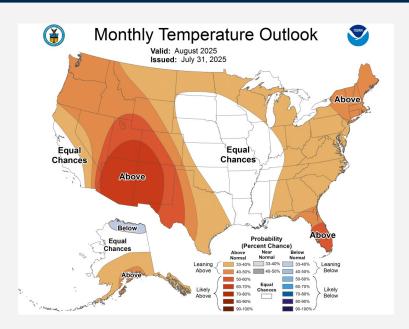
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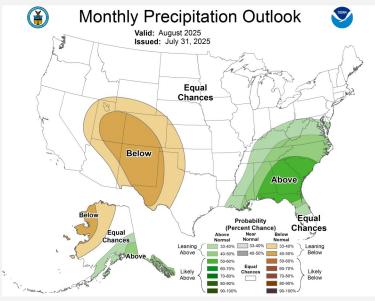
Good to Excellent

Change from Last Week

Above normal temperatures are likely through the first part of August. Hints toward the wetter side continue in the eastern Corn Belt. According to the updated August outlook from NOAA's Climate Prediction Center, much of the region has an equal chance of above or below normal temperatures over the next month, and North Dakota and the Great Lakes are leaning above normal. August precipitation is also a toss-up, and equal chances of below or above normal rainfall are possible across the region. Warmer than average conditions seem more likely for the first part of the month with more moderate conditions likely later.







Outlooks provided by the Climate Prediction Center.

Looking further in the future, there is a greater likelihood of above-normal temperatures from August through October across the North Central region. The seasonal precipitation outlook is mixed, with the Northern Plains and Upper Midwest leaning below normal, while a band from Missouri through Michigan has a 50-50 likelihood of above or below normal precipitation. On the far eastern edge, Ohio leans slightly above normal for precipitation over the next 3-month season.

Ample soil moisture has helped reduce crop stress despite recent high temperatures across the region. However, as above normal temperatures are likely to persist, we may start to see small amounts of crop stress. Crop progress should continue readily at least through the first part of the month. Excess moisture conditions should ease a bit as precipitation chances become less. More humid conditions should return with the return of the heat.

The El Niño Southern Oscillation (ENSO) is most likely neutral through summer. Looking into the fall/winter El Niño seems unlikely with La Niña/Neutral conditions about equally likely.

Partners and Contributors

<u>United States Department of Agriculture (USDA)</u>

National Oceanic and Atmospheric Administration (NOAA)

Climate Prediction Center (CPC)

National Weather Service (NWS)

National Center for Environmental Information (NCEI)

National Drought Mitigation Center (NDMC)

National Integrated Drought Information System (NIDIS)

Midwestern Regional Climate Center (MRCC)

Midwest State Climatologists

High Plains Regional Climate Center (HPRCC)

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