

Midwest Ag-Focus Climate Outlook

Main Points

- Temperatures have been generally been well above average over the last 30 days
- Large parts of the region have received less than 50% of June precipitation or worse. Very spotty areas have been wetter than average.
- Crop conditions are still OK, but worsening quickly as lack of precipitation and high atmospheric demand stress crops.
- Early July will be stressful for crops, humans and livestock, though latter July may see some easing of stress.



Current Conditions



Temperatures over the last 30 days have been warmer than average over nearly the whole region with pockets closer to average. Most of the region west of the Mississippi River has been well above average (+3-5 °F). These deviations are not record-setting, but well above average for early summer. Precipitation has been mostly below average with very isolated areas above where heavier rains occurred. Large areas received below 50% of average precipitation and worse (remember June is on average the wettest month for most of the region). Parts of the Plains (parts of Kansas and western Dakotas) did see some recovery during June. The warmer temperatures along with wind, lower humidities and decent amounts of solar radiation increased evapo-transpiration during the month.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: ACIS Climate Maps. Generated: 7/7/2022.



U.S. DEPARTMENT OF AGRICULTURE



The heat over the region had a two-fold effect. The additional warmth did add GDDs for late planted crops helping them catch-up some on phenology, though most of the region is still behind in development. The additional heat as mentioned (combined with lack of rain) increased stress on crops. Stress included corn rolling in many areas and beans seeing more limited vegetative growth. Overall impact on yield is still to be determined, though some yield loss has likely occurred for both corn and soy. The heat and shifting temperatures from the spring lead to some isolated specialty crop losses on grapes (OH) and blueberries (IL). The dry conditions have reduced disease issues across the range of crops.

Flash drought is a topic of many conversations with the aforementioned dry conditions. Reminder-flash drought is a quick intensification of drought conditions. Severe drought was still mainly confined to Plains area and parts of NW IA. But USDM coverage of D0-D1 did increase over much of the Midwest in June and heat and lack of rain depleted soil moisture.

Crop conditions were still generally OK, though starting to worsen with increasing dryness. Far northern areas were also poorer because of extreme early season wetness and planting delays into very wet soils.

Check your corn GDD accumulation for your location and planting date at: <u>https://mygeohub.org/groups/u2u/</u>









Maps Generated by the National Drought Mitigation Center and the National Agricultural Statistic Service.

For more information, please visit: https://www.climatehubs.usda.gov/hubs/midwest

SDA Midwest Climate Hub

U.S. DEPARTMENT OF AGRICULTURE

July and shorter term outlooks do show some increased risk for a wider spread of agricultural issues for the month.

Higher chances for above average temperatures, especially earlier in the month exist for nearly the whole region. The Great Lakes to eastern Corn Belt have lesser chances for above average heat. The Plains area have greatly increased chances. An area from Nebraska to southern Illinois into the southern Plains has slightly increased chances for drier than average conditions.

A ridge of high pressure has been influencing conditions leading to the recent heat in this region.

Email the <u>Midwest Climate Hub</u> to join our list of subscribers.

Midwest Ag-Focus Climate Outlook

For more information, please visit: https://www.climatehubs.usda.gov/hubs/midwest Precipitation has not shut off completely as various storms have ridden across the top of the ridge helping isolated areas in the central to northern Corn Belt. This situation seems likely to continue allowing spotty areas to get rains, leaving many areas dry and susceptible to worsening drought conditions.

More recent outlooks hint at the ridge possibly moving westward, easing some of the heat while making conditions more

difficult for the western US. A westward shift in the ridge would ease the heat potential, but not improve the rainfall situation.

SDA Midwest Climate Hub

U.S. DEPARTMENT OF AGRICULTURE

Crop stress is likely to continue worsening around the critical corn reproductive period. Soybeans will be less affected before August. Also, non-irrigated specialty crops are likely to experience some stress from the excess heat.

Heat combined with high dew points are also going to create periodic dangerous conditions for people working outside and livestock. Conditions should be monitored for specific events and mitigation efforts taken as necessary. Warmer and drier than average conditions are still a possible risk over most of the area mentioned in the seasonal outlook (July-September-not pictured).

Check the most recent outlooks here : <u>https://www.cpc.ncep.noaa.gov/</u>

Outlooks provided by the <u>Climate Prediction Center</u>.

Partners and Contributors

United States Department of Agriculture (USDA) 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)

1

For More Information

Laurie Nowatzke, Coordinator USDA Midwest Climate Hub 1015 N University Blvd., Ames, IA 50011 515-294-0213 <u>laurie.nowatzke@usda.gov</u>

For more information, please visit: https://www.climatehubs.usda.gov/hubs/midwest