

July 27, 2022

Midwest Ag-Focus Climate Outlook

Main Points

- Warmer than average temperatures have still covered the region, though not as far above normal as in June.
- Drier conditions are still prevalent due to lack of rainfall and higher evapotranspiration, leading to widespread dry soils.



- Isolated areas have had heavier rains, which has helped crops.
- Crop conditions regionally are holding on with some areas getting quite bad.



Temperatures have been a little closer to average in the last 30 days, though warmer than average over most of the Plains into Missouri. In these areas 2-5 °F above average was common. Over most of the rest of the region temperatures were within 1-2 °F of average, with a tendency for above average but below common as well. Drier than average conditions dominated most of the region with pockets of well above average in spots across the whole area. Kansas to Missouri and north to Minnesota had areas below 25% of average. On the other side of the spectrum, several small areas received as much as 200% of average precipitation.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: <u>ACIS Climate Maps</u>. Generated: 7/27/2022.



1-month EDDI categories for July 21, 2022

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Impacts

Important to remember is that dry conditions over much of the area were only partially caused by lack of precipitation. The warm temperatures (along with sunlight, lower humidity and wind) added to heavy crop water use across the region. The EDDI map assesses evapotranspiration (ET) scaled in USDM categories. Water loss from the surface over most of the central US has been well into the higher categories – increasing the intensity of drought conditions.

Soil moisture is reflecting the rainfall-ET moisture situation with very dry soils over much of the Corn Belt. Areas north and east are in the "best" condition being closer to average. Large areas are in the 5th to 10th percentile or worse in a few small pockets and Kentucky. Drought conditions were worsening quickly in spots and more generally overall with "flash drought" conditions and persisting dryness in some areas.

Crop conditions were still generally OK with corn holding steady regionally and soybeans sorghum slipping more in the latest crop reports. Iowa and the northern states were in the best conditions with southern and plains states worst. Overall yields are likely reduced, but may be as bad as they might have been. Conditions can still change. Milder temperatures and some rainfall have likely helped corn still tasseling late July.

Overall crop development for all crops has continued to be behind average despite warmer temperatures.

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



45°N

40°N

35°N

30°N

25°N

120°W

110°W

Drought categories

ED4 ED3 ED2

95%

Maps Generated by the National Drought Mitigation Center, the Short-term Prediction Research and Transition Center, and the NOAA Physical Sciences Laboratory.







100°W

ED1 ED0

(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

80%

90°W

80°W

EW0 EW1 EW2 EW3 EW4

Wetness categories

70°W



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The August outlooks shorter and longer term indicate a return to warmer conditions from the milder last week of July much of the region experienced. Warmer than average conditions are very likely into August. The whole month of August has increased chances for above average temperatures. Drier than average conditions are also likely throughout the region, though with lesser certainty for the whole month of August.

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







Maps Generated by the National Agricultural Statistic Service.



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

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This combination of conditions continues to increase risks to all crop yields by keeping a high ET demand on rapidly drying soils. Corn will be past its most critical stage, but still at risk. Soybeans will also experience stress in dry areas. Other food crops (unirrigated) may also be at risk, as well as pastures. The heat will continue to push crop development.



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ISDA



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