

# Hydrologic and Climate Assessment

July 31, 2020



Photo Courtesy of Elizabeth Hawkins

**Aaron B. Wilson**

**STATE CLIMATE OFFICE OF OHIO (SCOO)**

DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

DEPARTMENT OF GEOGRAPHY



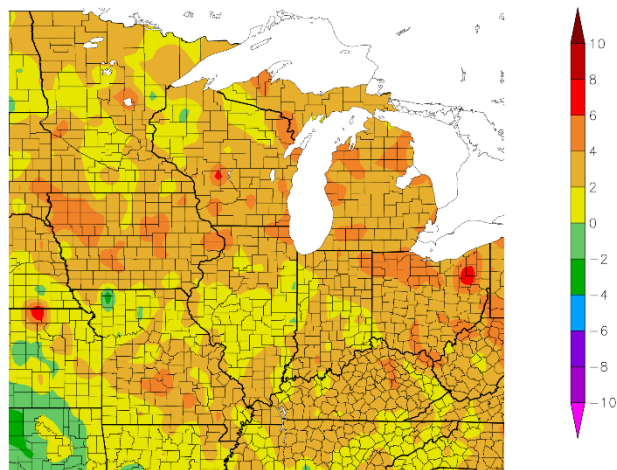
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# Temperature Differences Compared to Average (1981-2010)

**7-Day**

Departure from Normal Temperature (F)  
7/24/2020 – 7/30/2020

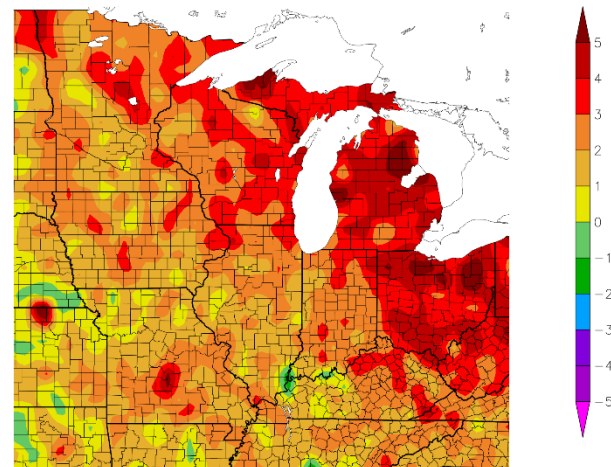


Generated 7/31/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

**30-Day**

Departure from Normal Temperature (F)  
7/1/2020 – 7/30/2020

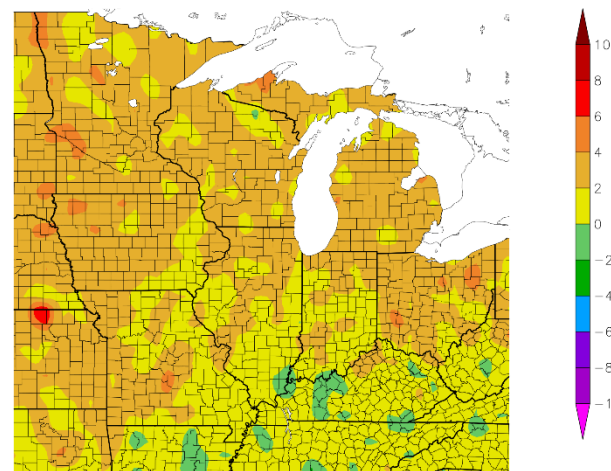


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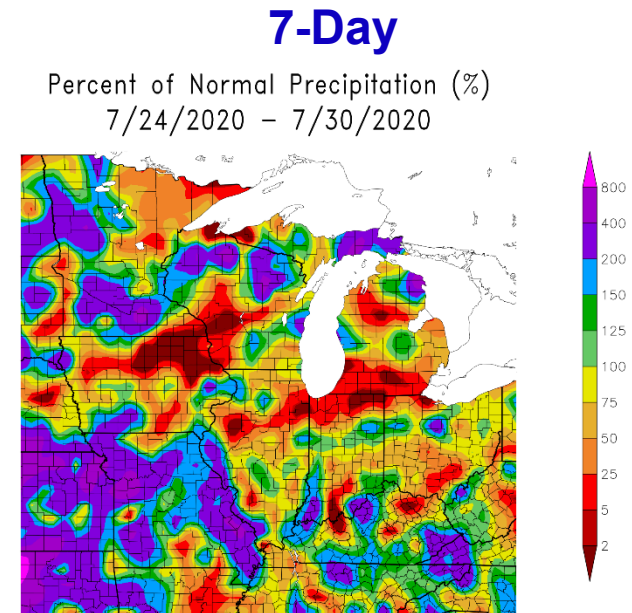
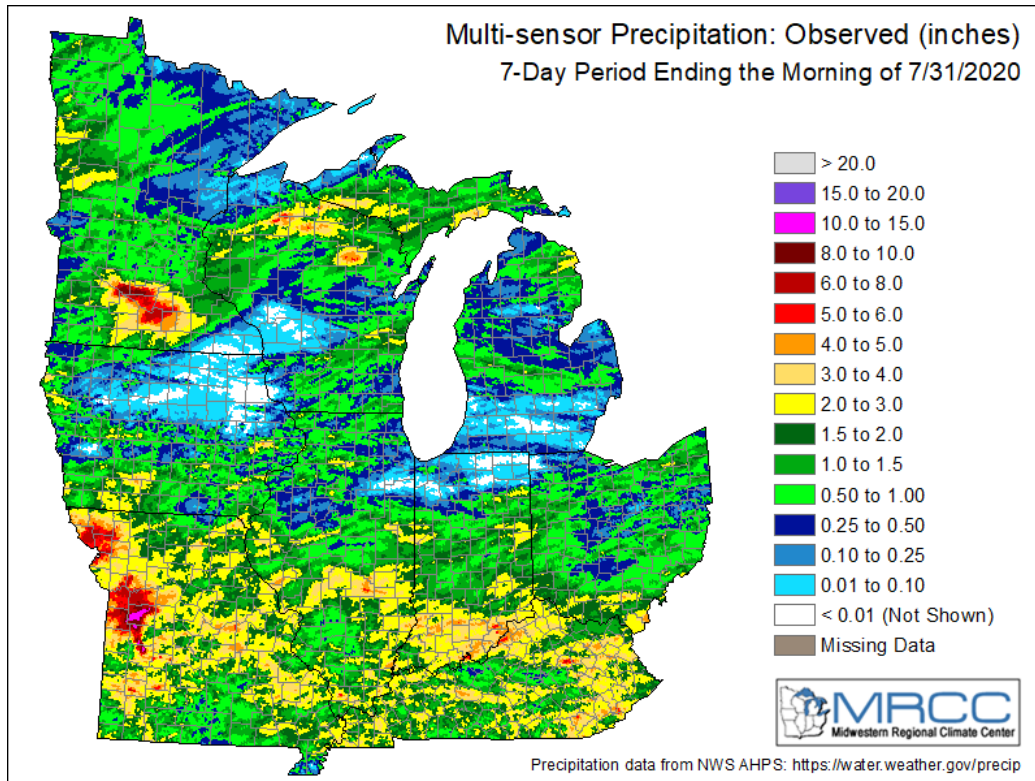
NOAA Regional Climate Centers

**60-Day**

Departure from Normal Temperature (F)  
6/1/2020 – 7/30/2020



# This Week's Precipitation



Generated 7/31/2020 at HPRCC using provisional data.

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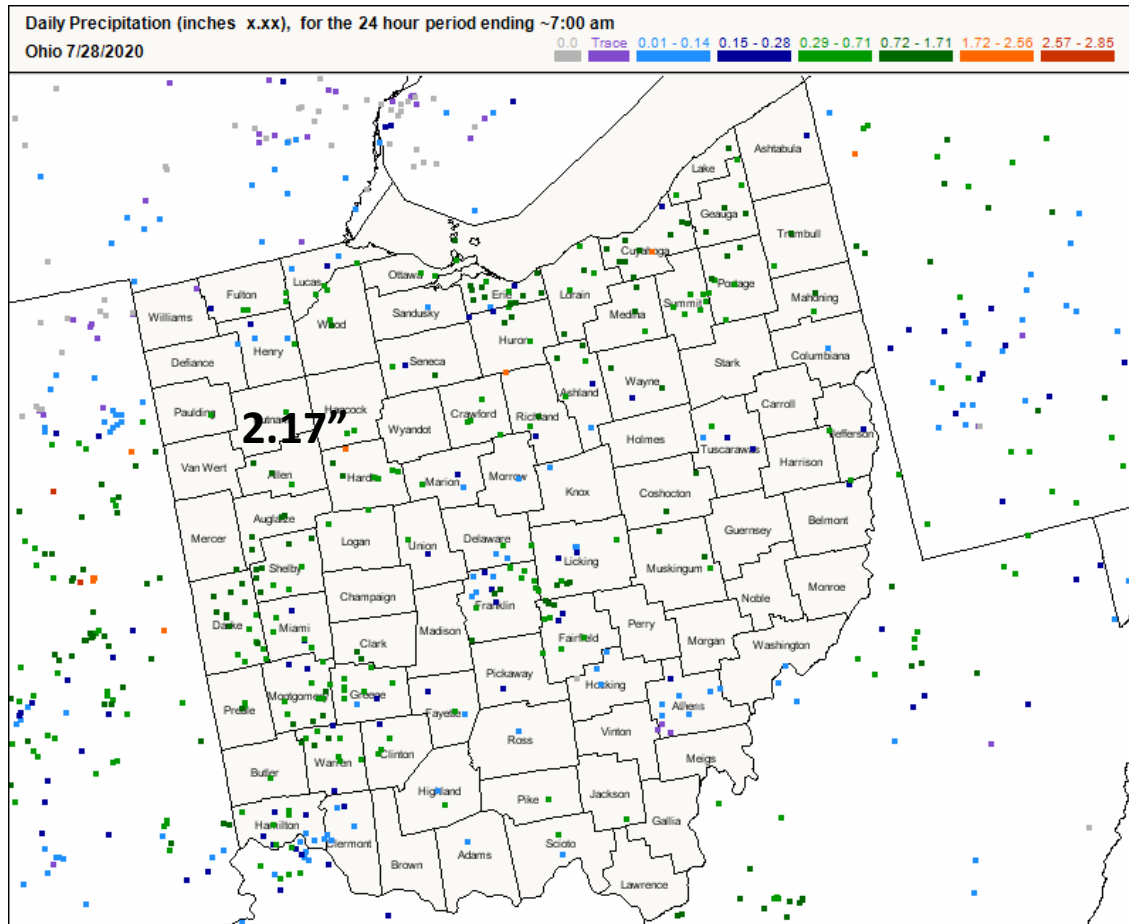
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# CoCoRaHS



## Top 5 Wettest/Driest: June

CoCoRaHS Name	Total Precip (inches)
Cheviot 4.0 S	12.05
Piketon 1.3 SSE	11.88
Pataskala 3.2 E	10.73
Cincinnati 4.2 ESE	10.62
Pataskala 2.1 ENE	10.16
McClure 0.4 SSE	2.60
Bowling Green 1.7 WNW	2.98
Urbana 2.7 SSE	3.30
Kenton 1.7 E	3.46
Ada 0.4 SSW	3.47

<https://cocorahs.org/>



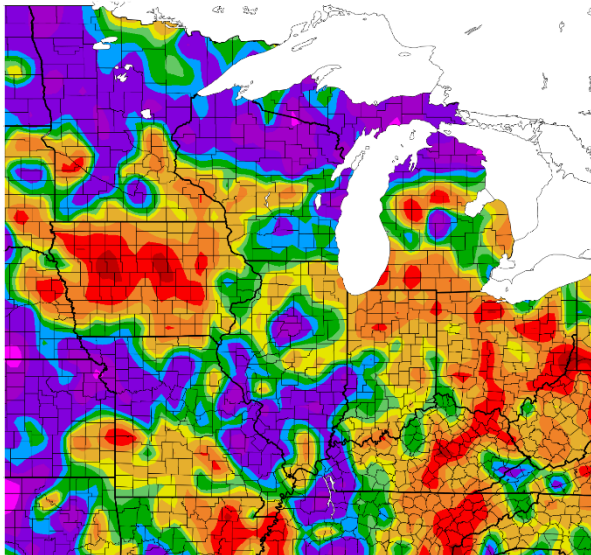
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# Precipitation Differences Compared to Average (1981-2010)

## 30-Day

Percent of Normal Precipitation (%)  
7/1/2020 – 7/30/2020

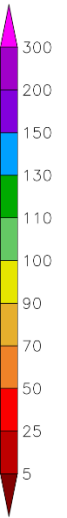
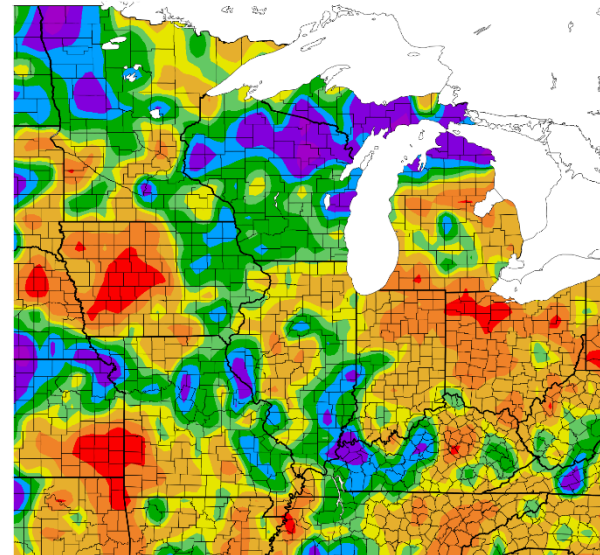


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## 60-Day

Percent of Normal Precipitation (%)  
6/1/2020 – 7/30/2020

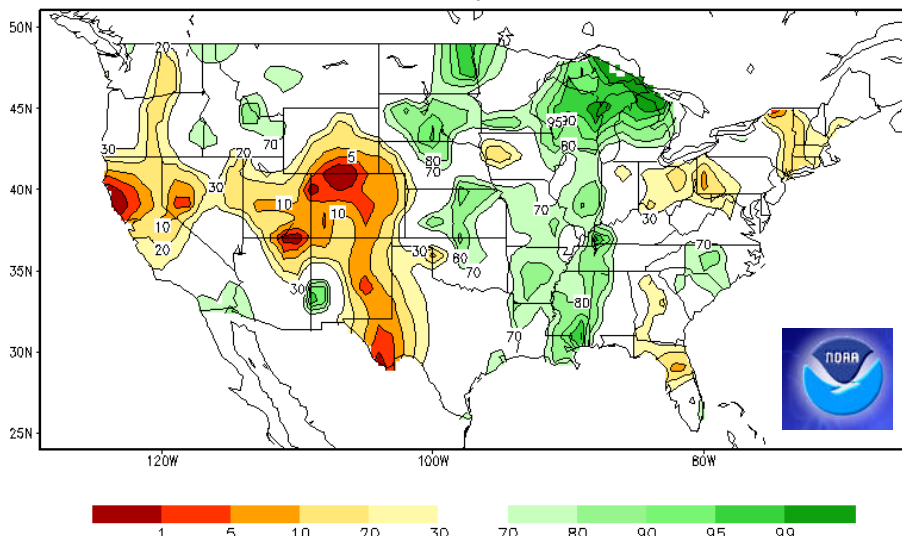


Generated 7/31/2020 at HPRCC using provisional data.

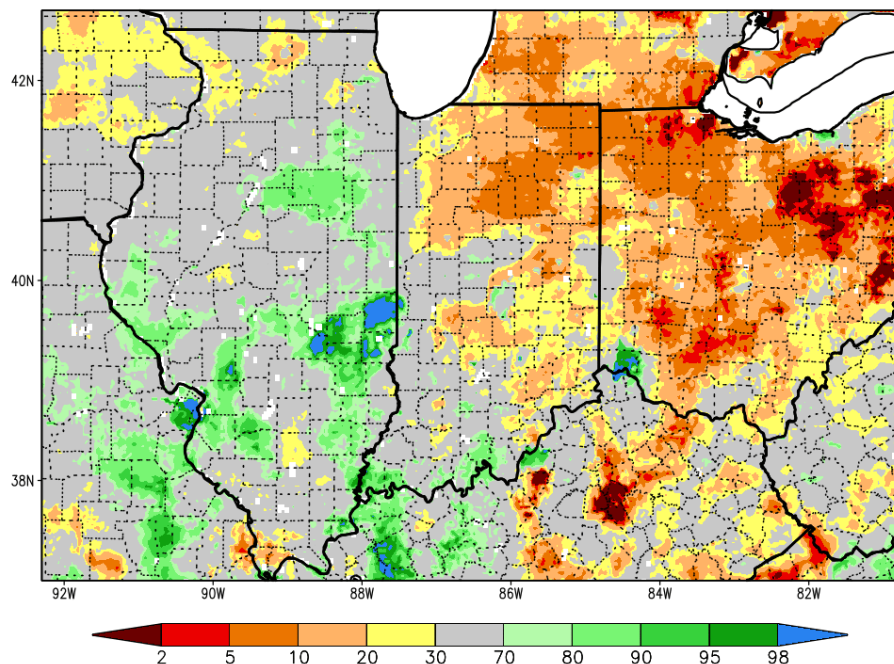
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Calculated Soil Moisture Ranking Percentile  
JUL 30, 2020

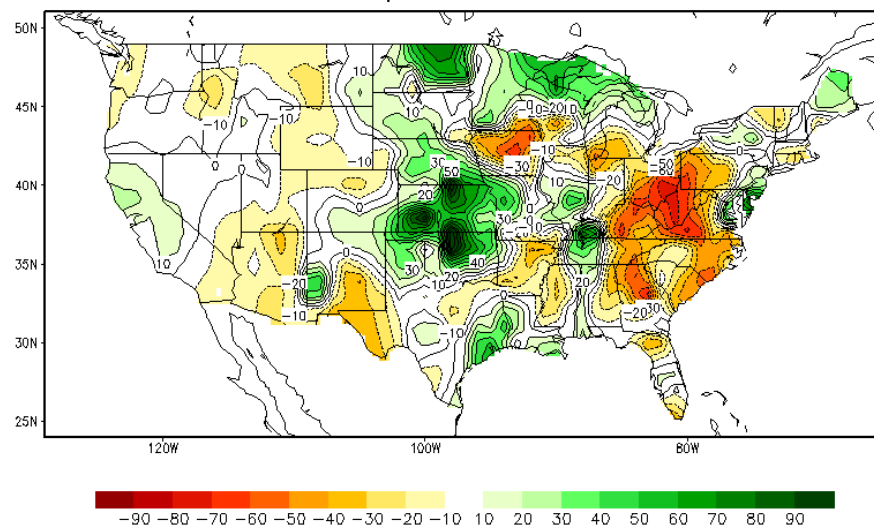


SPoRT-LIS 0-200 cm Soil Moisture percentile valid 31 Jul 2020



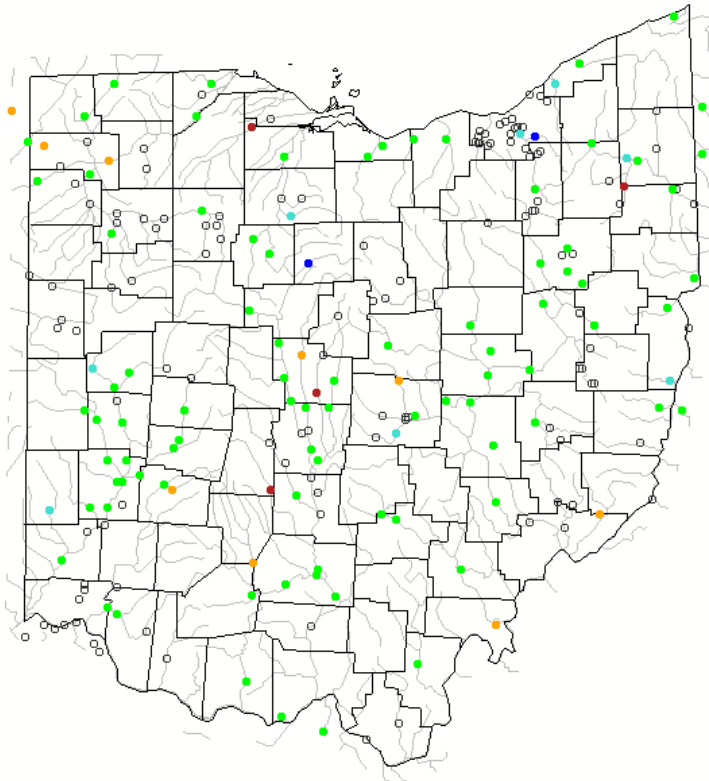
# Soil Moisture

Calculated Soil Moisture Anomaly Change  
JUL 30, 2020 from JUN.30



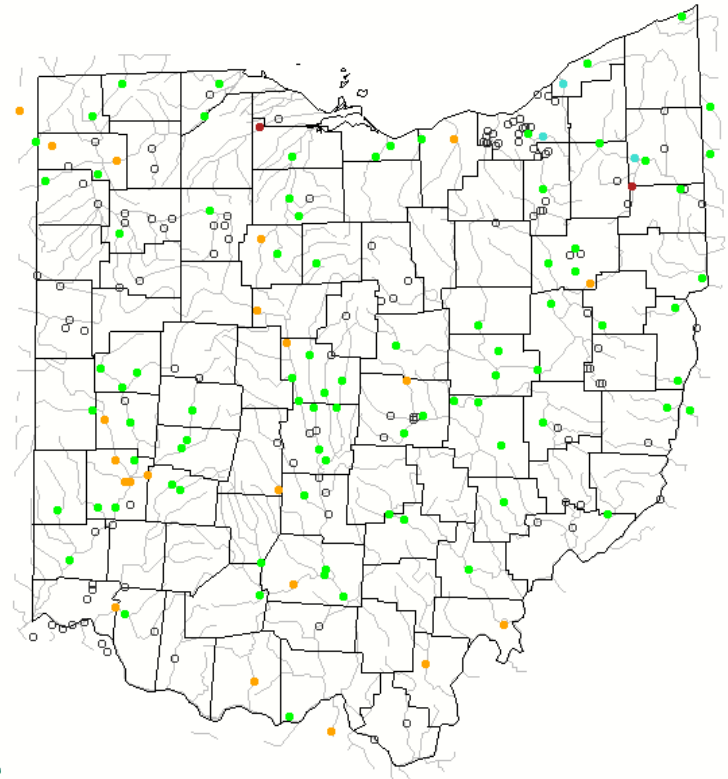
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7-DAY



# USGS Streamflow

28-DAY



Explanation - Percentile classes

Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Average streamflow compared to historical streamflow for the day of the year



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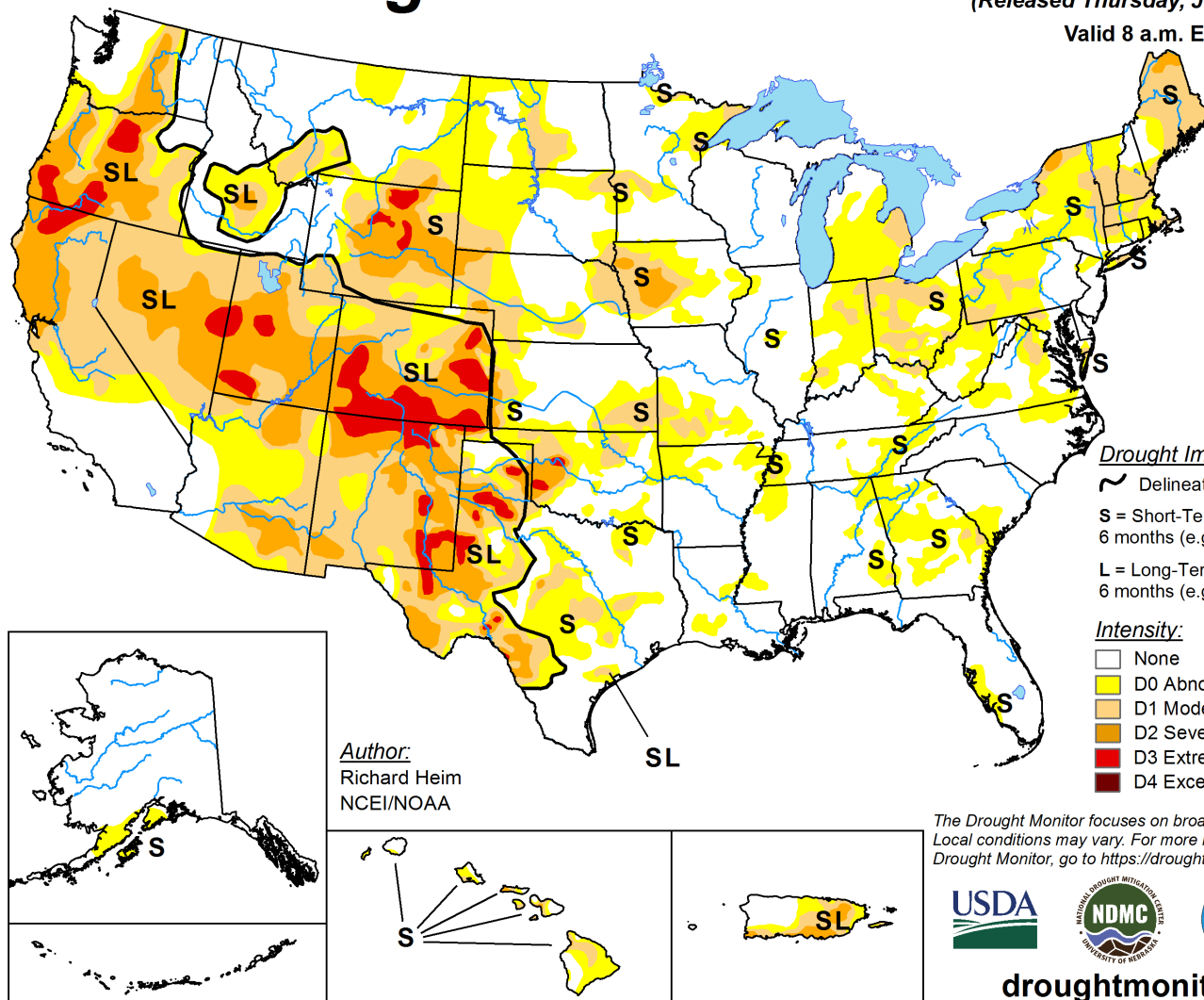
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# U.S. Drought Monitor

July 28, 2020

(Released Thursday, Jul. 30, 2020)

Valid 8 a.m. EDT



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# U.S. Drought Monitor Ohio

**July 28, 2020**


(Released Thursday, Jul. 30, 2020)

Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	15.25	84.75	37.20	0.00	0.00	0.00
<b>Last Week</b> <i>07-21-2020</i>	21.10	78.90	23.12	0.00	0.00	0.00
<b>3 Months Ago</b> <i>04-28-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>12-31-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <i>10-01-2019</i>	19.41	80.59	12.37	0.00	0.00	0.00
<b>One Year Ago</b> <i>07-30-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00

## Intensity:

 None	 D2 Severe Drought
 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drought

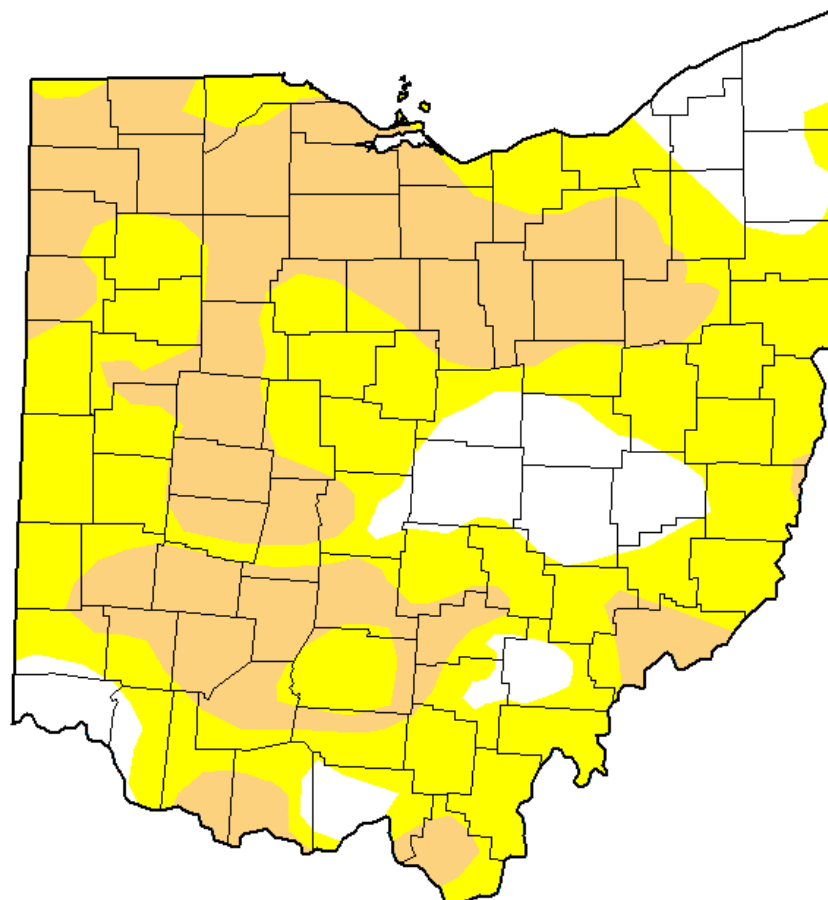
*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

## Author:

Richard Heim  
NCEI/NOAA



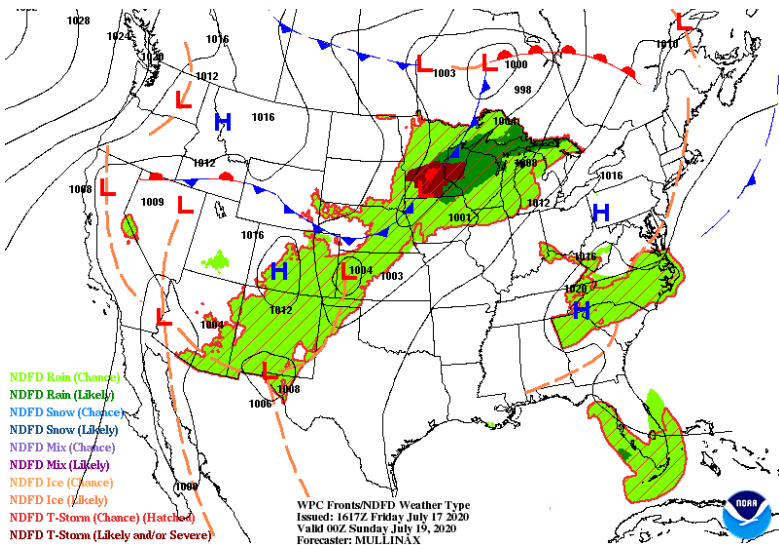
**droughtmonitor.unl.edu**



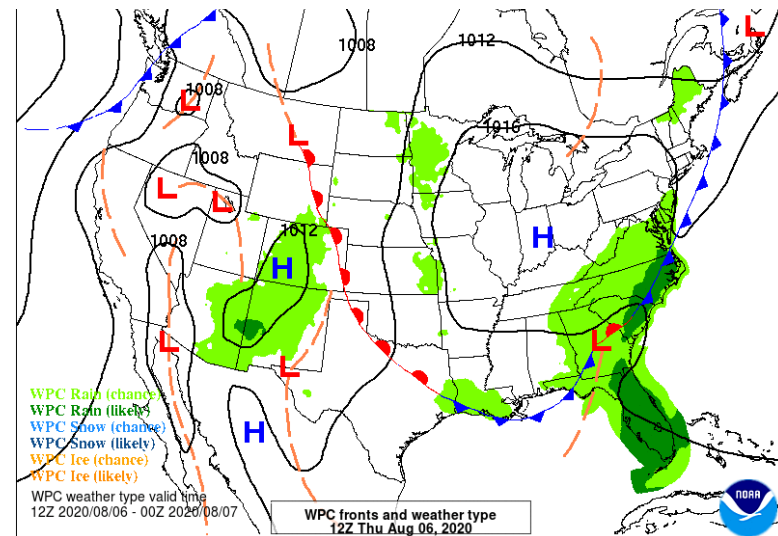
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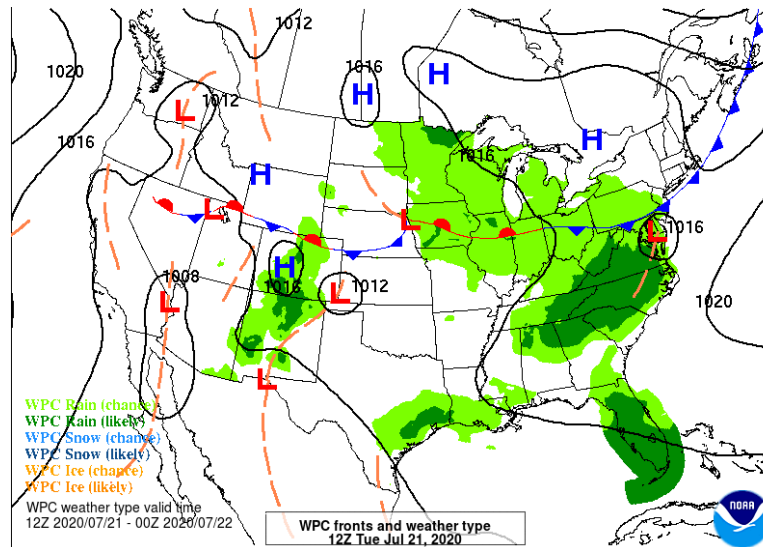
# Weather for the Week Ahead



**Saturday 8/1**



**Thursday 8/6**



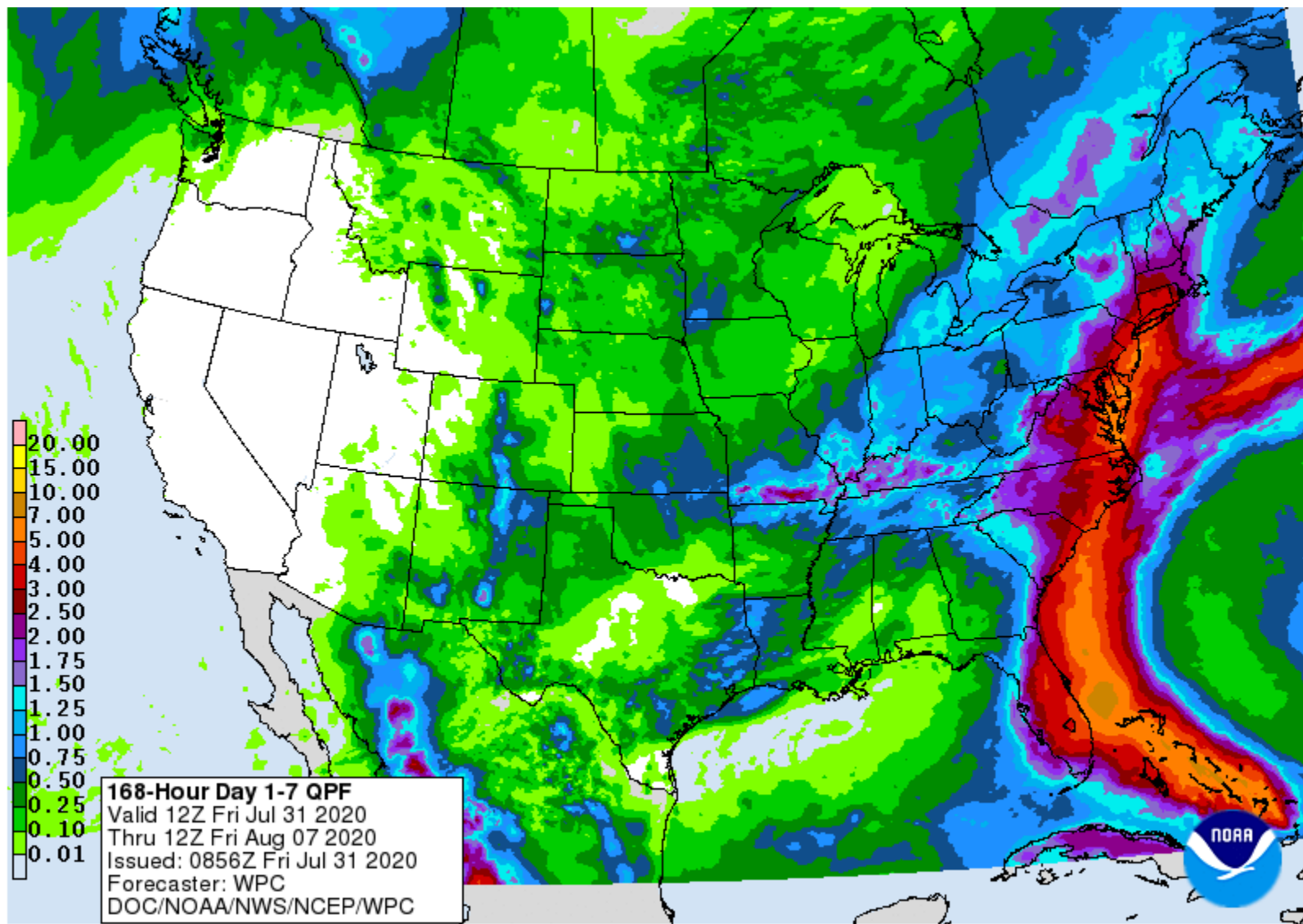
**Monday 8/3**

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# 7-Day Precipitation Forecast



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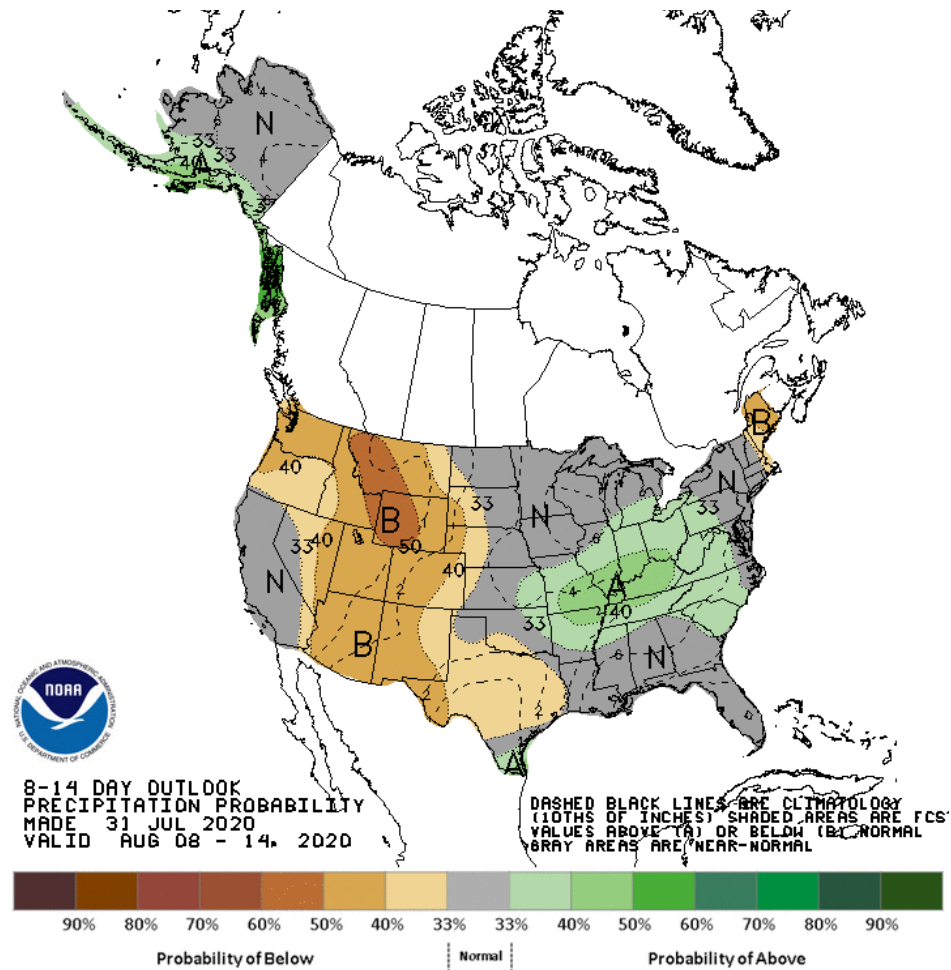
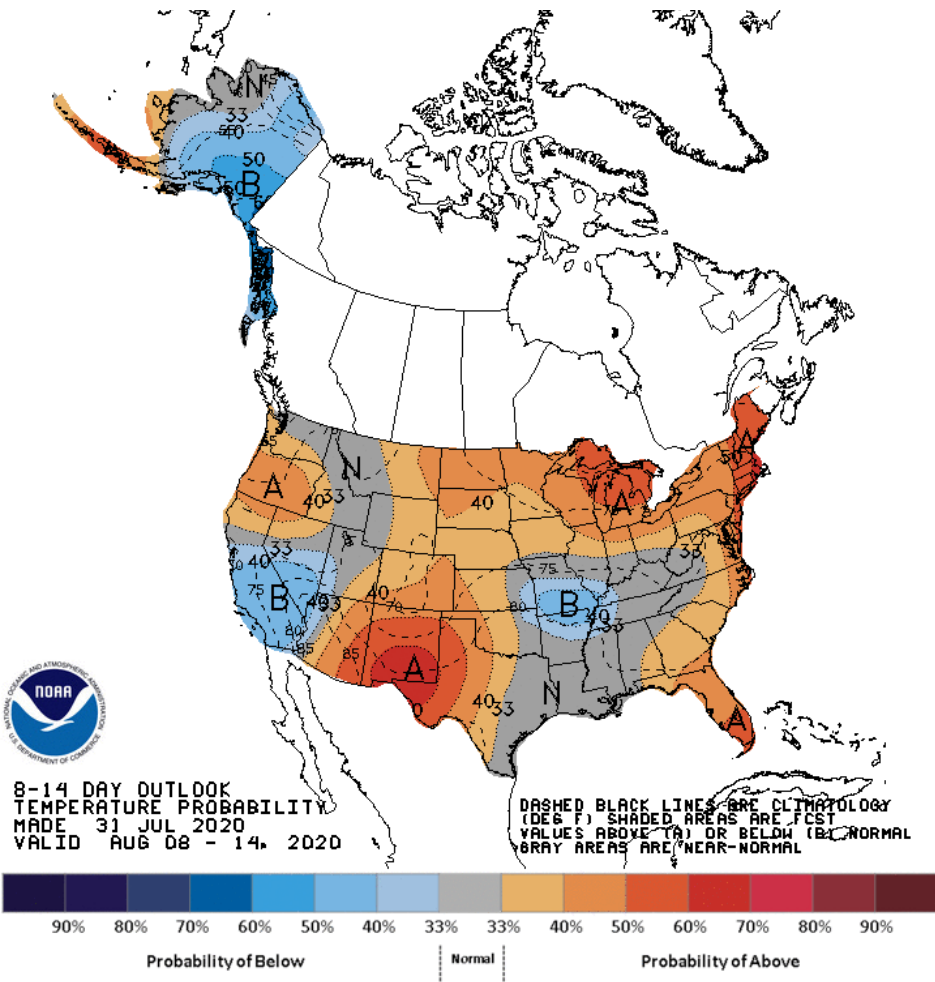
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# 8-14 Day Outlook



Highs: 80-85°F; Lows: 60-65°F; Precip: 0.80-0.09" (per week)



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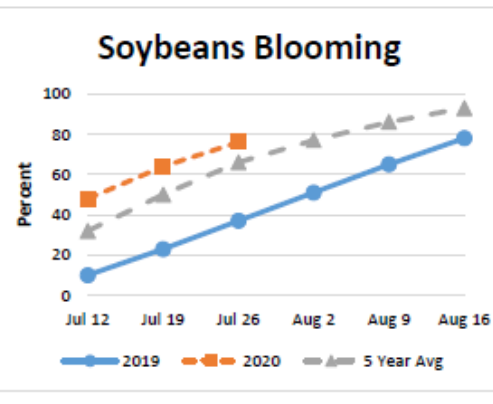
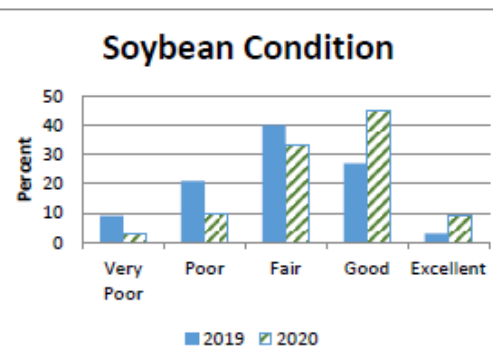
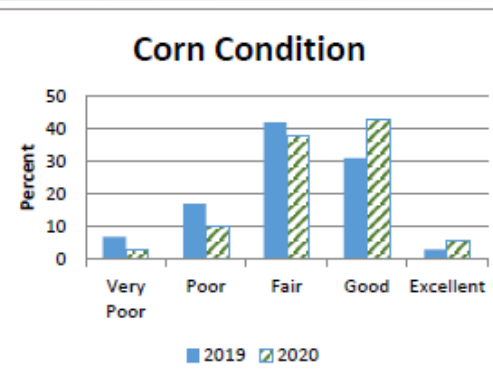
# Ag Highlights

- 5.5 suitable days for fieldwork ending July 26
- Rain Welcomed – improved crop conditions
- Oats harvested

**NASS: Cheryl Turner –**

[https://www.nass.usda.gov/Statistics\\_by\\_State/Ohio/Publications/Crop\\_Progress\\_&\\_Condition/2020/cw2220oh.pdf](https://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/Crop_Progress_&_Condition/2020/cw2220oh.pdf)

**Photo Credit: Beth Scheckelhoff**



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# Summary of Conditions



**Drought Monitor:** D1 moderate drought conditions expanded to ~37% of the state

**Climate Recap:** Warmer than average; some welcome rainfall for some

**Week Ahead:** Cooler temperatures with opportunities for rainfall



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# Partners and Additional Information

- SCOO's Website: <https://climate.osu.edu>
- NOAA's National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)
  - Monthly climate reports (U.S. & Global): [www.ncdc.noaa.gov/sotc/](http://www.ncdc.noaa.gov/sotc/)
- NOAA's Climate Prediction Center: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)
- USDA Midwest Climate Hub:  
<https://www.climatehubs.oce.usda.gov/hubs/midwest>
- Climate Portal: [www.climate.gov](http://www.climate.gov)
- U.S. Drought Portal: [www.drought.gov](http://www.drought.gov)
- National Drought Mitigation Center: <https://drought.unl.edu/>
- Midwest Regional Climate Center: <https://mrcc.isws.illinois.edu>
- Community Collaborative Rain Snow Hail Network (CoCoRaHS):  
<https://cocoahs.org>
- Song: "Wishful Thinking" by Dan Lebowitz