Hydrologic and Climate Assessment

June 25, 2019

OARDC Eastern Agricultural Research Station
U.S. Drought Monitor

June 18, 2019
(Released Thursday, Jun. 20, 2019)
Valid 8 a.m. EDT

Drought Impact Types:
- Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

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

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

droughtmonitor.unl.edu

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY
Temperature Differences Compared to Average (1981-2010)

7-Day
Departure from Normal Temperature (°F)
6/18/2019 – 6/24/2019

30-Day
Departure from Normal Temperature (°F)
5/26/2019 – 6/24/2019

60-Day
Departure from Normal Temperature (°F)
4/26/2019 – 6/24/2019
This Week’s Precipitation
**CoCoRaHS**

**Cheviot: 40.29” since Jan 1**

Since April 1

<table>
<thead>
<tr>
<th>CoCoRaHS Name</th>
<th>Total Precip (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Marys 2.9 S</td>
<td>25.29</td>
</tr>
<tr>
<td>Amelia 0.3 SSW</td>
<td>22.84</td>
</tr>
<tr>
<td>Cherry Grove 0.4 NW</td>
<td>22.24</td>
</tr>
<tr>
<td>Greenville 1.6 NNW</td>
<td>22.06</td>
</tr>
<tr>
<td>Anna 3.1 NNW</td>
<td>21.93</td>
</tr>
<tr>
<td>Cheviot 3.4 W</td>
<td>21.18</td>
</tr>
<tr>
<td>Cincinnati 6.7 E</td>
<td>20.66</td>
</tr>
<tr>
<td>Lexington 0.9 NW</td>
<td>20.55</td>
</tr>
<tr>
<td>Canfield 0.5 N</td>
<td>20.41</td>
</tr>
<tr>
<td>Batavia 3.3 NE</td>
<td>20.14</td>
</tr>
</tbody>
</table>

https://cocorahs.org/
Precipitation Differences Compared to Average (1981-2010)

30-Day

Percent of Normal Precipitation (%)
5/26/2019 – 6/24/2019

60-Day

Percent of Normal Precipitation (%)
4/26/2019 – 6/24/2019
Soil Moisture

Calculated Soil Moisture Ranking Percentile
JUN 24, 2019

Ensemble-Mean – Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: JUN 20, 2019

THE OHIO STATE UNIVERSITY
Average streamflow compared to historical streamflow for the day of the year
Evaporative Demand Drought Index

EDDI can offer early warning of agricultural drought, hydrologic drought, and fire-weather risk by providing near-real-time information on the emergence or persistence of anomalous evaporative demand in a region. A particular strength of EDDI is in capturing the precursor signals of water stress at weekly to monthly timescales, which makes EDDI a strong tool for preparedness for both flash droughts and ongoing droughts.

Image provided by the NOAA/ESRL Physical Sciences Division, Boulder, Colorado, from their web site at: https://www.esrl.noaa.gov/psd/.
Weather for the Week Ahead
Highs: 82-86°F; Lows: 62-66°F; Precip: 0.80-1.05” (per week)
July 2019 Outlook
Ag Highlights

• < 1 day suitable for fieldwork for the week ending June 23

• Corn and soybean emergence well behind 5-year averages

• Wheat (scab); Hay and other forages (condition and quantity); Pasture (conditions degrading); Fruit (behind on treatments)

NASS: Cheryl Turner –
Summary of Conditions

Drought Monitor: None

Climate Recap: Widespread rainfall across the state this past week; a little drier NW

The week ahead: A drier and warmer week ahead; locally heavy rain associated with isolated to scattered storms

Photo credit: Zachrich Hop Yard (Facebook)
CLIMATE SMART: Farming with Weather Extremes
Thursday July 18, 2019 | 8:30 a.m. – 3:00 p.m.
Der Dutchman | 445 S. Jefferson Ave. Plain City, Ohio 43064

Planting season 2019 has tested the limits of resilience for many of us across Ohio. How anomalous has the weather been? Does this fit current trends? How likely are we to experience this again? Join us as we discuss climate impacts on farming in Ohio, water management, price and production risk, and a whole lot more!

Current Agenda
8:30  Arrival & Continental Breakfast
9:10  Welcome
9:16  Opening Remarks (Gary Pierzynski; OARD Council Associate Dean for Research and Graduate Education)
9:25  Ohio's Changing Climate (Aaron Wilson; OSU Extension Research Scientist and Climate Specialist)
10:15 Water Management (Jeff Hatley; Professor OSU SENR)
11:05 Break
11:20 Price and Production Risk (Ben Brown; Assistant Professor of Professional Practice in Agricultural Risk Management OSU AEDE)
12:10 Lunch, Networking, & Vendors
1:00  Keynote: Nebraska Flooding Spring 2019 (Tyler Williams; University of Nebraska Lincoln Cropping Systems Extension Educator)
2:00  Farmer Panel Discussion (Fred Yoder, Paul Pullins, Corey Hendricks, and Liza and Bennett Musselman)
2:55 Program Close and Evaluation

RSVP HERE: go.osu.edu/climatesmart
Free to Attend! RSVP by July 11 to guarantee lunch!

Contact Information:
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We Sustain Life

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Partners and Additional Information

- SCOO’s Website: [https://climate.osu.edu](https://climate.osu.edu)
- NOAA’s National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)
- 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](https://www.climatehubs.oce.usda.gov/hubs/midwest)
- Climate Portal: [www.climate.gov](http://www.climate.gov)
- National Drought Mitigation Center: [https://drought.unl.edu/](https://drought.unl.edu/)
- Midwest Regional Climate Center: [https://mrcc.isws.illinois.edu](https://mrcc.isws.illinois.edu)
- Community Collaborative Rain Snow Hail Network (CoCoRaHS): [https://cocorahs.org](https://cocorahs.org)

- Intro Song: “To Weather A Storm” by Dan Lebowitz