



Extension University of Wisconsin-Madison



Midwest Climate Hub



Ag Weather Outlook for Wisconsin

Week of June 16, 2025

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Navigate to select slides by clicking on the links below.

- 1) Cooler-than-normal <u>temps</u> were common last week, as well as over the <u>last 30 days</u>. GDD's are running <u>behind normal pace</u>.
- Several days of rainfall last week brought <u>1-3</u>" of precip for many in the north and southwest. The southeast had some higher totals between the 17th and 19th.
- 3) The area of <u>abnormal dryness</u> in the north was greatly reduced in size from last week's report.
- 4) Another <u>active precip week</u> is in store, with some <u>extreme heat</u> incoming over the next several days.
- For this week's agronomic recommendations from UW Extension, click <u>here</u>.
- For this week's crop progress updates from USDA NASS, click <u>here</u>.

Rainy Days

Number of Days Precipitation > 0 inches Date range: 2025-06-10 through 2025-06-16 Grid: NRCC station



1

2

3

4

5

6

Wisconet Station (County)	Precip Total (5/1 – 6/9)	Precip Total (5/1 – 6/16)
Greenwood (Clark)	4.21	7.11
Durand (Pepin)	5.61	8.49
Rhinelander (Oneida)	2.95	5.12
Spooner (Washburn)	3.60	5.71
Crandon (Forest)	2.55	4.48
Brigham (lowa) (Est. 5/7/25)	2.98	4.69
Arthur (Chippewa)	4.15	5.85
Soldiers Grove (Crawford)	4.10	5.69
Clear Lake (Polk)	3.37	4.93
Marshfield (Marathon)	2.90	4.04

Wisconet stations in this list are those that had the <u>highest</u> reported precip totals in the state last week.

https://scacis.rcc-acis.org/

7 Day Precip



- An active week brough **multiple days of rainfall** to most of the state.
 - **3 days or more** of measurable precip was common across the north and west.
- There was a swath of **2-4**" across the NW, as well in parts of the SW.
- Lowest totals in the SE →
 0.25" or less
- Last week's maximum total: Brantwood, Price Co. (CoCoRaHS) → 3.30"

https://water.noaa.gov/

Addition – June 17–19 Rain



- After being missed by the June 10-17 rainfall, the southeast has picked up 0.5" or more since the 17th.
- **0.5" or more** was common across most of the south.
- Instances of **3" or more** across Rock & Walworth Cos.
- Maximum total: Clinton WWTP, Rock Co. (COOP) →
 6.90"

30 Day Precip



- Heaviest precipitation was in the NW, where totals of **5" or more** were common.
- **6-8**" was common between La Crosse and Eau Claire.
- 3-5" for the majority of WI, with totals tapering to <3" in the far north, NE, and SW.

https://water.noaa.gov/

30 Day Precip Total/% Avg.



- Below climatological normal across most of the state. 80% of normal or less in areas outside of the NW and just north of the Milwaukee metro.
- 4.75" or more across the NW and in Ozaukee County → near to above normal totals.
- **50% or less of normal** in the far SW and along Lake Superior.

https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

90 Day Precip Total/% Avg.



- >9.5" common across most of WI, with **pockets of over 1 foot** in parts of the north and west-central.
 - Near-to-above normal in these regions.
- Lower totals in the far south & along Lake Superior → <8", or <80% of normal.

2025 Precipitation (so far)



https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Soil Moisture Models

- Following a week of 1-3" or more across the north, soil moisture levels are wetter than normal across the northern region. Near normal in the far NW and central.
- Abnormal dryness in the south exists along the state line, with the driest conditions in the SE where there was little to no precip last week.

Model Notes:

Red areas = top 5 driest in 100 years. Dark red areas = top 2 driest in 100 years. Blue areas = top 2 wettest in 100 years.

It's worth noting that each soil moisture model has their own characteristics and input variables, so there tends to be variation between models. Thus, it's worthwhile to look at multiple models opposed to just one.

https://weather.ndc.nasa.gov/sport/case_studies/lis_CONUS.html https://www.drought.gov/states/wisconsin









Soil Moisture Models



Wisconet Soil Moisture

Maps showing soil moisture conditions on June 17th @ Mid-morning. Units of map values are {Volume of water}/{Volume of soil}.



Wisconet Soil Moisture

Change in soil moisture from June 10th (Start) to June 17th (End). Units of change values are {Volume of water}/{Volume of soil}.

Research Farm	County	Total Precip (in)	p 4" Change (Start) (End)		8" Change (Start) (End)		20" Change (Start) (End)	
Arlington	Columbia	0.95	0.32	0.29	0.33	0.34	0.41	0.40
Black River Falls	Jackson	0.10	0.12	0.08	0.10	0.09	0.10	0.08
Dairy Forage ARS	Sauk	1.31	0.16	0.21	0.20	0.20	0.37	0.35
Hancock	Waushara	0.07	0.09	0.06	0.09	0.07	0.07	0.06
Kemp	Oneida	1.01	0.20	0.19	0.19	0.19	0.07	0.09
Lancaster	Grant	0.61	0.21	0.20	0.21	0.19	0.40	0.39
Marshfield	Marathon	1.14	0.33	0.40	0.42	0.47	0.52	0.54
O.J. Noer (Turfgrass)	Dane	0.64	0.30	0.27	0.23	0.23	0.44	0.43
Peninsular	Door	0.07	0.24	0.19	0.21	0.17	0.23	0.22
Rhinelander	Oneida	2.17	0.10	0.14	0.10	0.13	0.05	0.07
Spooner	Washburn	2.11			0.12	0.19	0.12	0.17

https://wisconet.wisc.edu/

Adequate Soil Moisture



- **65-70%** of agricultural soils in the state with **adequate** topsoil and subsoil moisture.
- **15%** of fields in the state are reported as having **surplus** topsoil moisture, **up 7%** from last week.

https://agindrought.unl.edu/Other.aspx

Wisconet Soil Temperature

Maps showing soil temperature conditions on June 17th @ Mid-morning.



https://wisconet.wisc.edu/

Wisconet Stations



- As of June 10, 2025, there are 65 Wisconet stations across the state.
- To find data for the station nearest to you, <u>click this link</u> to go to a webpage with an interactive Wisconet station map.

Stations added since January 1, 2025:

Taycheedah, Fond du Lac County (4/23/25)
 Brigham, Iowa County (5/7/25)
 Westboro, Taylor County (5/13/25)
 Shanagolden, Ashland County (5/28/25)
 Darlington, Lafayette County (5/29/25)
 Grand Marsh, Adams County (6/12/25)

US Drought Monitor

U.S. Drought Monitor **Midwest**



June 17, 2025 (Released Thursday, Jun. 19, 2025) Valid 8 a.m. EDT

Drought Conditions (Percent Area) None D0-D4 D1-D4 D2-D4 D3-D4 D4 67.11 32.89 7.45 0.11 0.00 0.00 Current Last Week 62.68 37.32 8.83 0.11 0.00 0.00 06-10-2025 3 Months Ago 33.73 66.27 37.17 4.39 0.00 0.00 03-18-2025 Start of 44.12 55.88 29.47 3.56 0.00 0.00 Calendar Year 01-07-2025 Start of 21.78 78.22 28.15 6.40 1.46 0.66 Water Year 10-01-2024 One Year Ago 77.60 22.40 0.78 0.00 0.00 0.00

Intensity:

06-18-2024



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:

Brad Rippey U.S. Department of Agriculture









droughtmonitor.unl.edu

- Compared to last week:
 - Decrease in D0-D1 coverage.
- Large reduction in D0 coverage area in northern WI, with **no** change in the south.
- **0.1%** of the Midwest is in D2 drought, **unchanged** from last week.
 - All in eastern ML
- **92.5%** of the Midwest is drought free (7.5% in D1 or D2).

Note: D0 is not considered drought.

US Drought Monitor

U.S. Drought Monitor Wisconsin



June 17, 2025 (Released Thursday, Jun. 19, 2025) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	74.12	25.88	4.70	0.00	0.00	0.00
Last Week 06-10-2025	52.97	47.03	4.70	0.00	0.00	0.00
3 Month s Ago 03-18-2025	18.55	81.45	50.50	0.00	0.00	0.00
Start of Calendar Year 01-07-2025	36.12	63.88	39.54	0.00	0.00	0.00
Start of Water Year 10-01-2024	18.68	81.32	29.83	8.45	0.00	0.00
One Year Ago 06-18-2024	96.44	3.56	0.00	0.00	0.00	0.00





D2 Severe Drought D3 Extreme 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:

Brad Rippey U.S. Department of Agriculture



droughtmonitor.unl.edu

Amount of state in:

- D1-D4 4.7% --
- D2-D4 0.0% --

<u>Note</u>: $\uparrow \downarrow$ indicate change from last week. Red up arrows indicate increase in drought area; vice-versa for green arrows.



USDM Time Series



http://droughtmonitor.unl.edu/

Wildfire Risk



A fire danger of **LOW** means wildfires do not easily ignite and will spread slowly.

A fire danger of **MODERATE** means wildfires can ignite and will spread but are relatively easy to contain.

A fire danger of HIGH means wildfires ignite easily, spread rapidly, and can be challenging to control.

A fire danger of **VERY HIGH** means wildfires start easily, spread rapidly with increased intensity and are difficult to control.

Map updated on 6/19/25

https://apps.dnr.wi.gov/wisburn/#/

7 Day Temperatures



- Average temp. range of **66-72°F** in the SC & SW to **51-57°F** in the far north.
- Below normal across almost all of WI. Close to normal in the south, with 4°F or more below normal in the north.
- In the north half of WI, highs did not hit 80°F last week at most locations.

30 Day Temperatures



- Average temperatures for the past month ranged from 60-64°F in the S & W to 52-56°F in the N & E.
- Below normal across the entire state.
 - 3-5°F below normal for most with some in the north at >5°F below normal.

Growing Degree Days (Base = 50°F; Since May 1)





Midwestern Regional Climate Center Purdue University Normals Period, 1991–2020

- 400-500 GDD in the N & E. 500-600 GDD in the S & W.
- GDD accumulation is **behind normal pace** across nearly all of WI. **40 GDD or more** behind schedule in the C & SE.

To calculate GDD for your corn variety and planting date, use this <u>tool</u>.

To see specific degree models for pests in your location, use the <u>Vegetable Disease & Insect</u> <u>Forecasting Network</u>.

> https://mrcc.purdue.edu/ climate_watch

Corn & Soybean Progress



Corn and soybean emergence made ~10% jumps in progress from last week, running at <u>near to normal pace</u>.
Both crops are nearing emergence completion (85-90%).

Crop Progress Report

Crop progress report for Wisconsin for the week ending on June 15th

- Corn emergence is <mark>91%</mark> complete, which is **right at** the 5-year average pace.
 - Condition was rated **71%** good to excellent.
- Soybean emergence is 85% complete, 1 day behind the 5-year average pace.
 - Condition was rated **72%** good to excellent.
- Winter wheat is 83% headed and is rated 70% good to excellent.
- The first cutting of alfalfa hay was **79%** complete.
- Pasture and range conditions are rated 74% good to excellent (down 4% from last week).
- Oats are 94% emerged and 24% headed.
- 80-85% of agricultural soils in the state have <u>adequate</u> topsoil and subsoil moisture.

In the news: https://www.brownfieldagnews.com/news/wisconsins-corn-and-soybean-conditions-decline/ Full report: https://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/Crop_Progress_&_Condition/2025/WI-Crop-Progress-06-16-25.pdf

7 Day Precip Forecast

7-Day Quantitative Precipitation Forecast for June 19-26, 2025





- A **very active** next 7 days for precip is forecasted for WI.
 - Highest chances for precip in the **west**central region.
 - Where totals are forecasted to be higher, be aware of the risk for **excessive rainfall** early next week.
 - <u>Check your local forecast</u> for details on totals and timing.

Forecast for 6/19/25 thru 6/26/25 (Begins at 7am CDT)

> https://www.wpc.ncep.noaa.gov/qpf/p168i.gif https://www.drought.gov/states/wisconsin

Extreme Heat Upcoming

https://www.wpc.ncep.noaa.gov/heatrisk/



8-14 Day Temp & Precip Outlook



Late June into Early July: Temperatures are leaning towards <u>above normal</u>, more so in the south. Precipitation is leaning towards <u>above normal</u> statewide.

http://www.cpc.ncep.noaa.gov/

30 Day Temp & Precip Outlook



Month of July: Temperatures leaning towards being <u>above normal</u>, more strongly in the north. There is <u>uncertainty</u> for precip with equal chances for above, near, and below normal.

http://www.cpc.ncep.noaa.gov/

90 Day Temp & Precip Outlook



Summer into Early Fall: Temperature chances lean toward <u>above normal</u>, with <u>uncertainty (equal</u> <u>chances</u>) for precipitation except for the NW & far NC (<u>below normal</u> lean).

http://www.cpc.ncep.noaa.gov/

Take-Home Points

Current Conditions

- Multiple days of precipitation impacted the state last week, bringing 1-3" for the north and southwest. Conversely, there were many locations that received very low totals, particularly in the east/southeast and between La Crosse & Eau Claire. However, the southeast picked up a half inch or more from the 17th to the 19th.
- Temperatures in the state were below normal last week except for the far south. 30-day average temperatures that were 3°F or more below normal were quite common across Wisconsin, leading to a lag in GDD accumulation since May 1.

Impact

- Soil moisture conditions **improved in the north** with the rainfall last week, with **abnormal dryness** still in place in the far south. Wisconet stations show a **mixed bag in moisture gained or lost** since last week, depending on how much rain was received.
- The area of abnormal dryness (D0) in the north was greatly reduced from last week, with no change in the south.
- Corn and soybean emergence are nearing completion, with development running at a pace near to the 5-year normal for both crops. However, crop condition for corn, soybeans, and wheat dropped from last week (Source: <u>NASS</u>).

Outlook

- The next 7 days look **very active for precip**. Be aware of some potentially **excessive rainfall totals** early next week.
- Late June climate probabilities are showing a lean towards above-normal temperatures and precip. Be aware of the risk of extreme heat over the next few days.
- The outlook for July indicates a lean towards warmer than normal with precip uncertainty (outlook updated on 6/19).

Agronomic Considerations

Field Work and Conditions

- Avoid trafficking fields in moist conditions to prevent compaction.
- See these considerations for early season corn management. See how wildfire haze may impact corn growth.
- Crop growth has been slowed with cooler temperatures. Much of the corn crop is short due to a lack of heat units but is expected to rebound with upcoming warm temps.
- Corn is reaching the growth stage appropriate for taking presidedress soil nitrate tests (PSNT).

Manure Applications

• Reminder of Wisconsin's NR 151 Runoff Rules with the timing of manure spreading and current runoff levels. Check DATCP Runoff Risk Advisory Forecast.

Pest Management

- Scout fields to note which weed species are emerging and/or which species escaped herbicide application.
- As corn and soybean crops grow, <u>note growth stages</u> to time future applications and sampling.
- While slug issues have not been as severe this year, UW is monitoring populations weekly across the state with <u>SlugNet</u>. Slug pressure will decrease with increasing temperatures and crop maturity.
- Check moth trap catches in your region with the DATCP Pest Survey. Sign up for insect pest alerts specific to your region.
- Routine scouting in corn to watch for: true armyworm, stalk borer, and European corn borer.
- Alfalfa weevil populations are coming to an end. Potato leafhopper numbers are increasing; keep an eye on populations the next several weeks.
- Use the <u>VDIFN model</u> to see risk in your region for several economically important pests.

Forage Management

- Alfalfa stands in northern WI are still being harvested. See first harvest considerations here. Some regions are considering a second harvest.
- <u>Consider annual forage options</u> depending on your situation and forage goals.

Small Grains

- Scout for stripe rust and any signs of disease with recent cool and wet weather. Cephalosporium stripe is showing up in Wisconsin.
- Fusarium Head Blight risk is increasing across the northern part of state. Consider <u>spraying fungicide</u>, especially to susceptible varieties. Scab alerts and risk forecast can be found <u>here</u>.

Specialty Crop Considerations

Fruit

•Apple and grape growers can reference the NEWA weather station network to monitor for disease infection periods in their area. Check out your nearest weather station: <u>NEWA Weather Station Network (Cornell)</u>.

•Apple scab fruit lesions have been observed in Southern WI, likely pushed along by recent rains. Continue scouting scab susceptible varieties. A reminder that protectants will typically wash off after ~1inch of rain.

•Apple growers should continue monitoring degree-day (base 50°F) accumulation for <u>Codling moth</u>. First generation larvae will emerge after ~250 degree-days (base 50°F) have accumulated from the biofix date. Second generation larvae will typically emerge at ~1250 degree-days (base 50°F) from the biofix date.

•Apple growers should keep track of degree-day (base 50°F) accumulation from petal fall to determine the end of <u>plum curculio</u> movement into the orchard. Plum curculio will typically cease movement into the orchard after ~308 degree-days (base 50°F) have accumulated from the petal fall date.

•Recent rain events have driven infection periods for grape diseases. Check out this article that overviews signs/symptoms of phomopsis, black rot, downy mildew and powdery mildew: Grape Scouting Report, June 2021 (UW Fruit News).

•Strawberry growers have reported signs of spittlebugs, which typically cause little damage unless large populations are present (~1/plant).

• Wisconsin fruit growers can reference the Midwest Fruit Pest Management Guide for a list of registered products and recommended best practices. View the MFPMG Online or order a hard copy here: MFPMG Hard Copy.

Vegetable considerations can be found on the next slide -->

Specialty Crop Considerations

Vegetables

- White mold was detected in high tunnels in the past 1.5 weeks. White mold can affect a wide variety of crops including beans, potatoes, cabbage, and pepper. Information on symptoms and management can be found <u>here</u>.
- <u>Squash vine borer</u> will be moving into southern WI over the next week. Monitor for activity of these orange and black moths. Row covers can be used to exclude
 adults early in the season but must be removed for flowering. If you use insecticides, the timing of treatment is key. Treatment must occur before eggs hatch and
 larva enter stems where they are well protected. More information on organic control methods can be found <u>here</u>.
- Scout for cabbage loopers, diamondback moths, and imported cabbage worms as risk is now high in southern WI.
- The second generation of <u>seed corn maggot</u> is in central and northern WI. The risk is high in central WI where mated females will begin laying eggs in the next 5-7 days. The 2nd generation poses a risk when eggs hatch and larva start feeding on newly seeded and transplanted crops. <u>Cabbage maggot</u> risk remains high in the north as well as along Lake Michigan.
- Continue monitoring for <u>aster leafhoppers</u>. Aster leafhoppers transmit aster yellows to a wide variety of crops including carrots, lettuce, celery, garlic, and many types of flowers. The best way to control aster yellows is by controlling the leafhoppers. Once plants are infected, they will not recover and must be removed to reduce the spread of this disease. Use the aster yellows index (page 19) in the <u>Commercial Vegetable Production</u> guide to help determine when to spray. You can also sign up for <u>text alerts from Michigan State University</u> on infectivity rates from their trapping network. <u>Reports out of Michigan</u> indicate elevated infectivity levels so far this year.
- <u>Downy mildew spores</u> were detected in air samples in Michigan. Spores are detected a few days to a few weeks before symptoms are seen. Keep an eye on cucumbers and melons. Find management information <u>here</u>.
- Continue scouting for <u>Colorado potato beetle</u> on potatoes and eggplant. Initial egg hatch is well underway in southern WI. Egg masses are now abundant in central WI. Colonizing adults will be impacting Antigo and Rice Lake regions in the next 3-7 days.
- While removing garlic scapes, be on the lookout for symptoms of <u>fusarium basal rot</u>, <u>botrytis neck rot</u>, <u>white rot</u>, and <u>stem and bulb nematodes</u>. <u>This chart</u> from the Ontario Vegetable report can help distinguish between symptoms.</u>
- <u>Potato leafhopper</u>, a pest of snap beans and potatoes, continue to increase in population size.

User Survey

Are you a regular user of the Ag Weather Outlook for Wisconsin (AgWOW)? Or maybe you are viewing these slides for the first time this week? Either way, we want to hear <u>your</u> feedback on this new resource! Please take a few minutes and fill out this survey:

LINK TO SURVEY

Your feedback will help us better serve your ag-weather data needs through AgWOW.

If you have any trouble accessing or filling out the survey, please email Josh Bendorf at <u>jbendorf@wisc.edu</u>.

Thank you!! -The AgWOW Team

Citizen Science Opportunity

CoCoRaHS – <u>Co</u>mmunity <u>Co</u>llaborative <u>Rain</u>, <u>Hail</u>, & <u>S</u>now Network

The Mission

(From cocorahs.org)

- Provide accurate high-quality precipitation data for end-users;
- Increasing the density of precipitation data available throughout the country;
- Encouraging citizens to have fun participating in meteorological science and heightening their awareness about weather;
- Providing weather education opportunities.



Sign Up Here: https://cocorahs.org/Content.aspx?page=application

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