







Ag Weather Outlook for Wisconsin

Week of August 19, 2025

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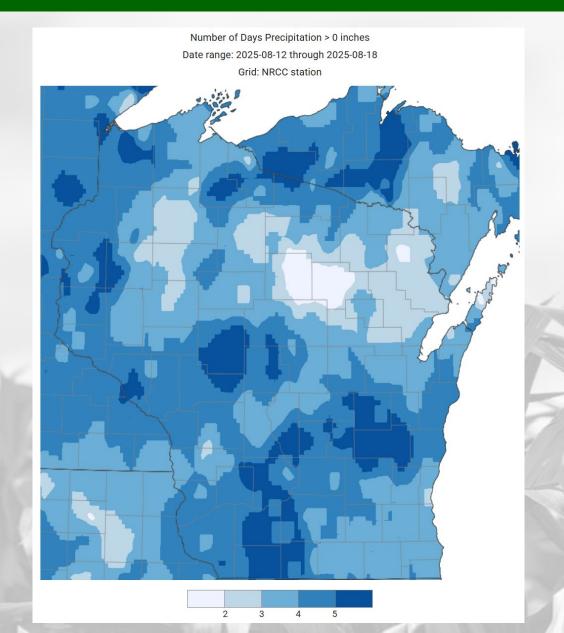
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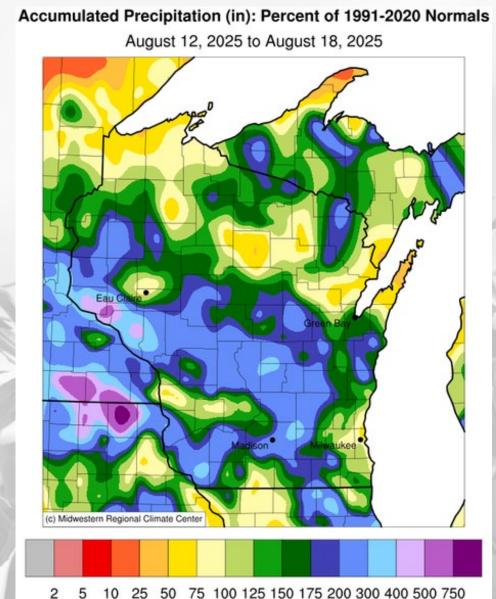
Key Points

Navigate to select slides by clicking on the <u>links</u> below.

- 1) Multiple <u>rainy days</u> last week brought <u>2" or more</u> of precip for most of southern and west-central WI.
- 2) Temps were <u>warmer than normal</u> by a few degrees, more so in the south (3-5°F).
- 3) <u>Drought</u> remains non-existent in WI with <u>soil moisture</u> levels near-to-above normal for most.
- 4) The transition to September is showing a higher likelihood to be cooler than normal.
- For this week's agronomic recommendations from UW Extension, click here.
- For this week's crop progress updates from USDA NASS, click <u>here</u>.

Wx Highlight → Another rainy week





Citizen Science Opportunity: Special Promo

CoCoRaHS – <u>Community Collaborative Rain, Hail, & Snow Network</u> 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.



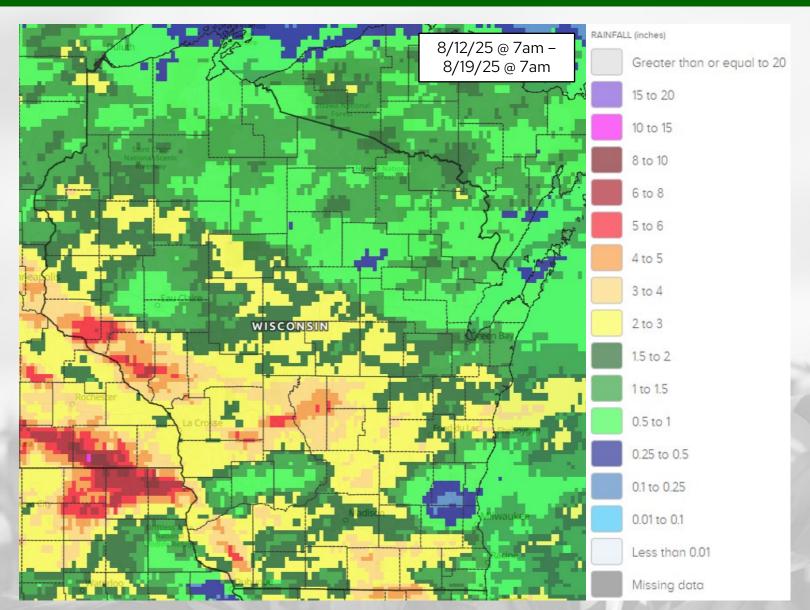
Sign Up Here:

 $\underline{https://cocorahs.org/Content.aspx?page=application}$

SPECIAL PROMOTION

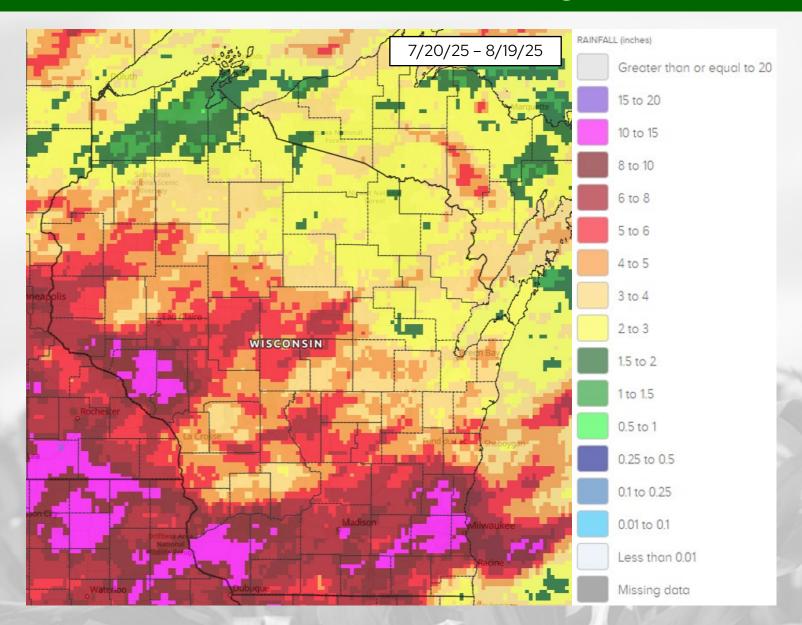
- In the wake of the historic flooding event in Milwaukee, there is a special promotion for \$8 off any CoCoRaHS gauge (no quantity limit).
 - Use code: WISCOCO8 at weatheryourway.com/collections/cocorahs-gauge-parts
 - Now through September 10th
- Free shipping is also available on any order over \$55 (no code necessary).

7 Day Precip



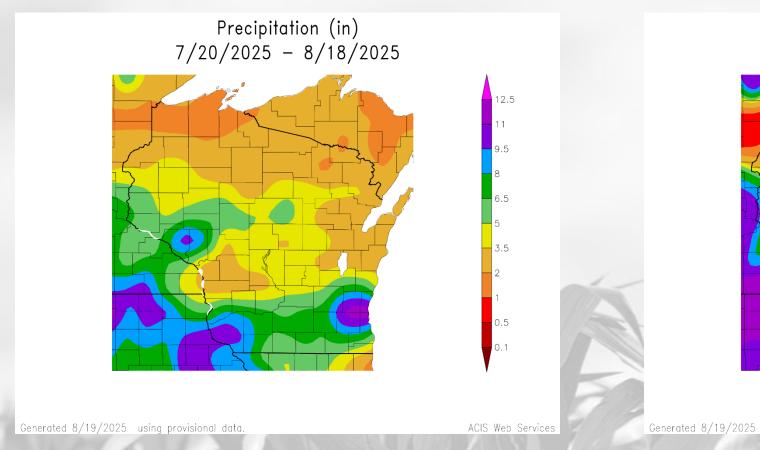
- Highest totals in the west-central and central counties.
 - >2" widespread, with pockets of 5+"
 - Totals of 3+" widespread in several southern/western counties.
- 1" or more across most of the southern half of WI.
- Lesser totals in the north (0.5" to 2")

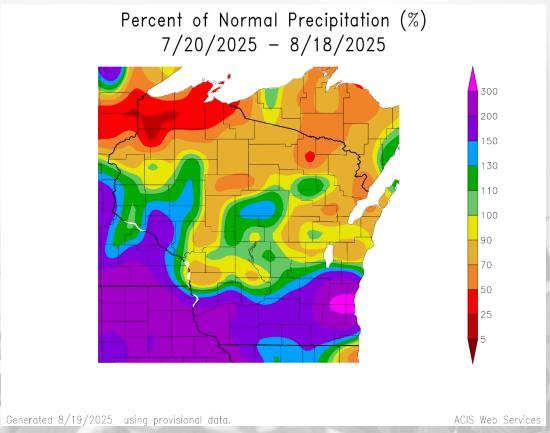
30 Day Precip



- **5-8"** across southern & west-central WI.
- Localized areas of 10" or more in SE, SW and WC WI.
- 2-4" across northern WI, and <2" in far NW WI.

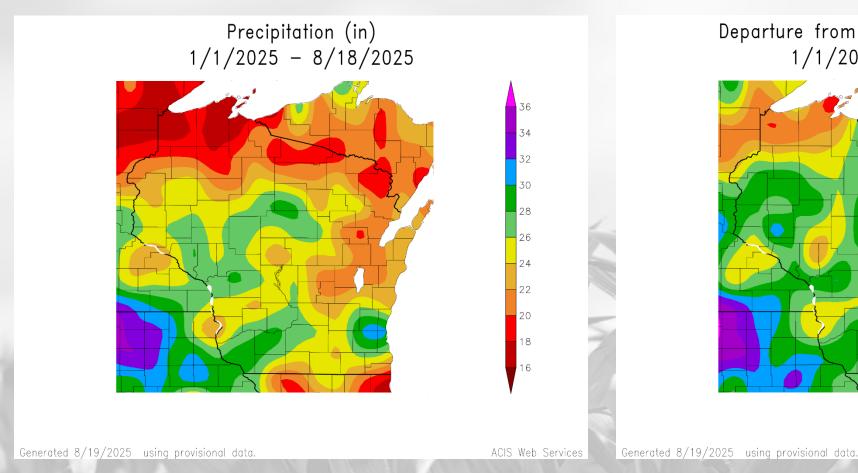
30 Day Precip Total/Percent Avg.

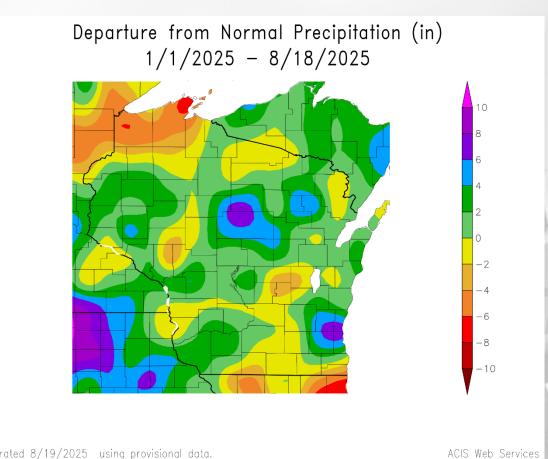




- 150% or more of normal across southern WI totals 5" or more, with instances of >9".
- Near to above normal in central and west-central WI totals of 3.5" or more.
- Below normal for most of northern and east-central WI totals 3.5" or less.

2025 Precipitation (so far)





Soil Moisture Models

- Near-normal soil moisture levels in the top 1 meter of soil across most of WI.
- Above normal levels across southern and west-central WI following above normal rainfall totals last week.
- Below normal levels remain in parts of the north and east after a drier-than-normal last 30 days, despite rains last week.

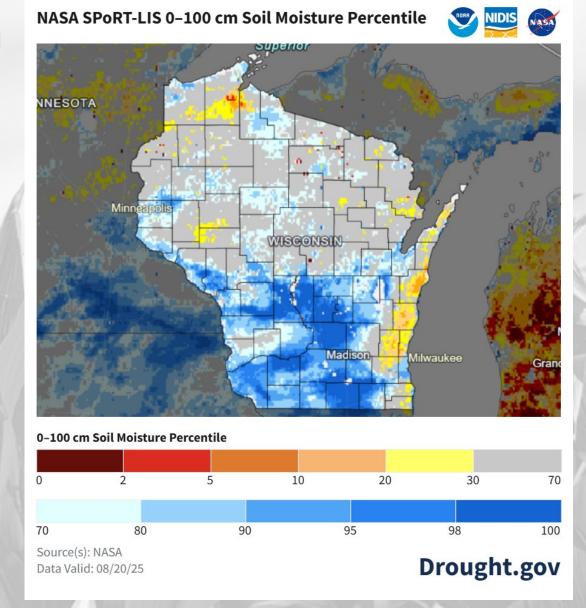
Model Notes:

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.



 $\frac{https://weather.ndc.nasa.gov/sport/case_studies/lis_CONUS.html}{https://www.drought.gov/states/wisconsin}$

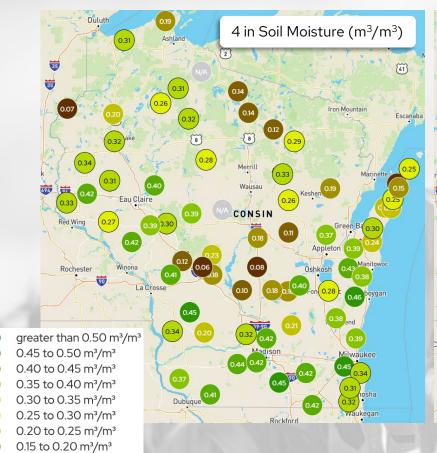
Soil Moisture Models

https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml

NOTE: this map displays the soil moisture percentile for Aug 14. It was the most recent update as of Aug. 19. Current SMP **ENSEMBLE** 14Aug2025 46N 44N 42N 40N 38N 36N 34N 32N 30N 28N 26N · 120W 115W 110W 105W 100W 95W 9ÓW 7ÓW 125W 85W 10 20 95 98 30

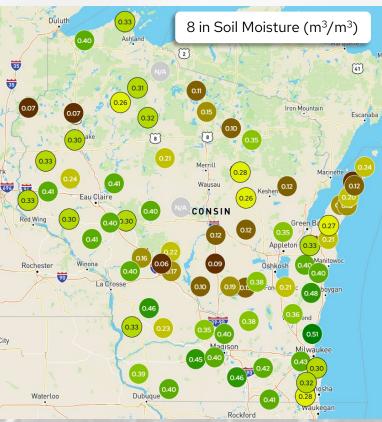
Wisconet Soil Moisture

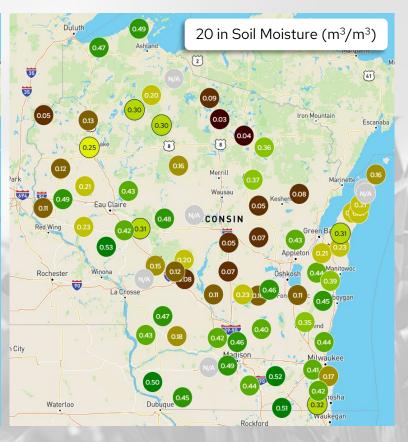
Maps showing soil temperature conditions on August 19th @ 11:30 am. Units of map values are {Volume of water}/{Volume of soil}.



0.10 to 0.15 m³/m³ 0.05 to 0.10 m³/m³

0.00 to 0.05 m³/m³



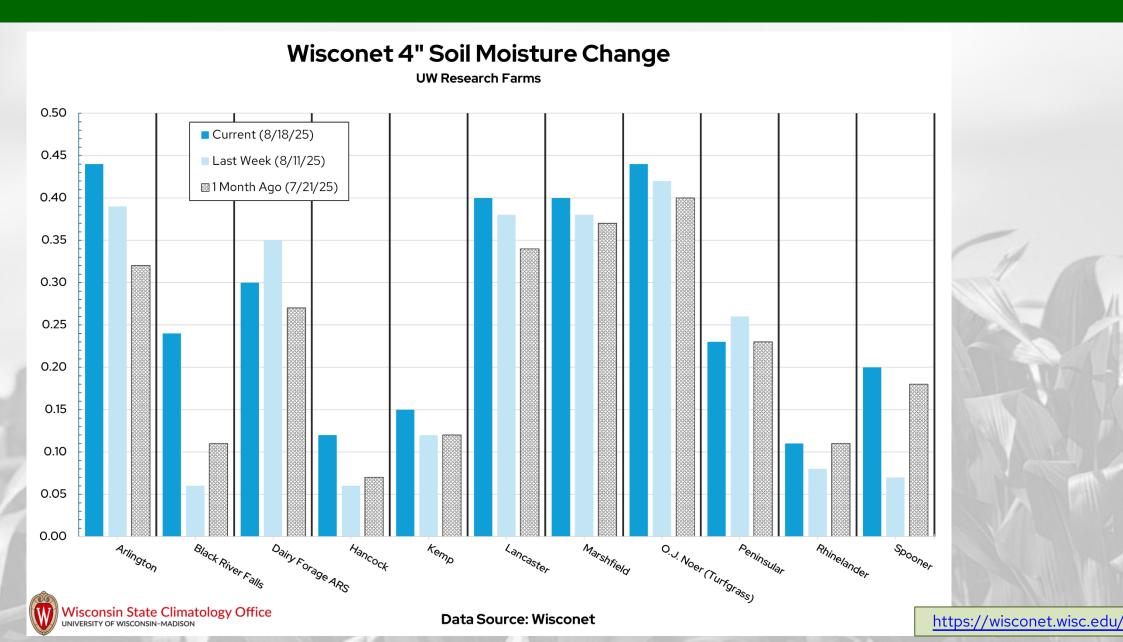


Wisconet Soil Moisture

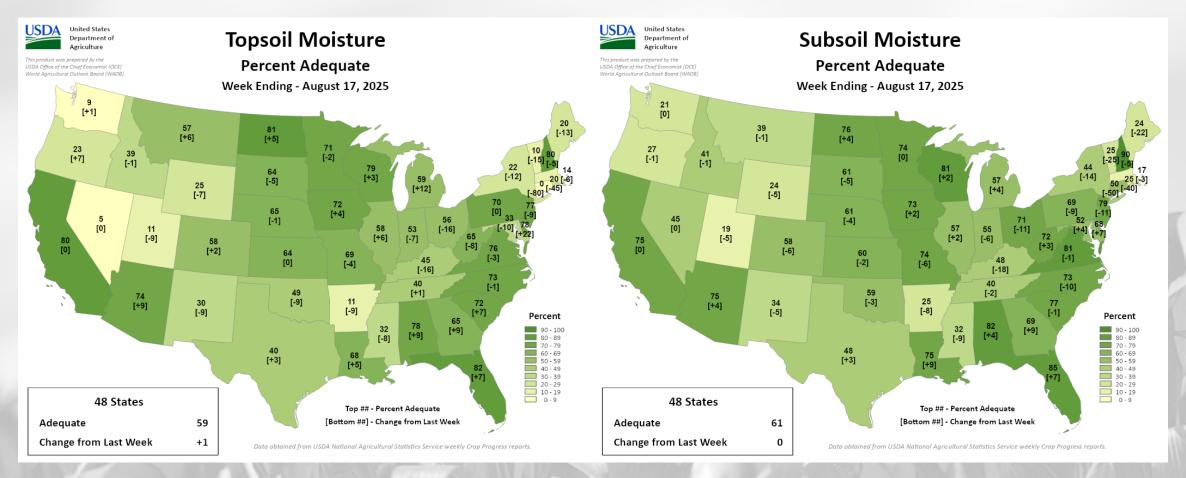
Change in soil moisture from August 12th (Start) to August 18th (End). Units of change values are {Volume of water}/{Volume of soil}.

Research Farm	County	Total Precip (in)	4" Change (Start) (End)		8" Change (Start) (End)		20" Change (Start) (End)	
Arlington	Columbia	2.20	0.41	0.44	0.39	0.41	0.37	0.43
Black River Falls	Jackson	2.98	0.06	0.24	0.10	0.24	0.06	0.17
Dairy Forage ARS	Sauk	1.63	0.35	0.30	0.37	0.35	0.42	0.42
Hancock	Waushara	3.28	0.06	0.12	0.03	0.12	0.03	0.09
Kemp	Oneida	1.43	0.11	0.15	0.12	0.15	0.03	0.03
Lancaster	Grant	2.72	0.39	0.40	0.39	0.40	0.50	0.51
Marshfield	Marathon	1.25	0.37	0.40	0.46	0.47	0.54	0.55
O.J. Noer (Turfgrass)	Dane	2.58	0.44	0.44	0.41	0.41	0.51	0.49
Peninsular	Door	0.66	0.24	0.23	0.20	0.18	0.22	0.21
Rhinelander	Oneida	1.09	0.08	0.11	0.07	0.10	0.04	0.04
Spooner	Washburn	1.32	0.07	0.20	0.04	0.07	0.12	0.12

Wisconet Soil Moisture



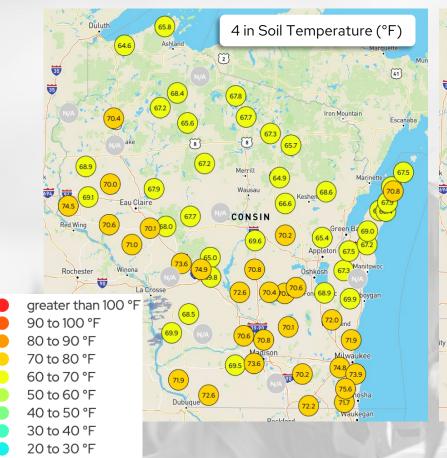
Adequate Soil Moisture



- 79-81% of agricultural soils in the state reporting adequate topsoil and subsoil moisture.
- **8%** of fields in the state are reported as having short to very short top and subsoil moisture, a **5% decrease** from last week.

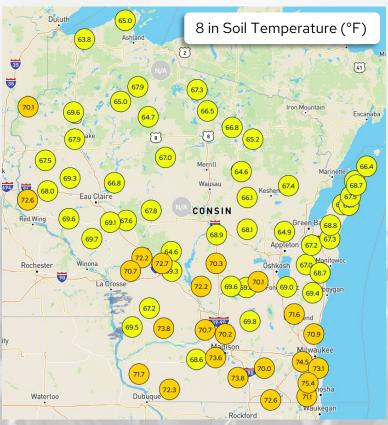
Wisconet Soil Temperature

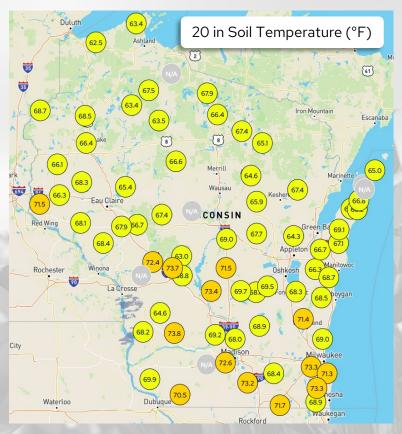
Maps showing soil temperature conditions on August 19th @ 11:30 am.



10 to 20 °F

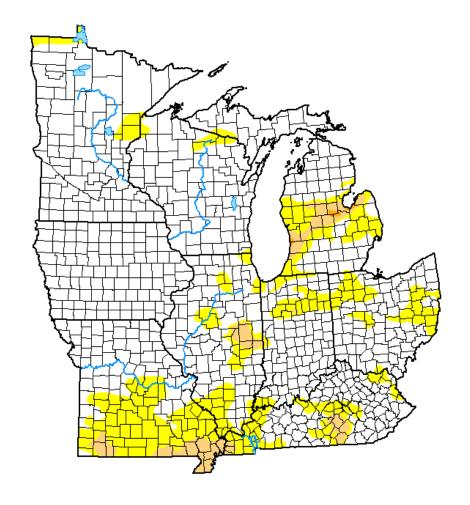
less than 10 °F





US Drought Monitor

U.S. Drought Monitor Midwest



August 19, 2025

(Released Thursday, Aug. 21, 2025)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	78.82	21.18	3.42	0.11	0.00	0.00
Last Week 08-12-2025	84.44	15.56	1.97	0.16	0.00	0.00
3 Month's Ago 05-20-2025	61.08	38.92	8.29	0.11	0.00	0.00
Start of Calendar Year 01-07-2025	44.12	55.88	29.47	3.56	0.00	0.00
Start of Water Year 10-01-2024	21.78	78.22	28.15	6.40	1.46	0.66
One Year Ago 08-20-2024	78.53	21.47	3.43	1.97	1.03	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

<u>Author:</u>

Lindsay Johnson National Drought Mitigation Center









droughtmonitor.unl.edu

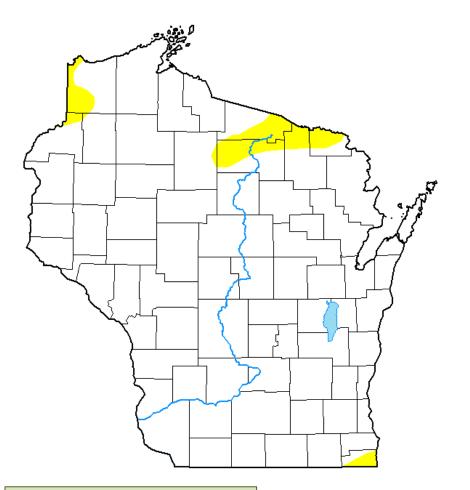
- Midwest: Compared to last week:
 - Increase in D0-D1 coverage.
 - Minimal decrease in D2 coverage.
- Midwest: 1 class improvement in northeast IL. D1 expansion in southern MO, central KY, and east-central IL.
- Wisconsin: The state is still droughtfree! No change in coverage or severity from last week's report.
- **96.5%** of the Midwest is drought free (~3.5% in D1 or D2).

Note: D0 is not considered drought.

US Drought Monitor

U.S. Drought Monitor

Wisconsin



August 19, 2025

(Released Thursday, Aug. 21, 2025) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	95.74	4.26	0.00	0.00	0.00	0.00
Last Week 08-12-2025	95.74	4.26	0.00	0.00	0.00	0.00
3 Month s A go 05-20-2025	56.53	43.47	5.69	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 08-20-2024	71.24	28.76	0.00	0.00	0.00	0.00

Intensity:

None

D2 Severe Drought

D0 Abnormally Dry D1 Moderate 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

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droughtmonitor.unl.edu

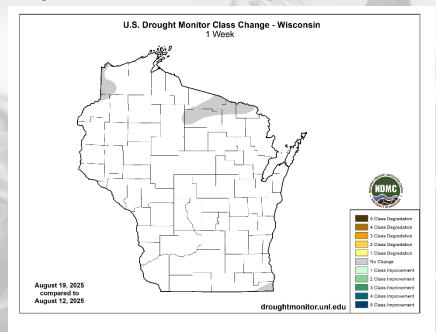
Amount of state in:

• D1-D4 - 0.0% --

• D2-D4 - 0.0% --

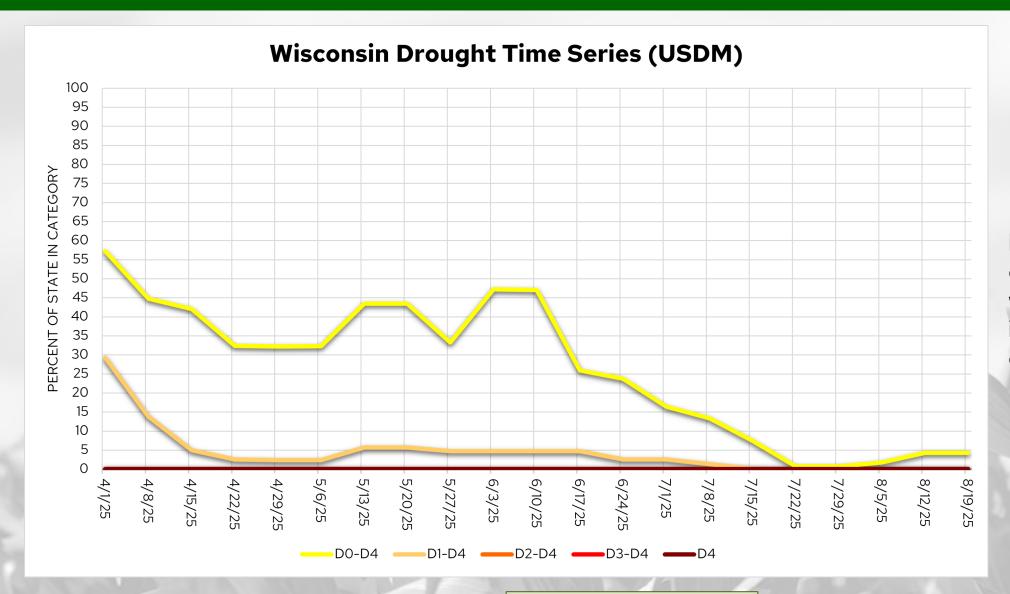
• D3-D4 - 0.0% --• D4 - 0.0% --

Note: ↑↓ indicate change from last week. Red up arrows indicate increase in drought area; vice-versa for green arrows. -- indicates no change from last week.



http://droughtmonitor.unl.edu/

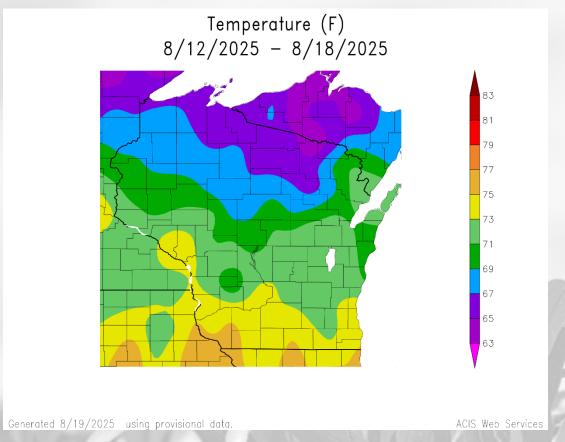
USDM Time Series

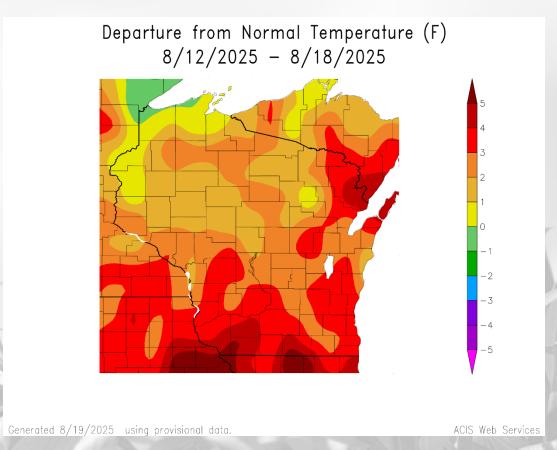


No change in conditions since last week, with a slight increase in DO coverage.

http://droughtmonitor.unl.edu/

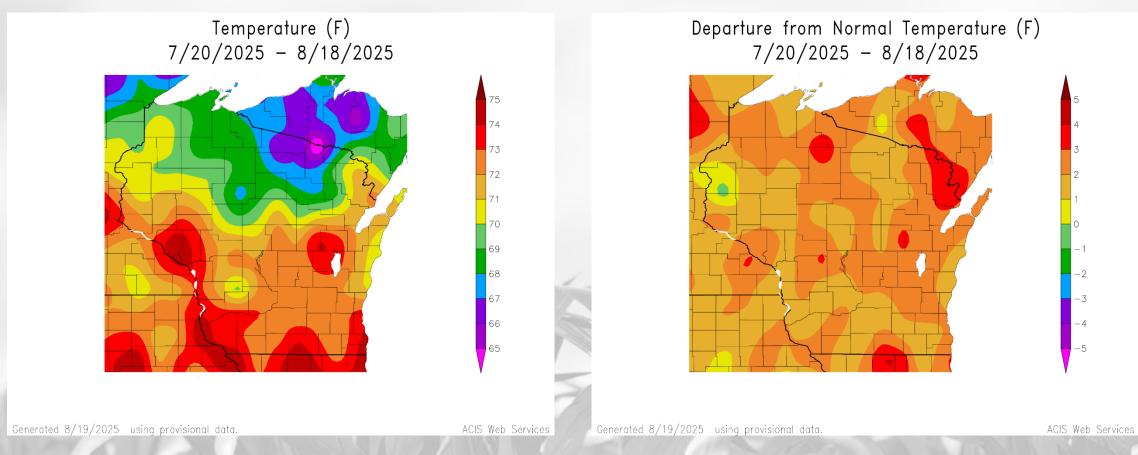
7 Day Temperatures





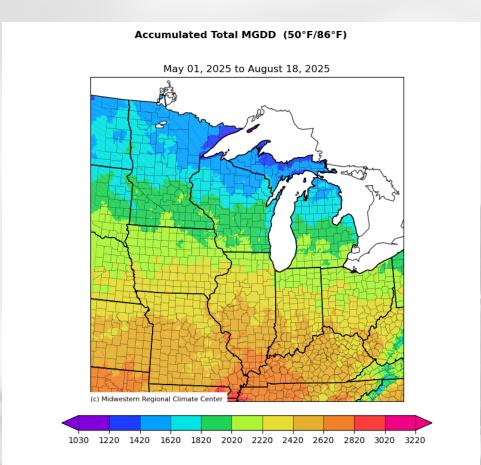
- Average temp. range of 73-77°F from south to west-central; to 63-67°F from central to N WI.
- **Warmer-than-normal** conditions were prominent statewide, especially in the south (**3-5+°F above normal**); closer to normal in the north and northwest.

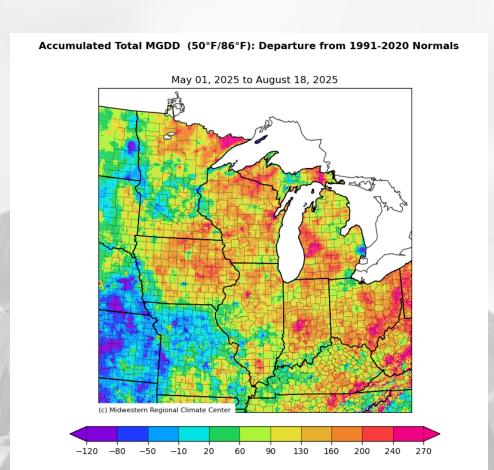
30 Day Temperatures



- Average temps. ranged from **73-75°F** in the south and west to **65-68°F** for the far north.
- 1-3°F above normal for most of the state.

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





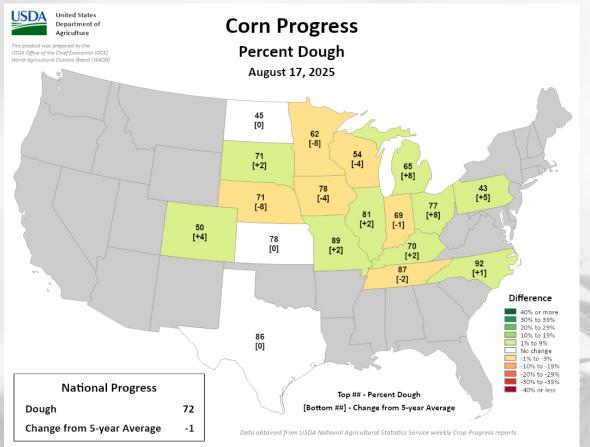
- Range from 2000-2200 GDD in the SW to 1400-1600 GDD in the N.
- GDD accumulation is running >100 GDD ahead of schedule across most of WI.
 Nearer to normal in the far NW.

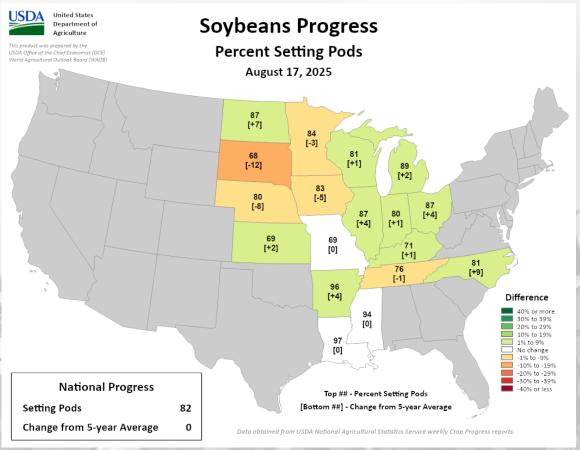
To calculate GDD for your corn variety and planting date, use this tool.

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

https://mrcc.purdue.edu/climate_watch

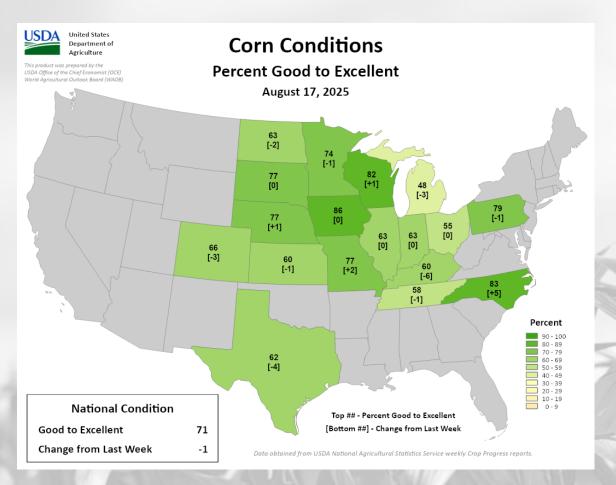
Corn & Soybean Progress

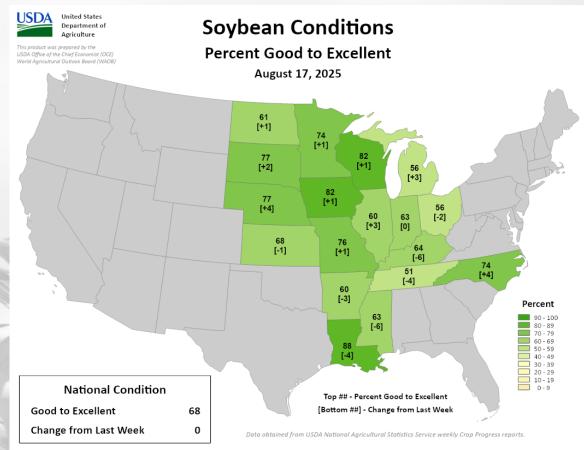




- Corn doughing is 54% complete in WI fields with silking nearly complete (95%).
 - Denting is being reported in 15% of corn fields in WI (near normal pace).
- Soybean pod setting is **81% complete** in WI fields which is just ahead of normal pace for mid August.

Corn & Soybean Condition





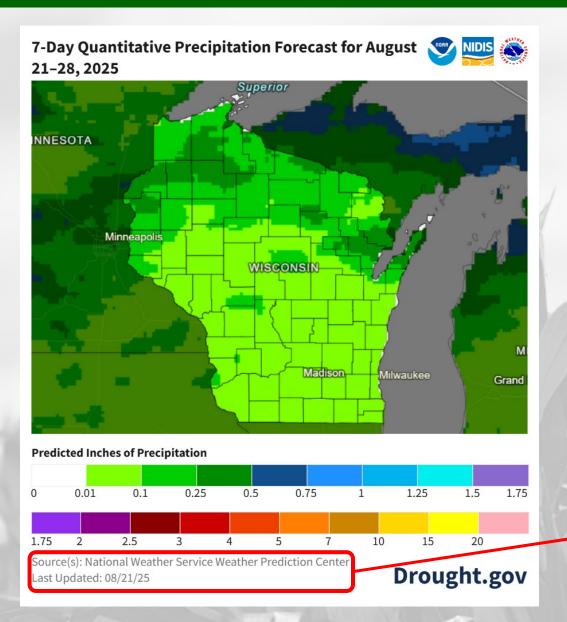
Crop Progress Report

Crop progress report for Wisconsin for the week ending on Aug 17th

- Corn silking is **95% complete.** Doughing is **54% complete** (2 days behind 5-year average).
 - Condition was rated 82% good to excellent.
- Soybean blooming reported at **93% complete**, with **81%** of soybeans setting pods (1 day ahead of 5-year average).
 - Condition was rated 82% good to excellent.
- Winter wheat harvest is 94% complete.
- The third cutting of alfalfa hay was **82%** complete (2 days ahead of 5-year average), with the fourth cutting at **18%** complete.
- Pasture and range conditions are rated 70% good to excellent (down 1% from last week).
- Oat harvest is at **72%** complete (3 days ahead of 5-year average).

<u>Full report</u>: https://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/Crop_Progress_&_Condition/2025/WI-Crop-Progress-08-18-25.pdf

7 Day Precip Forecast

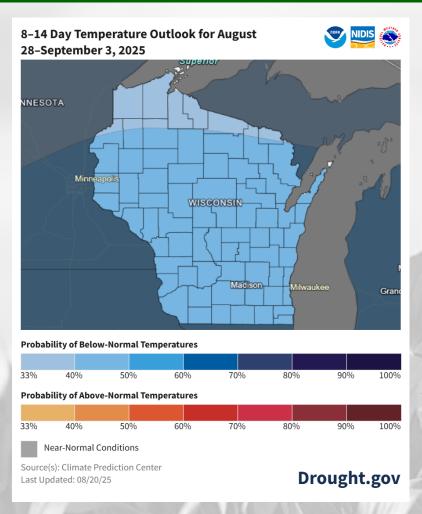


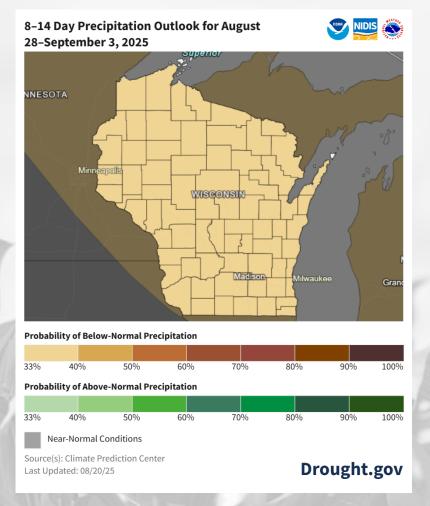
- When? → chances for rain on Friday into early Saturday, with things looking dry early next week.
- Where? → best chances in the north, but totals are not forecasted to be substantial.
- <u>Check your local forecast</u> for details on totals and timing.
- Average precip (1991-2020) for this week: 1.04"

Forecast for 8/21/25 thru 8/28/25 (Begins at 7am CDT)

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

8-14 Day Temp & Precip Outlook



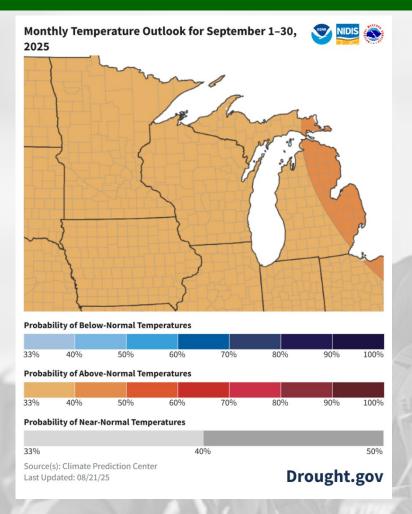


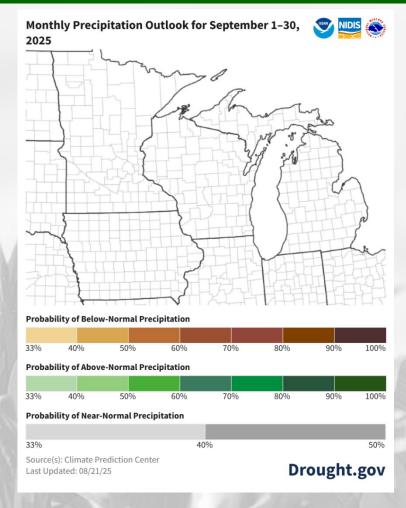
http://www.cpc.ncep.noaa.gov/ https://www.drought.gov/states/ wisconsin

Aug-to-Sep Transition: A lean towards <u>cooler-than-normal</u> temperatures, lesser so in the far N. Precipitation is leaning towards below normal statewide.

> Statewide normals (1991-2020) for Aug 28-Sep 3 are **65.1°F** and **0.83"**.

30 Day Temp & Precip Outlook



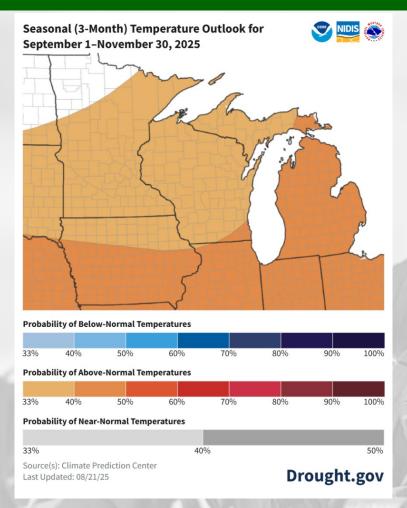


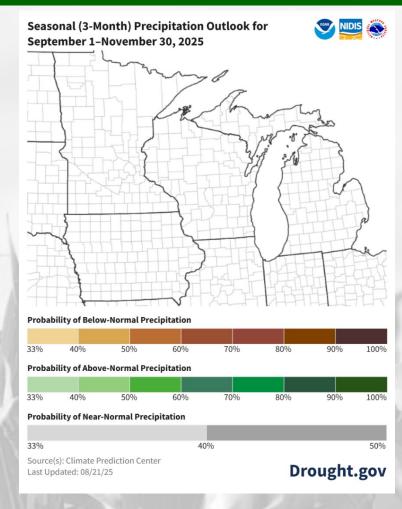
http://www.cpc.ncep.noaa.gov/ https://www.drought.gov/states/ wisconsin

Month of September: Temperatures leaning slightly towards <u>above normal</u> statewide, with <u>uncertainty</u> for precipitation.

> Statewide normals (1991-2020) for September are **58.5°F** and **3.75"**.

90 Day Temp & Precip Outlook





http://www.cpc.ncep.noaa.gov/ https://www.drought.gov/states/ wisconsin

Fall 2025: Temperatures leaning slightly towards <u>above normal</u> statewide (more so in the SE), with <u>uncertainty</u> for precipitation.

> Statewide normals (1991-2020) for Sep-Nov are 46.0°F and 8.51".

Take-Home Points

Current Conditions

- Multiple days of precip last week brought **2" or more** across most of southern and west-central WI, with **pockets of 5+"**. Precip in the south and west-central was **well above normal over the past 30 days**, while the north has been abnormally dry.
- Temperatures were warmer than normal last week by 2-4°F for most of WI, with 3-5°F above normal further to the south.

Impact

- After a relatively active week of precip, soil moisture is estimated to be **above normal** for most of SE, SC, and WC WI. Wisconet research farm stations show **increases in 4" soil moisture** from last week at most sites.
- Drought remains **non-existent** in WI with no change in coverage from last week.
- Corn silking and winter wheat harvest are nearly complete, with pod setting complete in 81% of soybean fields. Crop condition reports indicate 82% of corn and soybean rated good to excellent (NASS).

Outlook

- Rain is most likely in the north over the next few days, but the beginning of next week is looking dry.
- Climate probabilities for the August-to-September transition show a lean towards below-normal temperatures and precipitation.
- The outlooks for the month of September and for fall (Sep-Nov) (updated 8/21) show a lean towards above normal temperatures.

Agronomic Considerations

Field Work and Conditions

Avoid trafficking fields in moist conditions to prevent compaction.

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

- Check moth trap catches in your region with the <u>DATCP Pest Survey</u>. <u>Sign up for insect pest alerts</u> specific to your region.
- Routine scouting in corn to watch for <u>corn earworm</u>. Pay close attention to late-planted sweet corn and grain corn with remaining green silks.
- Note Japanese beetle populations in soybean fields.
- Use the <u>VDIFN model</u> to see risk in your region for several economically important pests.
- Scout for soybean aphid and soybean gall midge (SGM not presently in Wisconsin; however, the pest has been located in nearby states).
- Southern Rust has been reported in southern and central regions.
- DATCP fall armyworm traps picked up large flights this week in southern Wisconsin. Egg-laying may be occurring in late-planted corn fields. Also be vigilant of activity in alfalfa fields. Pay attention to trap catches through mid-September.

Forage Management

- Alfalfa stands are varying between third and fourth cuts depending on location in the state. Scout for potato leafhopper. Also scout for pea aphid.
- Use the <u>alfalfa cutting tool</u> to plan remaining alfalfa harvests for persistence. Those affected by flooding can review <u>flooded forage options</u>.
- Consider <u>in-field management strategies</u> to reduce mycotoxins in silage. <u>Begin sampling and estimating moisture as silage matures</u>. Read <u>corn silage harvest management considerations</u>.
- Foliar disease presence can make silage harvest timing critical. Read these considerations for managing disease at chopping.

Small Grains

- Winter wheat harvest is mostly complete. As you harvest, remember the importance of combine cleaning to prevent weed seed spread from field to field.
- Consider planting a <u>cover crop after small grain</u> harvest. Review <u>Cover Crops 10</u>1 for a list of viable species and seeding recommendations. Cover crops can also be an opportunity for grazing.

Fruit Considerations

General

- •Sun scald and southwest injury to trunks and branches has been observed across many orchards and vineyards this summer, likely due to wide variations in winter temperatures that can cause trunk and branch damage.
- Fruit sunburn has been observed across many fruit crops in southern WI. Consider removing this fruit while out picking to prevent other pests attracted to the volatiles released from impacting fruit.
- •Sanitation: remove and destroy (chop/compost) fallen fruit ~weekly to prevent any internally developing larvae from reaching maturity, and to limit the spread of disease.
- •Japanese beetle pressure has lessened in Southern WI, though emergence may continue through September. Review best monitoring and management practices here.

Apples

- •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: NEWA Weather Station Network (Cornell).
- •Warm and rainy weather conditions are ideal for bitter rot in apple orchards; see the article on bitter rot management from the July 4 WI Fruit newsletter.
- •Sooty blotch and flyspeck has been observed in Southern WI, pushed along by warm, humid conditions. Continue monitoring NEWA models.
- •Apple growers should continue monitoring pheromone traps and degree-day (base 50°F) accumulation for Codling moth.
- •Apple maggot pressure is variable across the state. Growers should continue to use red sphere traps to monitor populations.
- •Check out the WI DATCP Orchard Insect Pest Bulletin for more information on current insect trap captures across the state.

Grapes

- •Several grape varieties (Frontenac, Marquette) have hit veraison in the last week or so. This may translate to increased bird and disease pressure (sour/bunch rot).
- •Grape berry moth has been observed in southern WI. Continue monitoring traps and using NEWA models.
- •Black rot fruit symptoms have been reported in vineyards around WI. Review this 2022 article by Dr. Leslie Holland on Fruit and Cluster Rots for more information on black rot and fruit rot management.
- •Overview of grape insect/mite monitoring and management: Grape Insects and Mite Pests, 2024 Field Season (Cornell, 2024).

Berries

•Grape and berry growers monitoring spotted wing drosophila should continue checking and refreshing traps weekly.

Vegetable Considerations

Pests

- The peak of the second generation of adult <u>Colorado potato beetles</u> is occurring across the state. Be on the lookout for eggs on eggplants, potatoes, peppers. Chemical treatments should be timed to coincide with egg hatch as the very early instars are most susceptible for chemical control. Detailed management info can be found <u>here</u>.
- The second generation of **European corn borer** adults are very active across central WI. Scout for egg masses in beans, eggplant, peppers, potato, and sweet corn. Economic thresholds and management options for these crops can be found here.
- **Corn earworm** moth <u>catches are up in WI</u>. The risk to late planted sweet corn is high as egg laying activity is now increasing. Sweet corn is vulnerable from row-tassel to 100% silk. <u>Insecticides must be present on vulnerable silks when eggs hatch</u>. Organic control options can be found <u>here</u>, and conventional insecticide options can be found in the commercial vegetable production guide.
- The second generation of adult <u>crucifer flea beetles</u> are active in central WI. Yellow sticky cards can be used to help determine their population. Treatment is recommended when 10-20% of a stand shows damage. Populations can be spotty across a field so spot treatment can be very effective.
- <u>Squash bug</u> populations are high across the state. Older plants are less susceptible to damage. However, large populations can cause wilting and feeding on fruit can prevent development and lead to rot. Remember chemical controls are most effective on young nymphs rather than older, larger nymphs or adults. View the <u>commercial vegetable production quide</u> for conventional options and <u>ATTRA for organic control options</u>.

Diseases

- The first symptoms of <u>brassica alternaria</u> are pin sized black specks on the leaves or stem. As the lesions expand, they will form concentric rings and black, sooty spores form during periods of high humidity. Sources of inoculum include infected plant debris and brassica weeds. It is spread by wind, rain, and insects like flea beetles.
- Anthracnose of cucurbits can infect all above ground plant tissue. Symptoms vary based on which cucurbit is infected. On melons and cucumber lesions are brown, irregularly shaped, and often have a yellow halo. On watermelons, the lesions are darker and smaller. Stem infections on melon will often secrete a red colored gum. Fruit lesions are black and sunken and salmon-colored spores will form during high humidity. Winter squash and pumpkins are not often infected.
- <u>Early blight</u> risk is high across the state. Lesions can occur on both fruit and stems. One way to distinguish this from other diseases is the larger lesions will have concentric rings. Copper can be used as preventative or very early on in disease development. Other control options can be found <u>here</u>. Be sure to remove or bury diseased tissue at the end of the season to the reduce the chances of the pathogen surviving the winter.
- Conditions are right for the development of <u>septoria leaf spot</u>. Lesions are tan to grey with dark margins and often contain very small black specks called pycnidia which are the fungal structures that produce spores. Symptoms often appear on the lowest leaves first. Like early blight, copper and chlorothalonil can be useful as preventative treatments.
- <u>Nicotianae blight</u>, a late blight look alike, was identified this past week on potato plants in central WI. The causal pathogen often infects roots and tubers causing pink rot, but occasionally lesions form on leaves. While foliar lesions look very similar to late blight, one way to distinguish between the two is that these lesions do not have the spores that are a symptom of late blight. Photos comparing the lesions can be found here.

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 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 jbendorf@wisc.edu.

Thank you!!

-The AgWOW Team

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