

Southwest Michigan Field Crops Updates February 2023

Here are updates from the MSU Extension Field Crops team in Southwest Michigan. If you have any items you would like me to include in future email updates—whether events you want others to know about or topics you would like to have addressed—please send me an email or call the office.

Updated Handy Bt Trait Table

The updated version of the Handy Bt Trait Table for US Corn Production is out and posted for free at <https://www.texasinsects.org/bt-corn-trait-table.html>. This resource is maintained by MSU field crop entomologist Chris DiFonzo with thanks to Dr. Pat Porter at Texas A&M for managing the web site.

USDA Ag Census Due February 6

Producers can access the census form and instructions on the [USDA website](#). The online questionnaire is secure and user friendly with several time saving features, such as skipping questions that do not pertain to the operation, pre-filling some information with previously reported data, and automatically calculating totals.

Responding to the Census of Agriculture is required by law under Title 7 USC 2204(g) Public Law 105-113. The same law requires NASS to keep all information confidential, to use the data only for statistical purposes, and only publish in aggregate form to prevent disclosing the identity of any individual producer or farm operation. NASS will release the results of the ag census in 2024.

Corn Response To Starter Fertilizer and Sulfur Fertilizer in Indiana

Purdue University researchers recently wrote articles summarizing research trials in Indiana with corn response to starter and sulfur fertilizers. “[Corn Response To Starter Fertilizer In Indiana](#)” and “[Corn Response To Sulfur Fertilizer In Indiana](#)” to read the full articles.

Starter Fertilizer Research Summary

- Starter fertilizer in 2×2 placement usually speeds up the plant development rate and dry matter accumulation of corn during vegetative growth stages. In-furrow fertilizer (pop-up) effects on early growth are not as large as higher nitrogen rates applied in 2×2 placement.
- Faster crop development results in earlier silking, earlier grain maturity, and dryer grain at harvest. Starter fertilizer, depending on placement and rate, reduced grain moisture at harvest between 0.6 and 1.4 percentage points compared to no starter fertilizer in 80% of the trials (43 of 54). Grain moisture was drier with starter, than without starter, by an average of 1 percentage point whether or not a grain yield increase occurred.
- Grain yield responses to 2×2 starter fertilizer occurred less frequently in our trials than did grain moisture responses.
 1. In 24 of 25 trials, yield response to 2×2 starter fertilizer (23-50 lbs. N) averaged 7 bushels per acre (bu/ac > compared to no starter fertilizer and ranged as high as 18 bu/ac. No yield response to this range of starter fertilizer was detected in the other 31 trials.

2. In 4 of 20 trials that compared normal (25-35 lbs. N) to higher than normal (46-50 lbs. N) rates of 2×2 starter fertilizer, yields with the higher starter rate averaged 5.2 bu/ac greater than those with the normal rate. No yield differences between the two starter rates were detected in the other 16 trials.
- In-furrow (pop-up) starter fertilizer (3-5 lbs. N) outyielded the [No Starter] control in only 1 of 21 trials (6.1 bu/ac) and decreased yield in 2 other trials by 3.3 and 5.4 bu/ac. No yield response to in-furrow fertilizer was detected in the other 18 trials.
 - A combination of in-furrow plus 2×2 starter fertilizer (total of 25 lbs. N) was evaluated in 19 trials, but only outyielded a standard (25 lbs. N) 2×2 starter fertilizer treatment in one of those trials by 6.8 bu/ac.
 - In 5 trials that evaluated N, N+P, and N+P+K starter 2×2 fertilizer sources, the nitrogen component of the 2×2 starter fertilizer was found to be the primary component that resulted in starter fertilizer benefits.

Why the Hostility? Exploring the Many Sides of Herbicide Antagonism

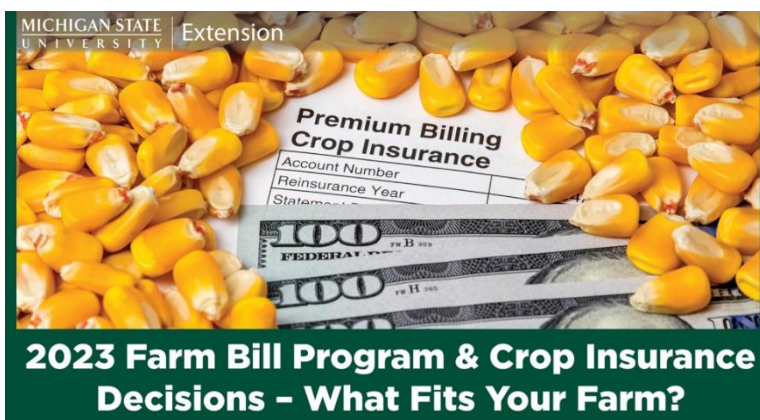
In a new episode of the [War Against Weeds Podcast](#), join hosts Alyssa and Sarah as they talk with Dr. Bryan Young from Purdue University about antagonism in the context of herbicide use. Special thanks to the North Central Integrated Pest Management Center for their funding and support!

2023 Farm Bill Program & Crop Insurance Decisions - What Fits Your Farm?

Experts from Michigan State University Extension will provide you with the best information to help you evaluate your risk and make decisions regarding PLC, ARC sign up with the FSA and new crop insurance options. The webinar will be February 21, 2023 from 6:30 - 8 p.m.

Producers will:

- Hear highlights from the 2023 decisions and how those decisions played out across the state.
- Learn the latest in policy and impacts of programs
- Learn about the current and new crop insurance options available to you
- Work through case examples using the MSU Extension Farm Bill Calculator to help make better decisions on ARC versus PLC (Each crop and FSA farm number may result in a different choice.).
- Discuss specific program details with experts



Featured Experts:

- Molly Sears, Assistant Professor, Michigan State University Department of Agricultural, Food, and Resource Economics
- Roger Betz, Michigan State University Extension Senior Educator
- Jon LaPorte, Michigan State University Extension Educator
- Elliot Alfredson, Eagle Valley Ag Risk Advisors, LLC

[Register](#) to receive the Zoom link.

Purdue's Forage Forum Fridays Webinar Series

Purdue Extension is planning one last run of the Forage Forum Fridays this year beginning Friday, February 10, 2023. No pre-registration is required. The Zoom link is: <https://purdue-edu.zoom.us/j/94983631528>. Contact Purdue Extension- DeKalb County Extension Director and Agriculture and Natural Resource Educator Elysia Rodgers (260-925-2562 or eberry@purdue.edu) for more information.

FEBRUARY 10, 2023
**FROM THE GROUND UP,
SOIL SILENTLY SERVES**
DR. ALAN FRANZLUEBBERS
ARS CO-DIRECTOR OF THE SOUTHEAST REGIONAL CLIMATE HUB

FEBRUARY 17, 2023
SELECTING SEEDS FOR YOUR SOIL
ELYSIA RODGERS & DR. KEITH JOHNSON
PURDUE UNIVERSITY

FEBRUARY 24, 2023
ANIMAL RELATED FORAGE DISEASES
DR. GRANT BURCHAM
*VETERINARY DIAGNOSTICIAN AND ASSISTANT DIRECTOR
HEEKE ANIMAL DISEASE DIAGNOSTIC LABORATORY*

MARCH 3, 2023
SOIL AFFECTS OUR HERDS TOO
DR. TERESA STECKLER
UNIVERSITY OF ILLINOIS COMMERCIAL AG EXTENSION SPECIALIST

MARCH 10, 2023
**TALKING PLANTS: WHAT THEY TELL
US ABOUT OUR SOIL**
MARK KEPLER & DR. KEITH JOHNSON
PURDUE UNIVERSITY

MSU Extension Hay Production 101 Webinar Series

This course is designed for participants to build a foundation of knowledge about growing hay. We will cover a variety of topics aimed at the unique challenges of growing hay in Michigan and the Great Lakes Region. Because of the systematic structure of the course and the importance of building foundational knowledge, participants should plan to attend all sessions. The MSU Extension teaching team is led by Forage Specialist Kim Cassida with other Specialists and Educators contributing.

Sessions run Tuesdays and Thursdays from 7:00-8:30pm from Feb. 21 through Mar. 9. Cost is \$85 per person. CCA credits available each night, 1 Michigan pesticide recertification (RUP) credit available on Mar. 7 only. [Register online](#).



Program Dates and Topics:

- Tuesday, Feb 21 - Hay Industry Overview; Matching Hay Species to Farm Goals
- Thursday, Feb 23 - Soil Fertility & Health Management
- Tuesday, Feb 28 - Field Establishment & Renovation
- Thursday, March 2 - Harvest & Post-Harvest Management
- Tuesday, March 7 - Managing Pests: Weeds, Insects, & Disease
- Thursday, March 9 - Cost of Production & Marketing

Pre-Excavation Checklist

As we kick-off 2023, reviewing safety tips in the planning phase of any farming project can help keep everyone safe during the upcoming planting season. Download the [Pre-Excavation Checklist](#) and keep one on hand in every tractor, office, and truck for a quick review when planning projects, reviewing work areas, and making sure they've done everything you can to stay safe before work begins.

Styrofoam Recycling in St. Joseph County

Items will be accepted at the Westside Landfill Recycling Center (60050 Roberts Rd, Three Rivers, MI) on Feb 11 from 7:30-11:30 AM. Quarterly collections will occur on May 13, Aug 12 and Nov 11. All items must be clean.

Accepted items include:

- Dinnerware
- Take-out containers
- Meat/fish trays
- Egg cartons
- Packing material
- Peanuts (bag separately)

Items not accepted include:

- Insulation board
- Fire-retardant foam

Job Opportunities

Secretary, MSU Extension in St. Joseph County

High School education with course work in business-related areas or an equivalent combination of education and experience. Six months of experience in word processing, typing, and filing, may require technical knowledge or training related to position. Visit <http://careers.msu.edu> and enter Posting Number 843532. The application deadline is 02/14/2023.

Summer Job Opportunity – Seed Corn Production Technician

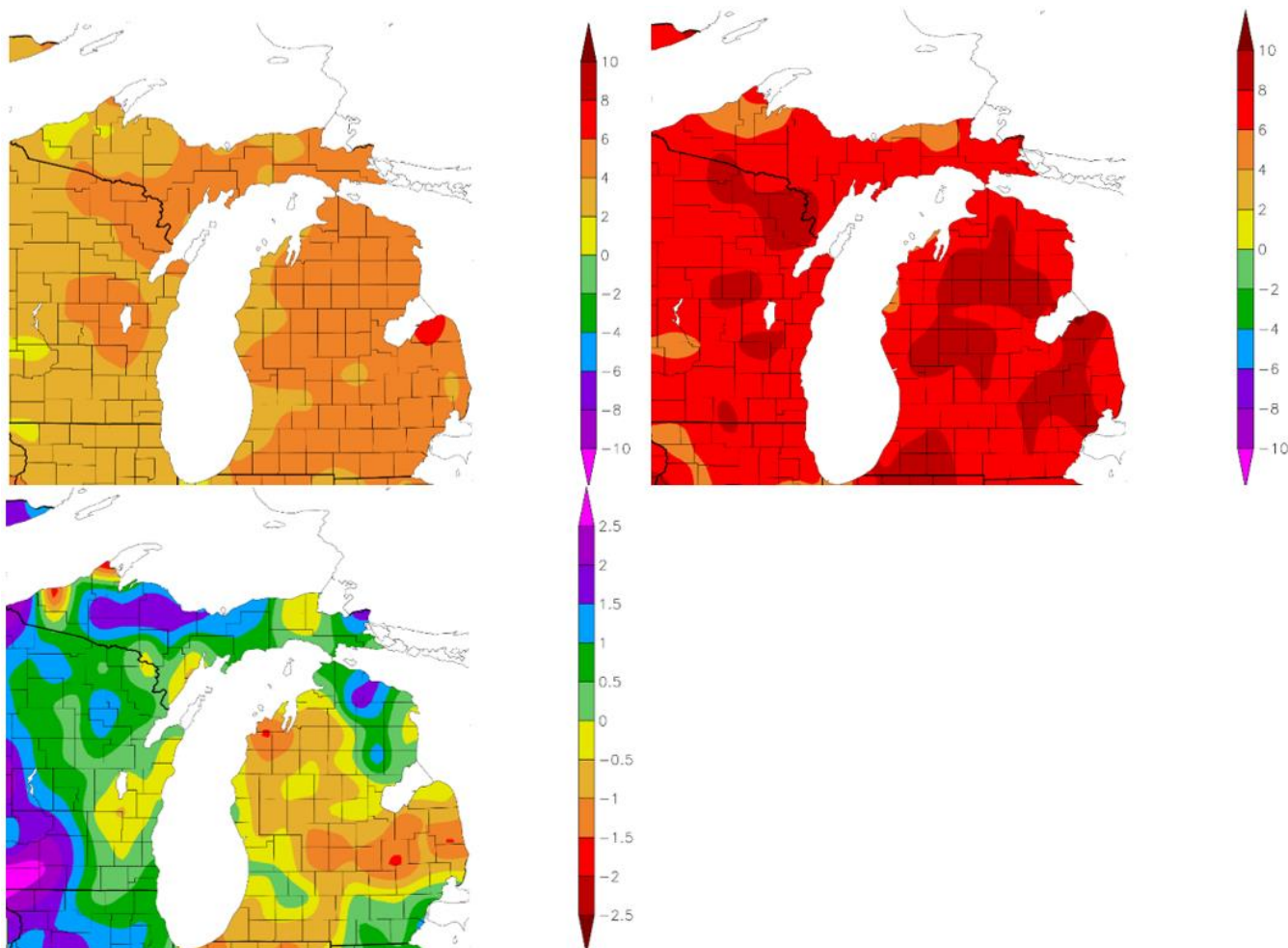
Michigan Crop Improvement has need of people to monitor seed corn development and manage detasseling activities near Vicksburg, Mendon, Constantine in Michigan and Howe, IN. Timeline is late June through early August. Pay rate is \$18/hr + mileage. Contact Tom Siler (silert@michcrop.com or 517-332-3546 office or 989-817-8570 cell) for more information.

Weather Update

Weather

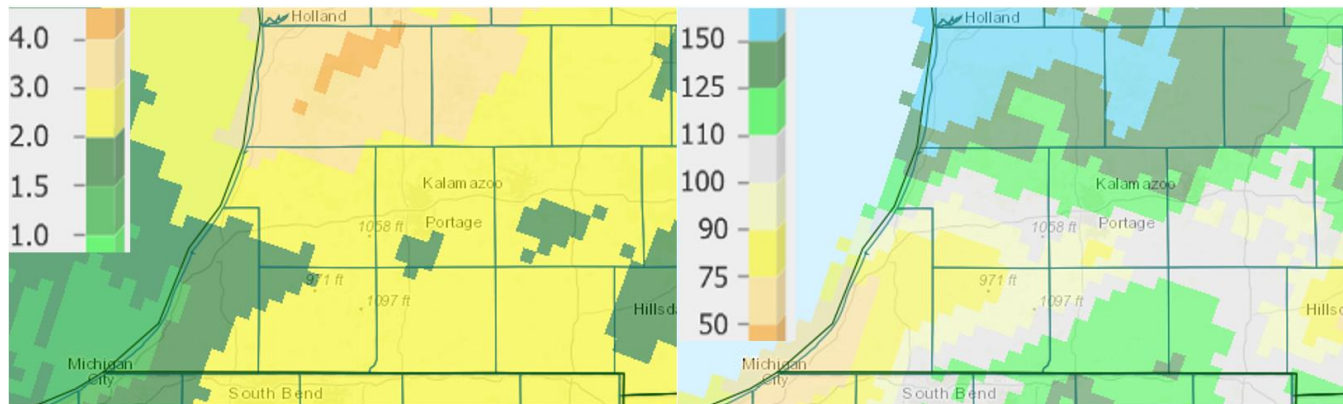
Temperatures have been 2-4 degrees above normal when averaged across November-January, as much as 6 degrees above normal for the past two months, and as much as 10 degrees above normal for January. Although precipitation has only been 10-20% below normal—outside of the snow belt near Allegan County, snow pack remains low as snow has melted during warm spells. Temperatures for the first half of February are predicted to be above normal with a high degree of certainty.

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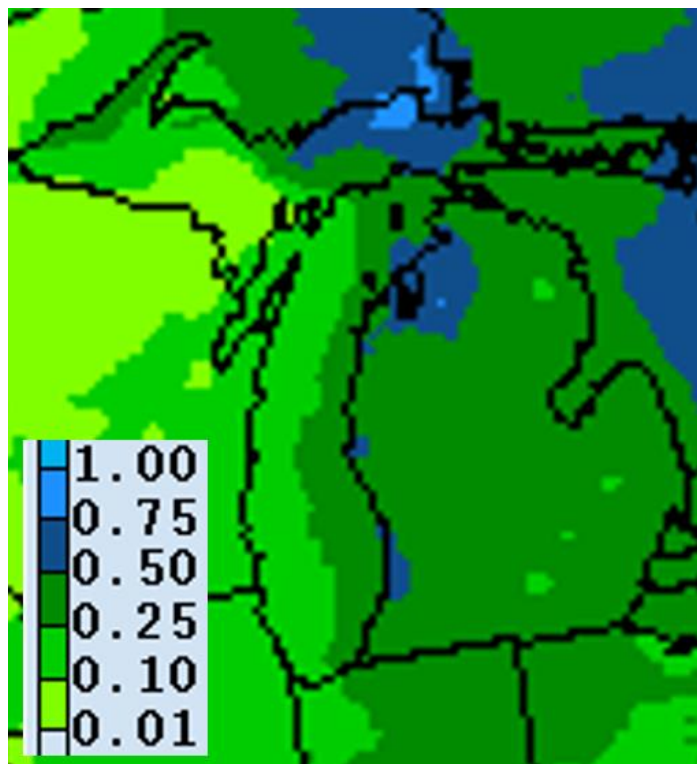


Departure from normal for temperature (upper left) and precipitation (lower left) for December through January, and temperature departure from normal for the month of January (upper right).

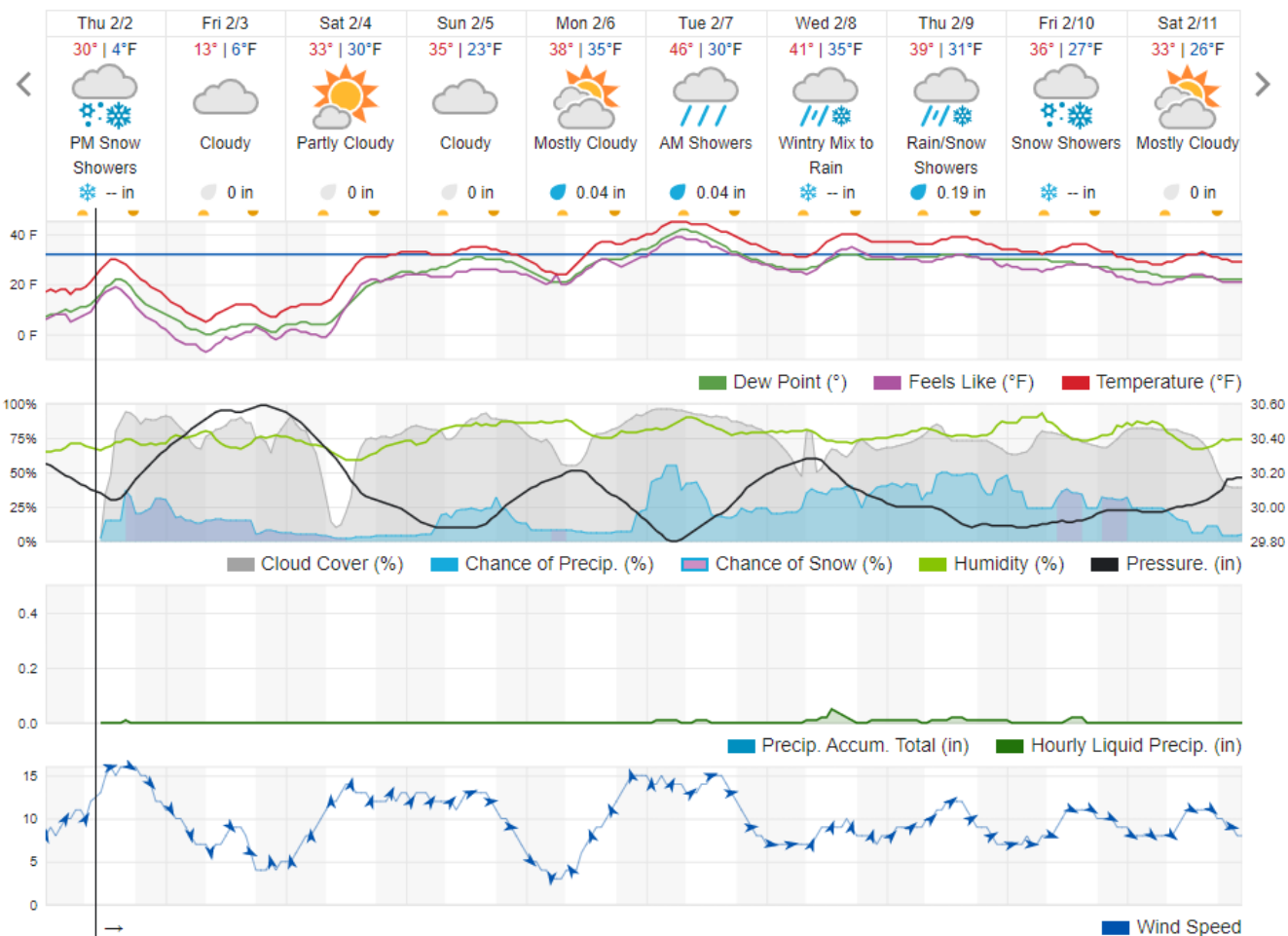
Precipitation has been varied with below-normal totals in the extreme southwest corner to 50% above normal closer to Grand Rapids for the month of January. Although most of southwest Michigan is not in drought conditions, areas further east and up into the Thumb continue to be in moderate to severe drought. The current forecast is for slight chances of above-normal precipitation during the second week of February.



Precipitation totals (left, water equivalent) and percent of normal (right) for the past 30 days as of February 2.

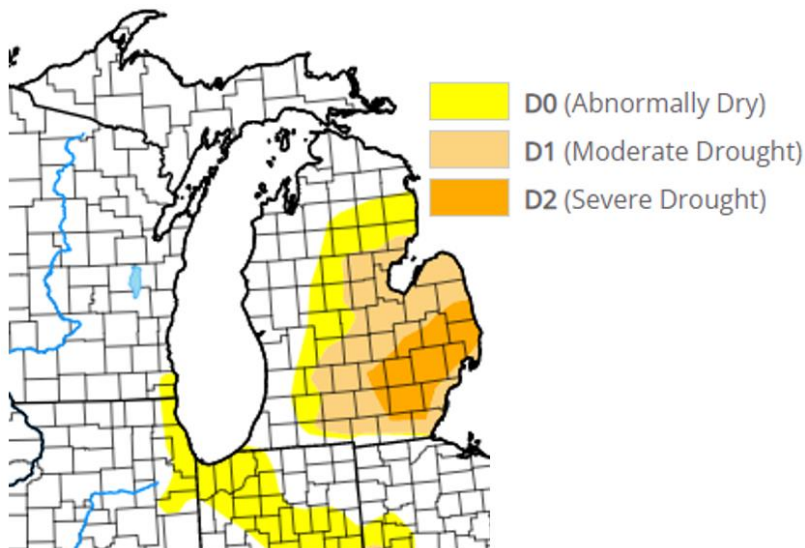


Precipitation forecast for Feb 2-9 in water equivalents.

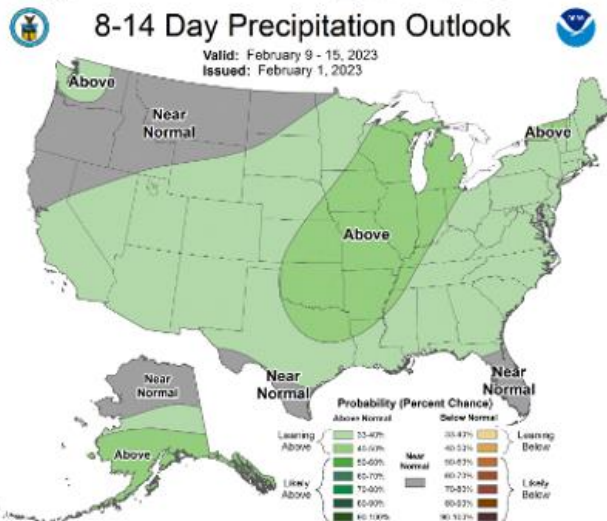
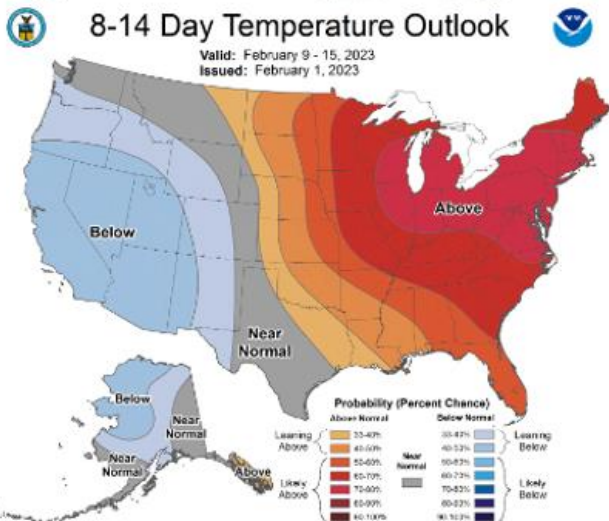
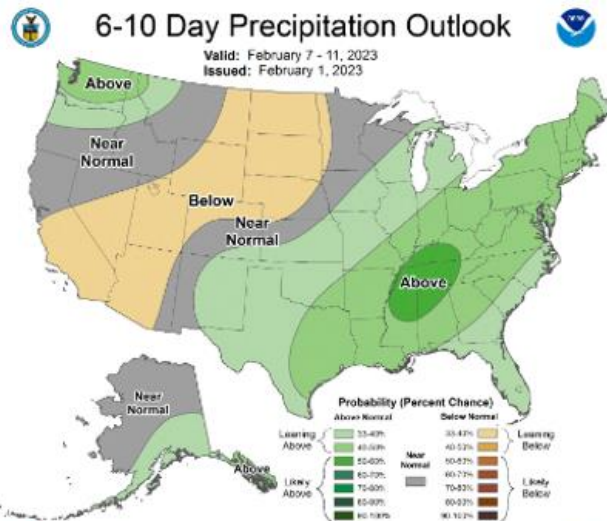
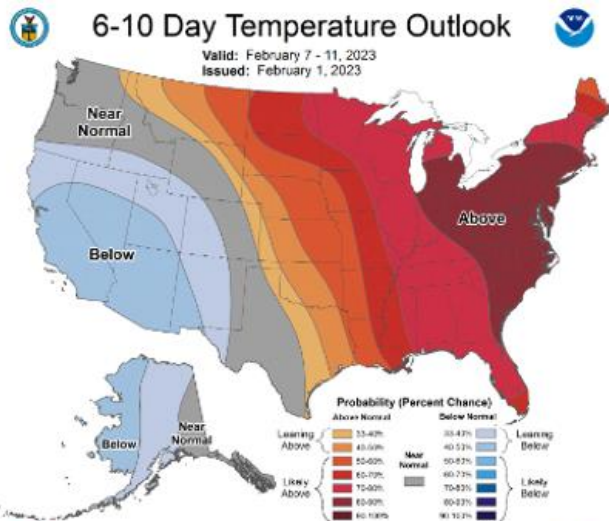


The 10-day weather forecast for Kalamazoo according to wunderground.com.

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US Drought Monitor released Feb. 2.



The 6-10 day (Feb 7-11, top) and 8-14 day (Feb 9-15, bottom) outlooks for temperature (left) and precipitation (right).

Winter Calendar

Titles are clickable links to online content when highlighted and underlined

- Feb 6 +** [Field Crops Webinar Series Begins](#). 7-8pm Monday evenings through March 27. Cost is \$20/person for 8-week series. Register online. Contact Eric Anderson (eander32@msu.edu, 269-359-0565) with questions. **1 RUP, 1 CEU** per live session
- Feb 7** [MSU Extension Pest and Crop Management SE Regional Update](#). 9am-3pm. Old Mill Museum, 242 Toledo St, Dundee, MI (5 min from Cabela's). Cost is \$40. **Registration is FULL. 5 RUP, 5 CEU**
- Feb 15-18** [Louisville Farm Machinery Show](#).
- Feb 20** [Branch County Farmers Day](#). 8am-12pm. Dearth Center, 262 S Sprague St, Coldwater, MI. Call Branch County Extension office (517-279-4311) for more details. **Deadline Feb 17. 3 RUP, 3 CEU**
- Feb 20** [In-Person Pesticide Applicator Training/Testing](#). 8am-2pm. Dearth Center, 262 S Sprague St, Coldwater, MI. Pesticide training+testing session offered concurrently with the BCFD. Only testing session scheduled this winter in south-central MI. Must attend both training and testing. Core exam only, no categories, no RUP credits. Cost is \$25 for training, separate fee paid to MDARD for licensing. Register online.
- Feb 17** [Farm Bill Program & Crop Insurance Decisions](#). 6:30-8:00pm.
- Feb 21 +** [MSU Extension Hay Production 101 Webinar Series](#). Tuesday and Thursday evenings from 7:00-8:30 pm, Feb 21 through Mar 9. Cost is \$85, RUP and CCA credits available. Register online.
- Feb 22** [MI Wheat Annual Meeting](#). Frankenmuth, MI.
- Feb 28** ["Pay Dirt" with Elkhart County SWCD](#). 8AM- 4PM. Elkhart County 4-H Fairgrounds, 17746 CR 34, Goshen, IN. Focus on soil health. Registration is \$25 includes lunch. Register online or call 574-523-2030.
- Mar 6** [Michiana Irrigated Corn and Soybean Production Workshop](#). 8:30am-4pm. Blue Gate Restaurant, Shipshewana, IN. Register online. **Deadline Feb 27**. Call Purdue Extension (260-636-2111) for information. **2 RUP, 5 CEU**
- Mar 7-9** [MSU Drainage Design Workshop](#).
- Mar 9-11** [Commodity Classic](#). Orlando, FL.
- Mar 23** [In-Person Pesticide Applicator Training/Testing](#). 8am-2pm. MSU Southwest MI Research and Extension Center, 1791 Hillandale Road, Benton Harbor, MI. See details from Feb 20 entry.

MSU Extension Digest Briefs

PUBLISHED ON JANUARY 27, 2023

- [ONLINE HAY PRODUCTION 101 SHORT COURSE IS BACK BY POPULAR DEMAND IN 2023](#) - Join our team of Michigan State University Extension specialists and educators online in February and March to learn the ins and outs of growing, harvesting and marketing your hay crop.

PUBLISHED ON JANUARY 26, 2023

- [MICHIGAN SOYBEAN GROWERS CAN HELP DEVELOP A NEW ONLINE TOOL FOR OPTIMIZING SOYBEAN PRODUCTION](#) - Survey data collected from Michigan soybean fields will help in the development of a new online tool that can provide field-specific management guidelines.

PUBLISHED ON JANUARY 24, 2023

- [FIELD CROP WEBINAR SERIES KICKS OFF FEBRUARY 6 WITH NUTRIENT MANAGEMENT RECOMMENDATIONS](#) - After 2-plus years of higher fertilizer prices, is it time to reconsider or adjust fertilizer management regimes?
- [NEW VIDEO SERIES SHARES TIPS FOR FARMERS SELLING TO LOCAL RESTAURANTS, RETAILERS AND INSTITUTIONS](#) - Hear insights from 14 farmers, food entrepreneurs and marketing experts.

PUBLISHED ON JANUARY 19, 2023

- [CLEARING UP NUTRIENT UNKNOWNNS ON IN THE WEEDS PODCAST SERIES](#) - “In the Weeds” podcast navigates the uncertain waters of the fertilizer markets with Kurt Steinke, MSU Extension soil fertility specialist.
- [IN THE WEEDS PODCAST HIGHLIGHTS KEY FINDINGS FROM KELLOGG BIOLOGICAL STATION RESEARCH](#) - Agriculture is an intricate system of inputs and outputs. Come listen to the “In the Weeds” podcast as we explore the complexities.
- [THIRD ANNUAL MI AG IDEAS TO GROW WITH VIRTUAL CONFERENCE FOCUSES ON FOOD AND ANIMAL PRODUCTION](#) - The MI Ag Ideas to Grow With virtual conference offers an array of free educational sessions on food and animal production from February 27 through March 10.

PUBLISHED ON JANUARY 12, 2023

- [54TH ANNUAL BRANCH COUNTY FARMERS DAY TO BE HELD FEBRUARY 20, 2023](#) - MSU Extension will host educational programming in Coldwater, Michigan to continue the legacy of this long-standing outreach event.

PUBLISHED ON JANUARY 11, 2023

- [COLLABORATIVE VIDEO SERIES WITH THE MIDWEST COVER CROP COUNCIL](#) - A new video series on Midwest Cover Crop Council’s YouTube highlights Michigan farmers using cover crops.

PUBLISHED ON JANUARY 6, 2023

- [REGISTER FOR MICHIGAN’S 2023 DRAINAGE DESIGN WORKSHOP](#) - Learn about subsurface drainage design with hands-on exercises, design tools, and learn from drainage industry professionals on March 7-9, 2023
- [2022 MICHIGAN SOYBEAN PERFORMANCE REPORT](#) - The 2022 Michigan Soybean Performance Report is a result of a cooperative effort of Michigan State University, MSU Extension and the Michigan Soybean Committee. This information will help you to make informed critical choices for your 2023 soybean crop.

PUBLISHED ON JANUARY 4, 2023

- [SARE RESOURCES AVAILABLE TO EVERYONE](#) - Looking for practical information on sustainable farming and ranching, or for training opportunities?
- [FARM BUSINESS SESSIONS FOCUS ON BEGINNING MANAGER SKILLS AND FARM SUCCESSION](#) - The MI Ag Ideas to Grow With conference offers an array of educational sessions on farm development, management and succession.

PUBLISHED ON DECEMBER 21, 2022

- [TOOLKIT FOR STARTING A GREAT FARM MENTORSHIP PROGRAM](#) - Farm educators can find templates to connect beginning farmers with mentors.

PUBLISHED ON DECEMBER 16, 2022

- [ECONOMIC ADVANTAGES TO WRAPPING DRY HAY](#) - Will the labor and expense needed to get two or three layers of plastic around a large bale of dry hay pay off?

PUBLISHED ON DECEMBER 15, 2022

- [INTERPRETING MANURE ANALYSIS RESULTS](#) - Applying the appropriate amount of manure requires correct interpretation of the manure test results.

PUBLISHED ON DECEMBER 12, 2022

- [WHAT TO EXPECT WHEN CONNECTING WITH THE 988 SUICIDE & CRISIS LIFELINE](#) - Know what to expect if you or someone you know connects with the 988 Suicide & Crisis Lifeline.

PUBLISHED ON DECEMBER 8, 2022

- [MSU EXTENSION FIELD CROPS WEBINAR SERIES STARTS FEBRUARY 2023](#) - The Field Crops Webinar Series will again be offered beginning in February to help growers and agribusiness professionals prepare for the 2023 growing season.
- [BIG WINS FOR WHEAT: GREAT LAKES YEN WINNERS ANNOUNCED](#) - Michigan wheat grower wins high yield category and highest percent of yield potential.
- [2022 MICHIGAN CORN HYBRIDS COMPARED](#) - Michigan State University conducts the Michigan Corn Performance Trials each year to determine yield and quality performance for corn hybrids throughout the state of Michigan.
- [VOLE MANAGEMENT ON-FARM STUDY REVEALS SURPRISING LEVELS OF SOYBEAN DAMAGE](#) - An on-farm study conducted in southwest Michigan in 2022 and funded by the Michigan Soybean Committee provided insights into vole feeding in soybean fields.

PUBLISHED ON DECEMBER 6, 2022

- [GRAIN MARKETING STRATEGIES TO CONSIDER FOR 2023](#) - Identifying tools that match your market expectations.
- [BEST PRACTICES FOR BUYING FARM INPUTS](#) - Lower your risk while maximizing your cash.
- [FARMLAND RENT CONSIDERATIONS](#) - Farmland Rent Considerations focuses on understanding what factors should be considered on land rent negotiations and the tools to help in that decision.

PUBLISHED ON DECEMBER 5, 2022

- [BURNING QUESTIONS ABOUT PRAIRIE STRIPS ANSWERED ON IN THE WEEDS PODCAST](#) - Learn about why and how you would install a prairie strip on your land by listening to the “In the Weeds” podcast.

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