

Southwest Michigan Field Crops Updates December 1, 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.

MSU Extension Public Listening Session December 18 in Kalamazoo

MSU Extension is holding a statewide series of public listening sessions as part of an ongoing strategic direction process. The one in our region will be in Kalamazoo on December 18 from 4:00-6:30pm at the Delta Hotels Kalamazoo Conference Center (2747 South 11th St., Kalamazoo, MI 49009). Through these sessions, the organization hopes to gather input from a diverse group of people to determine where MSU Extension is, what is working well and opportunities for improvement. This information will be then used to help shape MSU Extension's priorities and service for years to come, ultimately helping the organization better serve all its stakeholders and partners.

"Whether you've used MSU Extension services for years or not at all, everyone has a valuable perspective," says Quentin Tyler, director of MSU Extension. "You can play a critical part in helping shape the services and offerings in your community." Everyone is welcome and encouraged to attend – youth, parents, partners, all Michigan State University Extension-affiliated faculty and staff, and curious community members.

Each listening session will begin with a welcome from MSU Extension leadership and staff. Then, participants will be divided into two groups – external participants and partners will gather in one room, and MSU Extension faculty and staff will gather in another. In each of these rooms, participants will be invited to share their perspectives and insights through a series of facilitated activities. Questions will center on topics such as:

- Emerging social, economic, and other trends that participants expect will impact them in the future.
- What participants know MSU Extension for.
- What participants believe MSU Extension does well, and what they think can be improved.
- What participants envision a thriving MSU Extension would look like in the future.

Each session's activities will be facilitated by a team of MSU Extension personnel and guided by an external consultant. Light refreshments will be available at all sessions. Translation and interpretation services, as well as other accommodations, may be available upon request. Once the sessions are complete, a team of MSU Extension staff will analyze and incorporate input into a vision that will guide the future direction of the organization.

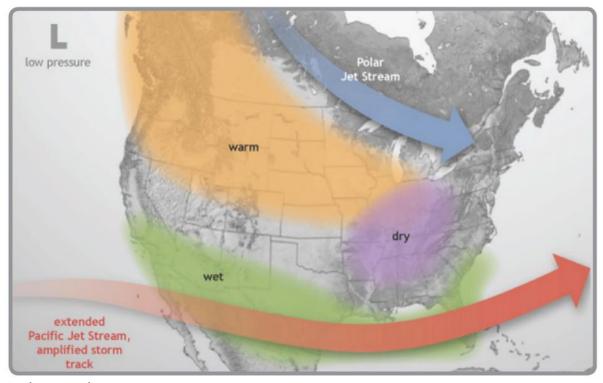
<u>Please register</u> to participate in a listening session and indicate any accommodation needs. Pre-registration is highly encouraged. Walk-in registrations may be limited due to facility capacity. If you have any questions about registration, please contact Kathy Walicki at <u>walicki@msu.edu</u> or 231-873-2129 or Marie Garcia at <u>garci434@msu.edu</u> or 517-353-9464.

How Might El Niño Affect Weather This Winter?

The following is an excerpt from a bulletin posted by the National Oceanic and Atmospheric Administration

An El Niño develops when sea surface temperatures are warmer than average in the eastern equatorial Pacific Ocean for an extended time. El Niño conditions can affect North American weather patterns, especially in the winter and early spring. According to the NOAA Climate Prediction Center, there is an 80% chance that El Niño conditions will last through Northern Hemisphere spring. There is a 75 to 85% chance that the current El Niño will become a "strong" event.

While each El Niño is different, some general patterns are predictable. For instance, the polar jet stream is typically farther north than usual, while the Pacific jet stream tends to remain across the southern U.S. This pattern brings increased chances of above-normal temperatures to the Great Lakes region. Cold weather will still occur, but cold air outbreaks tend to be less frequent. El Niño also increases the chances of dry conditions, especially in the southern portion of the Great Lakes basin.

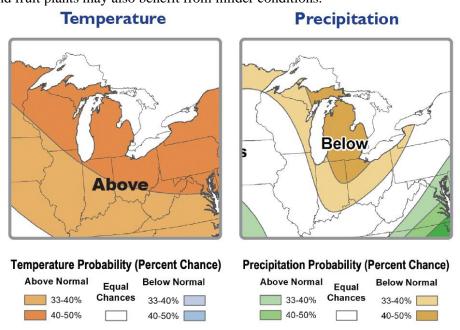


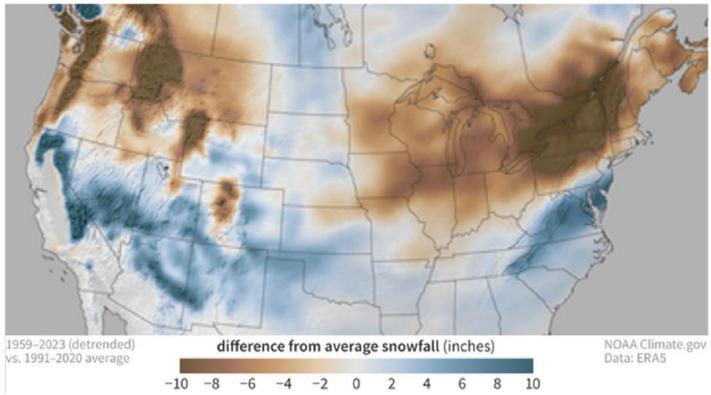
El Niño is not known to impact:

- first freeze in the fall (early or late)
- last freeze in the spring (early or late)
- potential for ice storms or blizzards

- track/intensity of any one weather system
- potential for spring drought or flooding

Much of the Great Lakes region is entering winter with below-normal soil moisture, so drier conditions due to El Niño may slow drought recovery. Additionally, reduced snowpack can expose crops to harsh winds and cold air outbreaks. Milder winter temperatures should benefit livestock producers by reducing operating costs and animal stress. Wheat, forage, cover crops, and fruit plants may also benefit from milder conditions.





Areas that tend to receive more (blue) or less (brown) average snowfall from January to March during moderate-to-strong El Nino events from 1959-2023.

HPAI Detected in a Cass County Flock

Following an investigation by MDARD, the MSU Veterinary Diagnostic Laboratory has detected the presence of highly pathogenic avian influenza (HPAI) in a backyard flock from Cass County. This is the first case of HPAI in Cass County since the disease was first detected in the state in 2022, and the first detection of the disease in Michigan since March 2023. As the fall migration of wild birds continues, it is crucial for every bird owner to take steps to protect their flock from this virus.

"While there have been fewer detections of HPAI in the United States and Michigan this year, the threat posed by this virus was never fully eliminated. Even though this detection is unfortunate, it is not unexpected, as cases of HPAI continue to be discovered both nationally and in Michigan's wildlife, meaning the virus is still very present and circulating in the environment," said State Veterinarian Dr. Nora Wineland. "The best strategy any bird owner has against this disease is prevention. It is essential to continue taking precautionary measures to protect flocks from wild birds and the germs they could be carrying."

HPAI is a highly contagious virus that can be spread in various ways from flock to flock, including by wild birds, through contact with infected poultry, by equipment, and on the clothing and shoes of caretakers. To protect other flocks in Michigan, the premises is currently under quarantine, and the birds will be depopulated to prevent disease spread. The flock contained approximately 60 birds of various species.

According to the <u>U.S. Centers for Disease Control and Prevention</u>, the public health risk associated with avian influenza remains low. Also, no birds or bird products infected with HPAI will enter the commercial food chain. As a reminder, people should properly handle and cook all poultry and eggs.

Whether it's a few backyard birds or a large commercial flock, following <u>a few key steps</u> is fundamental to protect the health and vitality of Michigan's domestic birds:

- Prevent contact between domestic and wild birds by bringing them indoors or ensuring their outdoor area is fully enclosed.
- Wash your hands before and after handling birds as well as when moving between different coops.

- Disinfect boots and other gear when moving between coops.
- Do not share equipment or other supplies between coops or other farms.
- <u>Clean and disinfect</u> equipment and other supplies between uses. If it cannot be disinfected, discard it.
- Use well or municipal water as drinking water for birds.
- Keep poultry feed secure to ensure there is no contact between the feed/feed ingredients and wild birds or rodents. MDARD is continuing to work diligently with local, state, and federal partners to quickly respond to reports of sick or dead domestic birds to best mitigate the spread of HPAI and provide outreach.

Reporting Possible Cases

For Domestic Birds

Domestic bird owners and caretakers should watch for multiple sudden deaths in the flock, a drop in egg production, a significant decrease in water consumption, diarrhea, sneezing/coughing, or an increase in sick birds. If avian influenza is **suspected in domestic birds**, contact MDARD **immediately** at 800-292-3939 (daytime) or 517-373-0440 (after-hours). *For Wild Birds*

If anyone notices what appears to be unusual or unexplained deaths among wild bird populations, please report these cases to the Michigan Department of Natural Resources (DNR) by:

- Using the DNR's <u>Eyes in the Field app</u>. Choose the "Diseased Wildlife" option among the selections for "Observation Forms."
- Calling the DNR Wildlife Disease Laboratory at 517-336-5030.

Stay Up to Date

Subscribe to receive email notifications by visiting MDARD's website and clicking on the "Avian Influenza" link. After entering a valid email address, subscribers will receive updates and alerts regarding the status of avian influenza in Michigan whenever there are new developments to report. Additional resources can also be found at Michigan.gov/BirdFlu.

USDA Plant Hardiness Zone Map Updated

The newest edition of the USDA Plant Hardiness Zone Map (PHZM) is GIS (Geographic Information System)-based and is specifically designed for the internet. It enables viewers to examine plant hardiness zones at a much finer scale than earlier maps. A personal ZIP Code zone finder is also included with this version of the map.

The edition of the USDA PHZM revised and published in 1990 was drawn from weather data from 1974–1986. The longer period (30 years) of data in the 2012 and this 2023 version of the USDA PHZM was selected by the group of horticultural, botanical, and climatological experts who led the review of the latest revision as the best balance between smoothing out the fluctuations of year-to-year weather variation and the concept that, during their lifetimes,

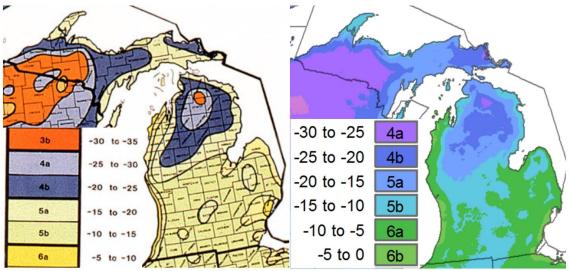


perennial plants mostly experience what is termed "weather" rather than "climate." The 1991-2020 period also aligns with the period currently in use by climatologists to describe baseline climate "normals" in the U.S.

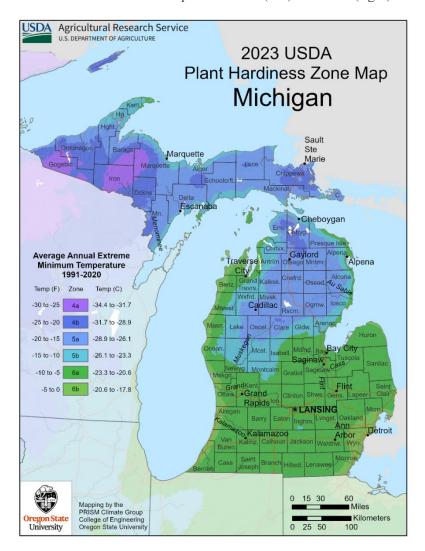
Because the 2023 and 2012 maps were created digitally with GIS technology, they have a higher level of resolution and can show smaller areas of zone delineations than earlier maps. For example, cities tend to hold more heat because they encompass large areas of concrete and blacktop, so a city or town might be assigned to a zone warmer than the surrounding countryside. Higher elevations tend to be colder than surrounding lower areas, so the top of a mountain might be an area of cooler zones. A location near a large body of unfrozen water, especially downwind from prevailing breeze from that water, might provide milder winter weather and be in a warmer zone.

Climate changes are usually based on trends in overall annual average temperatures recorded over 50-100 years. Because the USDA PHZM represents 30-year averages of what are essentially extreme weather events (the coldest temperature of the year), changes in zones are not reliable evidence of whether there has been global warming.

Compared to the 2012 and 1990 maps, zone boundaries in this 2023 edition have shifted in many areas. The new PHZM is generally about one quarter-zone warmer than reported in the 2012 PHZM throughout much of the United States, as a result of a more recent averaging period (1976-2005 vs. 1991-2020). However, some of the changes in the zones are the results of additional data sources and improved interpolation methods. These zone shifts can sometimes result in a cooler, rather than warmer, zone. The most substantial changes produced by additional data sources and improved interpolation methods are seen in upland areas of Alaska.



USDA Hardiness Zones maps from 1990 (left) and 2012 (right).



Preserving Fields, Protecting Yields: EQIP and the Power of Windbreaks

Windbreaks play a crucial role in mitigating wind erosion in crop lands, offering multiple benefits that contribute to sustainable agriculture. These linear barriers, typically comprised of trees or shrubs, act as shields against the erosive forces of wind, providing a range of advantages for both soil health and crop productivity. [They also keep snow from drifting onto the road which I particularly appreciate.]

One of the primary functions of windbreaks is to reduce wind speed. [So maybe they should be called wind brakes?] As winds encounter these barriers, their velocity decreases, preventing the detachment and erosion of soil particles. This reduction in wind speed helps maintain the integrity of the topsoil, crucial for sustaining nutrient-rich layers that are essential for plant growth. In addition to soil conservation, windbreaks contribute to water conservation. By preventing wind erosion, they help the soil retain moisture, contributing to the sustainability of agricultural practices. The impact of windbreaks extends beyond soil protection. Windbreaks contribute to biodiversity by providing habitats for various species of birds and insects. These natural allies can assist in pest control.

Implementing effective windbreak systems requires careful planning, considering factors such as wind direction, spacing of trees or shrubs, and the types of species used. Native vegetation is often preferred for its adaptability to local conditions and its ability to thrive with minimal maintenance.

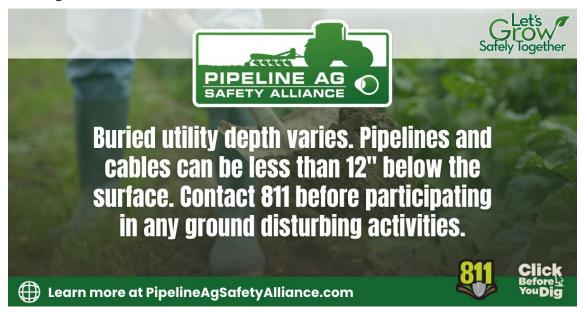
The importance of windbreaks in combating wind erosion in crop lands cannot be overstated. Beyond preserving soil fertility, these protective barriers offer a range of benefits, including water conservation and support for biodiversity. Integrating windbreaks into farming practices emerges as a sustainable and effective solution for securing the future of food production.

Through the Environmental Quality Incentives Program (EQIP), a vital initiative by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS), farmers gain access to financial and technical assistance that can make the implementation of windbreaks a reality. The program provides cost-sharing payments to help cover the expenses associated with planning, designing, and installing windbreak systems on agricultural lands.

Apply at your local USDA Service Center, which you can find at <u>farmers.gov/service-locator</u>. Applications for EQIP financial assistance are accepted throughout the year. Specific state deadlines are set for ranking and funding.

Utility Depth Varies

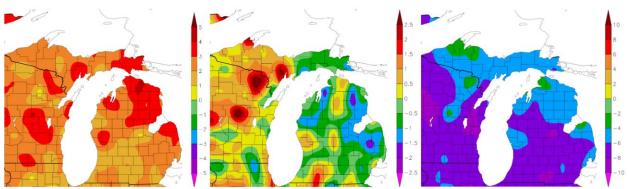
Don't assume the depth of any utility. Some pipes and cables can be less than 12" below the surface due to erosion, grading, or soil movement [or an installation crew that was, er, hasty]. Always contact 811 before any ground disturbing work begins.



Weather and Crop Update

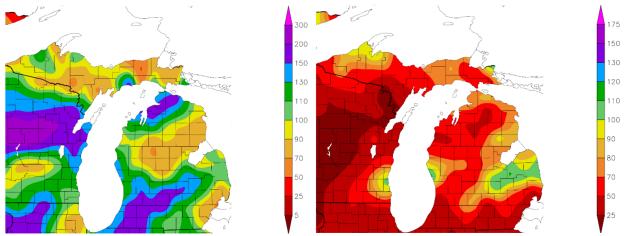
Weather

Temperatures over the past 60 days were 1-3 degrees warmer than normal in southwest Michigan although the past week saw temperatures that were 4-6 degrees below normal. The 6-10 and 8-14 day outlooks predict strong chances of above-normal temperatures.

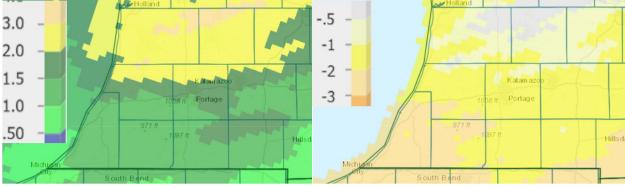


Temperature departure from normal for October (left), November (center) and the last 7 days (right) as of November 30.

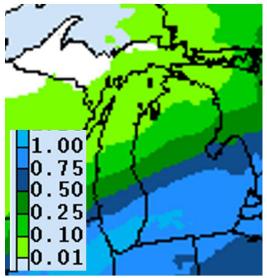
Precipitation this fall shifted from above-normal in October to below-normal in November. With the growing season we had, many fields failed to mature as quickly as expected which meant maturity was delayed by 1-2 weeks in some cases. Combined with the near-constant wet weather in October, harvest was delayed in the southwest part of the state compared with the 5-year average. However, the first half of November dried out sufficiently, and corn and soybean harvest—and wheat planting—gained much-needed ground. The precipitation forecast for the coming week predicts 0.75-1.25 inches for southwest Michigan, most of that predicted from today through the weekend. The 6-10 and 8-14 day outlooks call for near-normal to slightly above-normal chances of precipitation, respectively.



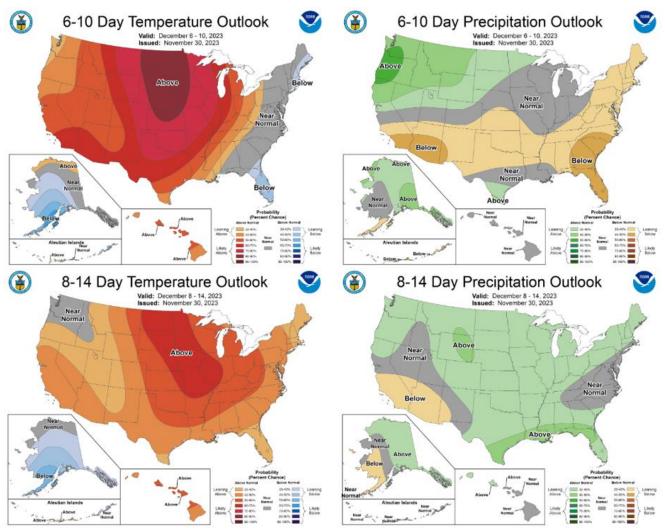
Percent of normal precipitation in October (left) and November (right).



Precipitation totals (left) and departure from normal (right) for the past 30 days as of November 30.



Precipitation forecast for December 1-8.



The 6-10 day (December 6-10, top) and 8-14 day (December 8-14, bottom) outlooks for temperature (left) and precipitation (right).

Crops

Corn and soybean harvest caught up quite a bit over the past few weeks. Corn is now only 4% behind the 5-year average across the state at 79% according to the latest USDA Crop Update—nothing compared with the 94% we had at this time

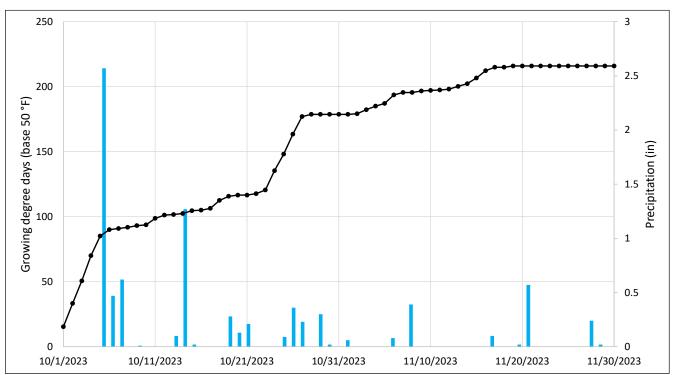
last year. Reports of very good, and in some cases record-breaking, yields came in this fall, and everyone I have talked to has been very pleased with the corn crop given the poor start to the season. Soybean harvest is nearly complete across the state at 96% which is 4% ahead of average, and I have not seen any standing beans in my driving around the area this week. All farmers I talked with said soybean yields were hit and miss between and within fields with averages falling somewhere short of where they have been.

Most farmers I talked with this fall mentioned issues with getting corn to dry down in the field. I discussed this in previous newsletters this fall, but I recently ran across the following information from Peter Thomison of Ohio State University Extension that might add some insights.

"Once corn achieves physiological maturity (when kernels have obtained maximum dry weight and black layer has formed), it will normally dry approximately 3/4 to 1% per day during favorable drying weather (sunny and breezy) during the early warmer part of the harvest season from mid-September through late September. By early to mid-October, drydown rates will usually drop to 1/2 to 3/4% per day. By late October to early November, field dry-down rates will usually drop to 1/4 to 1/2% per day and by mid-November, probably 0 to 1/4% per day. By late November, drying rates will be negligible.

"Estimating dry-down rates can also be considered in terms of Growing Degree Days (GDDs). Generally, it takes about 30 GDDs to lower grain moisture each point from 30% down to 25%. Drying from 25 to 20 percent requires about 45 GDDs per point of moisture. In October, we accumulate about 5 to 10 GDDs per day. However, note that the above estimates are based on generalizations, and it is likely that some hybrids may vary from this pattern of drydown. Some seed companies indicate considerably lower GDDs for grain moisture loss, i.e., 15 to 20 GDDs to lower grain moisture each point from 30% down to 25% and 20 to 30 GDDs per point from 25% to 20%."

Corn grain is generally around 30-35% moisture at black layer. Using the estimate from OSU for required GDD_{50} 's for drydown, it would take 150 GDD_{50} to go from 30% to 25%. The graph below shows accumulated GDD_{50} since the beginning of October this year. There were only 11 days with greater than 5 GDD_{50} , and there 23 days with less than 1 GDD_{50} and 11 days with 0 GDD_{50} accumulation.



Accumulated growing degree days (base 50 degrees) since October 1 and daily precipitation as measured at the Kalamazoo Enviroweather station.

Winter wheat is 93% emerged across the state which is equal to the average, and 83% of the crop is being rated at fair or good at this point.

Calendar

(Note: Titles are clickable links to online content when highlighted and underlined.)

- Dec 5-7 Great Lakes Fruit & Veg Expo. Grand Rapids, MI.
- Dec 11 Stored Grain and Soil Fumigation Training. 9am 3:30pm. MSU Livestock Pavilion, 4301 Farm Lane, East Lansing. Training will cover the basics of stored grain fumigation in the morning and soil fumigation in the afternoon. 4 fumigation RUP credits available. Cost is \$60, includes lunch. Register by Dec. 4.
- **Michiana Irrigation Association Annual Meeting.** 8:30am 3:30pm. Beacon Health and Fitness Center, 200 E Jackson Blvd, Elkhart, IN. Cost is \$45, includes MIA dues and lunch. Contact Deanna Mumby at 269-998-1177 or Lyndon Kelley at 269-467-5511.
- **Pall-Seeded Grains Acreage Reporting Deadline.** Those who have not yet completed their <u>crop acreage</u> reports after fall planting should make an appointment with their county Farm Service Agency (FSA) office.
- **Dec 18** MSU Extension Public Listening Session. 4:00 6:30pm. Delta Hotels Kalamazoo Conference Center, 2747 South 11th St., Kalamazoo, MI. Register online.
- **Dec 19** Integrated Crop and Pest Management Update for Agribusiness. 9am 4pm. MSU Livestock Pavilion and online via Zoom. Cost is \$65 for in-person when pre-registering, \$80 when registering onsite, \$35 for virtual option, both including the 2024 MSU Weed Guide. Register online by Dec. 10 for in-person or Dec. 14 for virtual.
- Jan 4, 2024 MSU Extension Virtual Crop and Pest Management Update. 9am 3pm. Zoom. Cost is \$40, includes 2024 MSU Field Crops Weed Guide. Register online by Jan. 2.
- Jan 4-5 Ohio Organic Grains Conference. Maumee Bay Lodge and Conference Center, 1750 State Park Rd. #2, Oregon, OH. Registration by Dec 1-\$100, by Dec 22-\$130 or after Dec 22 / onsite registration \$175, includes 2 days of programing, meals, materials and access to all exhibitors-sponsors.
- Jan 5 Purdue's Top Farmer Conference. 8am 4pm. Beck Agricultural Center, 4550 US-52, West Lafayette OR online. Keynote Dr. Jim Bullard, former president and CEO of the Federal Reserve Bank of St. Louis, will discuss insights into Federal Reserve policy along with an examination of the key factors he expects to influence the U.S. economy in the years ahead. Cost is \$150 regardless of format, register online.
- Jan 9-10 MABA Winter Conference. Lansing, MI.
- Jan 11 <u>Farm Policy and Risk Management Series Late-Breaking News: Farm Bill Session</u>. 6:30 7:30pm. Zoom. Cost is free, register online.
- Jan 16 <u>Michigan Soybean On-farm Research Program Update</u>. 9am 1pm. GreenMark Equipment, Three Rivers, MI. Lunch provided by the Michigan Soybean Committee. 1 RUP available. Cost is free, register online to reserve your seat.
- Jan 16 <u>Farm Policy and Risk Management Series Field Crops Session</u>. 6:30 7:30pm. Zoom. Cost is free, register online.
- Jan 23 <u>Farm Policy and Risk Management Series Farm Bill Session #1</u>. 6:30 7:30pm. Zoom. Cost is free, register online.
- Jan 24-25 Great Lakes Crop Summit. Mt Pleasant, MI. Registration before Jan 8 \$175 after Jan 8th \$200.

- Jan 29 MSU Extension SW Crop and Pest Management Update. 8:30am 3:00 pm. Dowagiac Conservation Club, 54551 M-51 North, Dowagiac, MI. Cost is \$40, includes light breakfast, lunch, 2024 MSU Field Crops Weed Guide. Register online by Jan. 21.
- **MSU Extension SE Crop and Pest Management Update.** 8:30am 3:00 pm. Old Mill Museum, 242 Toledo St., Dundee. Cost is \$40, includes light breakfast, lunch, 2024 MSU Field Crops Weed Guide. Register online by Jan. 26.
- Feb 13 Farm Policy and Risk Management Series Farm Bill Session #2. 6:30 7:30pm. Zoom. Cost is free, register online.
- Feb 19 Branch County Farmers Day Field Crops Track. 8am 12pm. Branch Area Career Center, Coldwater, MI. Sessions to include irrigation practices, marketing vole management, conservation practices for less risk and more profit, and weed escapes in soybean. Cost is free, registration available soon. 3 RUP, 3 CCA
- In-Person Core Pesticide Review and Core Testing. 8:00am. Branch Area Career Center, Coldwater, MI. Cost is \$15 for morning training payable to MSU, cost for testing dependent on license type. Morning training session is required before afternoon testing, only core and standards exams (no commercial categories) offered. Other locations and dates available. Register online.
- Feb 19-3/1 MI Ag Ideas to Grow With Virtual Conference. Field Crops track on Feb 22. Cost is free, registration open soon.
- Feb 26 <u>Michiana Irrigated Corn and Soybean Conference</u>. Blue Gate Restaurant, 105 E Middlebury St, Shipshewana, IN. Cost \$20 for early registration. Registration and more details available soon.
- Feb 27 Soil Fertility & Nutrient Management Short Course. Allegan County MSU Extension office, 3255 122nd Ave., Ste. 200 Human Services Building, Allegan. Check back soon for more information.
- Feb 27-29 <u>2024 Drainage Workshop</u>. East Lansing. Sponsored by MSU Extension in partnership with Michigan Land Improvement Contractors of America. Learn from university specialists and drainage industry professionals. Cost is \$210 by Feb. 1 or \$300 by Feb. 23. Register online, no onsite registration available.
- Apr 10 In-Person Core Pesticide Review and Core Testing. 8:00am. GreenMark Equipment, Three Rivers, MI. Cost is \$15 for morning training payable to MSU, cost for testing dependent on license type. Morning training session is required before afternoon testing, only core and standards exams (no commercial categories) offered. Other locations and dates available. Register online.

MSU Extension Digest Briefs

2024 MICHIGAN SOYBEAN ON-FARM RESEARCH UPDATES OPEN FOR REGISTRATION PUBLISHED ON NOVEMBER 30, 2023

Results from 52 on-farm research trials and practical information for managing deer damage will be presented at six educational programs conducted around the state.

START GATHERING AGRONOMY INSIGHTS FOR 2024 AT THE INTEGRATED CROP AND PEST MANAGEMENT UPDATE

PUBLISHED ON NOVEMBER 28, 2023

Join MSU Extension for the Integrated Crop and Pest Management Update for Agribusiness on Dec. 19, 2023.

MSU-LED RESEARCH TEAM RECEIVES \$946K GRANT TO STUDY ALFALFA AUTOTOXICITY PUBLISHED ON NOVEMBER 28, 2023

The project is funded by USDA NIFA's Alfalfa Seed and Forage Systems program.

2024 DRAINAGE WORKSHOP: CONTEMPORARY DESIGN CONCEPTS TO INCREASE PROFIT

PUBLISHED ON NOVEMBER 27, 2023

Register by Feb. 1 for a 30% discount for early registration at the 2024 Drainage Workshop.

FALL WHEAT EMERGENCE AND THE VERNALIZATION PROCESS

PUBLISHED ON NOVEMBER 22, 2023

If late-planted wheat doesn't emerge, can it still survive, vernalize and produce good yields?

FARM POLICY AND RISK MANAGEMENT WEBINAR WILL FOCUS ON VEGETABLES

NOVEMBER 21, 2023 | STEVE WHITTINGTON

MSU Extension will host the next farm policy and risk management webinar focused on vegetables with industry professionals on Tuesday, December 12.

MASSACHUSETTS FARMER HEADLINING AGRIVOLTAIC TRACK AT GLEXPO

PUBLISHED ON NOVEMBER 20, 2023

Joe Czajkowski grows 400 acres of row crops, hay, and vegetables, including 2.5 acres of broccoli in rows between solar arrays on his farm.

FINDING FINANCIAL SUCCESS IN UNCERTAIN TIMES

NOVEMBER 20, 2023 | JON LAPORTE

As recent years have shown, farming involves identifying and adjusting to many forms of uncertainty. Some of the most common areas of uncertainty often come from weather, market prices, and input costs. The Desire 2 Learn course "Finding Financial Success in Uncertain Times" is designed to help identify uncertainties and how to plan for and react to them for financial success.

BEGINNING FARMERS HAVE PLENTY TO GLEAN FROM GREAT LAKES EXPO

NOVEMBER 20, 2023 | MARIEL BORGMAN

The Great Lakes Fruit, Vegetable & Farm Market EXPO and Michigan Greenhouse Growers EXPO (GLEXPO) is an annual event that draws thousands of farmers from Michigan and beyond to Grand Rapids, Michigan each December.

MICHIGAN STATE UNIVERSITY EXTENSION HIRES STATEWIDE COMPOST SYSTEMS EDUCATOR

PUBLISHED ON NOVEMBER 17, 2023

New compost systems educator Eliza Hensel brings a community approach to composting.

MSU EXTENSION HIRES AGRICULTURAL AND OCCUPATIONAL HEALTH EDUCATOR

PUBLISHED ON NOVEMBER 16, 2023

Michigan State University Extension is pleased to welcome Samantha Wolfe as a statewide educator.

SOYBEAN PHYTOPHTHORA STEM AND ROOT ROT RESISTANCE GENES HAVE BECOME LESS EFFECTIVE PUBLISHED ON NOVEMBER 15, 2023

Managing soybean Phytophthora stem and root rot starts with variety resistance. A recent study led by MSU determined that previously relied upon resistance genes are failing and there is a need for soybean breeders to incorporate new sources of resistance.

MSU EXTENSION TO HOST RESTRICTED USE PESTICIDE REVIEW AND TESTING DURING GLEXPO PUBLISHED ON NOVEMBER 14, 2023

MSU Extension in partnership with MDARD will host a 2024 Restricted Use Pesticide Review and Testing at GLEXPO on Dec. 7, 2023.

UNDERSTANDING CORTISOL, THE STRESS HORMONE

PUBLISHED ON NOVEMBER 10, 2023

In today's fast-paced world, understanding and managing cortisol is the key to reducing stress, boosting your overall health and enhancing your quality of life.

CONSIDERATIONS FOR PLANNING AND SELECTING PUMPING PLANTS FOR SPRINKLER IRRIGATION PUBLISHED ON NOVEMBER 6, 2023

Several types of pumps and power units are available for use with sprinkler irrigation systems. Careful planning and selection of the pumping plant can reduce irrigation costs by reducing system energy inputs.

MSU EXTENSION ANNOUNCES STATEWIDE PUBLIC LISTENING SESSIONS IN NOVEMBER AND DECEMBER

PUBLISHED ON NOVEMBER 6, 2023

Staff, partners and members of the public alike are encouraged to attend and voice their ideas to help shape the future of Extension.

FARM RESILIENCE STARTS WITH A SOLID FINANCIAL FOUNDATION

PUBLISHED ON NOVEMBER 3, 2023

How the MSU Extension Farm Business Management Team and their resources can help farms build resiliency.

HANDLE YOUR RAW DOUGH WITH CARE

PUBLISHED ON NOVEMBER 3, 2023

Whether you eat it or craft with it, re-think your habits of handling raw dough.

FARM RESILIENCE STARTS WITH A SOLID FINANCIAL FOUNDATION

NOVEMBER 3, 2023 | JONATHAN LAPORTE

After struggling through the 2023 season, the agriculture community is looking to wrap up remaining harvest activities and reset for 2024. Finishing out the year means reflecting on input needs and maximizing future sales. Input prices are more favorable compared to last year's historical highs.

RECOMMENDATIONS FOR A LATE SOYBEAN HARVEST

PUBLISHED ON NOVEMBER 2, 2023

Overcome the challenges associated with a late soybean harvest.

Eric Anderson Michigan State University Extension Field Crops Educator - St. Joseph County 612 E. Main St., Centreville, MI 49032 (269) 359-0565 (Home Office) (269) 467-5511 (Extension Office) eander32@msu.edu

Michigan State University is an affirmative action/equal opportunity employer. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Quentin Tyler, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. The 4-H Name and Emblem have special protections from Congress, protected by code 18 USC 707.