

Southwest Michigan Field Crops Updates March 2022

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.

MI Ag Ideas to Grow With Conference

The MI Ag Ideas to Grow With week-long conference has given birth to a month-long conference! Back by popular demand from 2021, this online series of meetings that started in response to COVID restrictions is now being offered in conjunction with MSU's ANR Month, February 28-March 29.



We are excited to offer nearly 80 sessions throughout the month focusing on the agricultural industry, but in an expanded format from last year's inaugural event. This month-long educational experience features a variety of tracks, with something for everyone, focused on:

- Animal Agriculture
- Community Food Systems
- Farm Business Management
- Farmer Stress and Well Being
- Field Crop Production
- Fruit Production
- Horticulture and Home Gardening
- Irrigation and Water
- Manure Management
- Precision Ag Technology
- Solar and Energy
- Woodlot Management
- Youth Track (designed for 14-19 year olds)

All sessions will be held using the Zoom platform. While there is no cost to participate, attendees must register to receive the necessary Zoom links. Attendees can attend as many sessions as they would like and are also able to jump around between tracks. RUP and CCA credits will be offered for several of the sessions. More information regarding the tracks, sessions being offered and a link to register can be found at:

<https://www.canr.msu.edu/miagideas>.

The full agenda can be viewed at the [MI Ag Ideas to Grow With website](#). Below are the tracks that are likely to be of interest to the field crop industry.

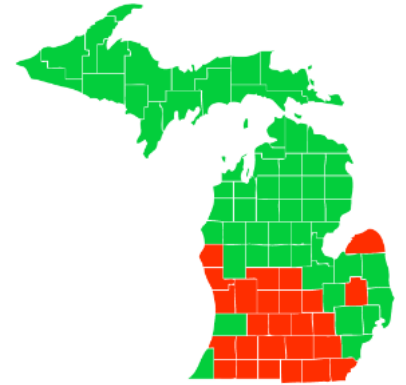
- March 7 – Ag Technology, 9 am to 3 pm, 5 RUP credits, CCA credits under review
- March 8 – Crop Production, 9 am to 3 pm, 4 RUP credits, CCA credits under view
- March 9 – Farm Woodlot Management, 9 am to 3 pm, 3 RUP credits
- March 22 – Stored Grain and Fumigation, 9 am to 12:40 pm, 3 RUP and 3.5 CCA credits

Report: Farmers' Needs Related to Soybean Insect Pests

A report titled "[Farmers' Needs Related to Soybean Insect Pests](#)" was prepared for the North Central Soybean Research Program as part of a project that the entomologist had for the last few years. This report has responses from a focus group of farmers and consultants interviewed, including several people from Michigan, about insect pest management. Chris DiFonzo, MSU's field crops entomologist, highlighted their responses in yellow—the entire document is 42 pages, but you could read the 2-page executive summary or just the highlighted comments if you're pressed for time.

Michigan Frost Laws in Effect

County Road Commissions in most counties in south-central and southwest Michigan have placed weight restrictions—aka frost laws—on many county roads. Most began March 1 (Branch, Calhoun, Cass, Kalamazoo, St. Joseph) while Van Buren began February 16th and Berrien begins March 4th. Visit the [County Road Association of Michigan website](#) to view maps, download phone apps, find links to the Oxcart permit system, and learn more about these seasonal restrictions.



2022 Michigan Soybean On-farm Research Trial Topics

The Michigan Soybean On-farm Research Trials are conducted on farmers' fields to learn about topics that are important to growers. Topics are selected each year from feedback received from attendees of MSC's regional winter meetings. The trials being included this year are listed in the table below. Farmer cooperators will receive: products used in the trial (depending on the topic); assistance with plot set-up, treatment application, and harvest; free soil test results and other crop metrics (depending on the topic); and access to individual and combined trial results. Contact me (Eric Anderson) or Mike Staton (staton@msu.edu) if you would like to know more about any of these trials or if you would like to sign up to host one or more trials on your farm.

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1. 2x2 starter fertilizer
 2. White mold fungicide application timing
 3. Delaro complete foliar fungicide
 4. HeadsUp seed treatment
 5. Growthful Soil amendment
 6. Stimulate biological mixed with post emergence herbicide
 7. Planting date
 8. Prescription foliar fertilizer based on tissue analysis
 9. Saltro vs Ileva
 10. Broadcast potassium
 11. Planting equipment comparison
 12. Foliar fertilizer applied with foliar fungicide
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Updated MSU Soils Lab Fee Schedule

The [MSU Soil & Plant Nutrient Laboratory](#) released its [newly-updated fee schedule](#) last month. This price increase began February 7 and the website is being updated to reflect the changes. The field/crop soil boxes have increased from \$11.00 to \$12.00 per box. Shipping has also had a slight increase, but there are still the same discounts offered for larger volume box orders. Contact the lab (517-355-0218) if you have any questions.

Updated Corn Fungicide Efficacy Guide

Using data gathered over multiple years and locations, researchers from The Corn Disease Working Group have developed updated efficacy ratings for a number of commercially available fungicide products in one of CPN's premier publications: "[Fungicide Efficacy for Control of Corn Diseases](#)". Taking an unbiased, research-based approach to determining how well some fungicides control major corn diseases, this publication is a must-read for farmers considering their disease control options.

Crop Marketing Evaluation Tool

With the volatile markets, people may want to look at various commodity marketing tools. MSU's Dr. Jim Hilker used this [crop marketing evaluation tool](#) in his classes only in paper form which shows and calculates the results from risk management tools, and MSU Extension farm management educator Roger Betz has updated the tool and made it available as an Excel file. Most farmers use these tools through their elevators, but the risk implications and results are the same. Contact Roger Betz (betz@msu.edu or 517-230-0110) if you have any questions about using this tool.

Enhanced Coverage Option: Return and Risk Results

The following is an excerpt from University of Illinois's farmdoc Daily report on Revenue Protection (RP), Supplemental Coverage Option (SCO) and Enhanced Coverage Option (ECO). For the full article, visit [farmdoc Daily's website](#).

Given their high coverage levels, SCO and ECO may have an impact at higher revenue levels than RP.

When combined with RP-85%, SCO provides county coverage from 86% to 85% — a limited range — and has a \$2 per acre premium. When combined with a RP-55% policy providing country coverage from 86% to 55%, farmer-paid premium totals \$32 per acre. Expected revenue with SCO increases to \$1,196, from \$1,194 with RP-85% alone. SCO premiums are also Federally subsidized, resulting in an increase in expected revenue. Because of its limited range, SCO does not significantly reduce the probability of being below \$1,050. For RP-85% with SCO the probability is 31% compared to 32% with RP-85% alone. When paired with RP-85%, SCO has limited additional impacts on downside revenue risk.

ECO at the 90% has a \$14 per acre premium. Combined with RP—85% and SCO, total farmer-paid premium equals \$46 per acre. ECO provides county protection from 90% to 86%, a more extended range than SCO covers when paired with RP-85%. Expected revenue increases to \$1,212 because ECO is Federally subsidized. ECO increases the expected return by \$18 per acre. The chance of being below \$1,050 is reduced to 26%, a significant reduction from 32% with just RP-85%. Overall, ECO-90% does reduce downside risk and increases expected returns. However, premiums are \$14 per acre, a significant increase in premium cost.

ECO at 95% has a \$40 per acre premium. The range from 95% to 86% will often trigger a payment, causing the large premium. The combination of RP-85%, SCO, and ECO-95% has total farmer-paid premium of \$72 per acre. Expected revenue with ECO-95% increases to \$1,222, with the increase due to Federal subsidies. An ECO-95% policy increases the expected return by \$10 per acre. The chance of revenue below \$1,050 is reduced to 19%.

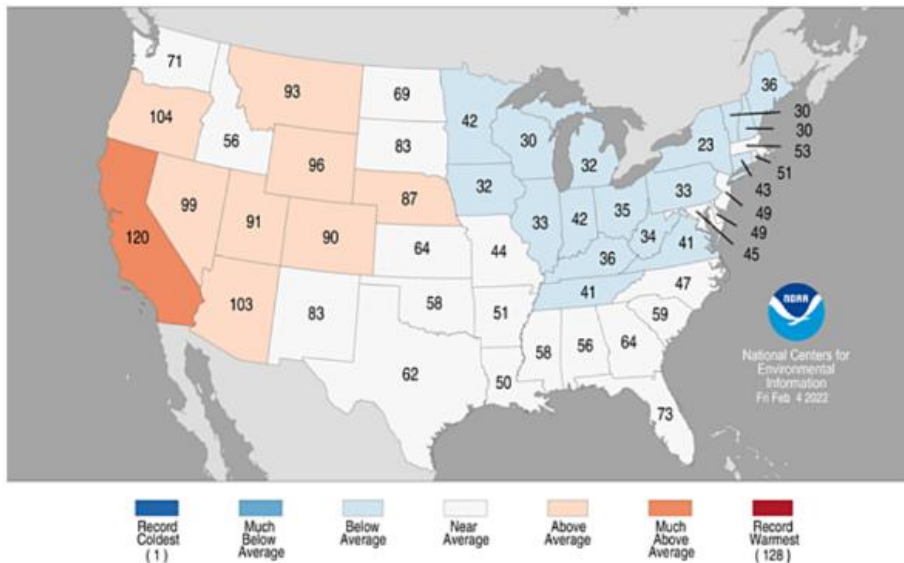
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ECO-95% used in conjunction with RP-95% and SCO will reduce risk and increase expected return. However, the premium costs are high, totaling \$72 per acre. The expected profit from corn production without crop insurance is \$114 per acre (\$1,174 expected revenue – \$1,050 total costs). In years when insurance payments are not triggered, the use of RP-85% with SCO and ECO-95% will reduce this profit by 63% to \$42 per acre. The premium costs will significantly reduce income in many situations in which crop insurance payments are limited.

Summary: ECO has several merits. The use of ECO will increase expected revenues and reduce downside risk. However, ECO has high premium costs. Those high premiums will reduce profits in years in which crop insurance payments are limited. The decision to use ECO is an individual one, weighing the costs of the policy with its potential benefits.

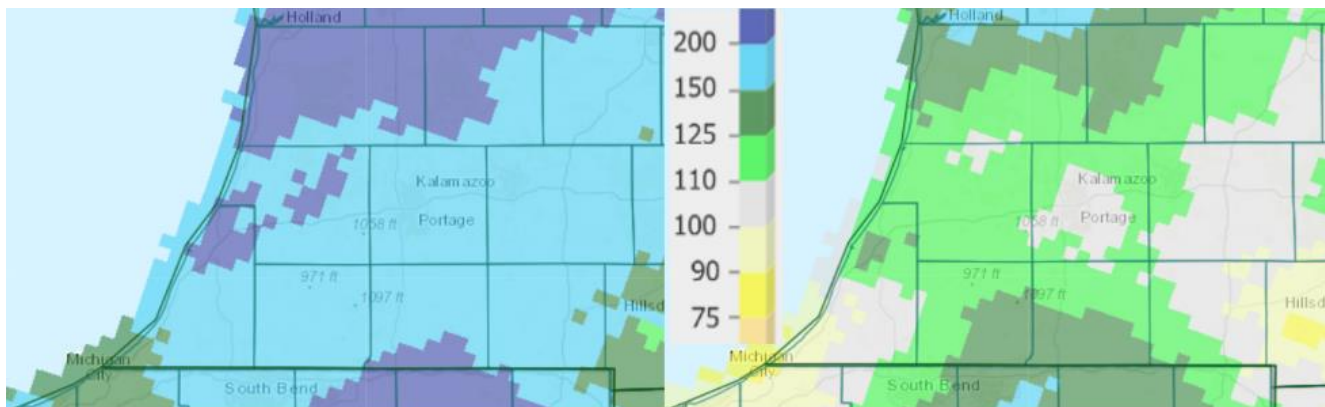
Weather and Crop Update

Temperatures in January were slightly below normal with 2022 ranking 32nd coldest on record for the state. February was on par to slightly below normal compared with the last five years—statewide rankings from NOAA for February won't come out until later in March.



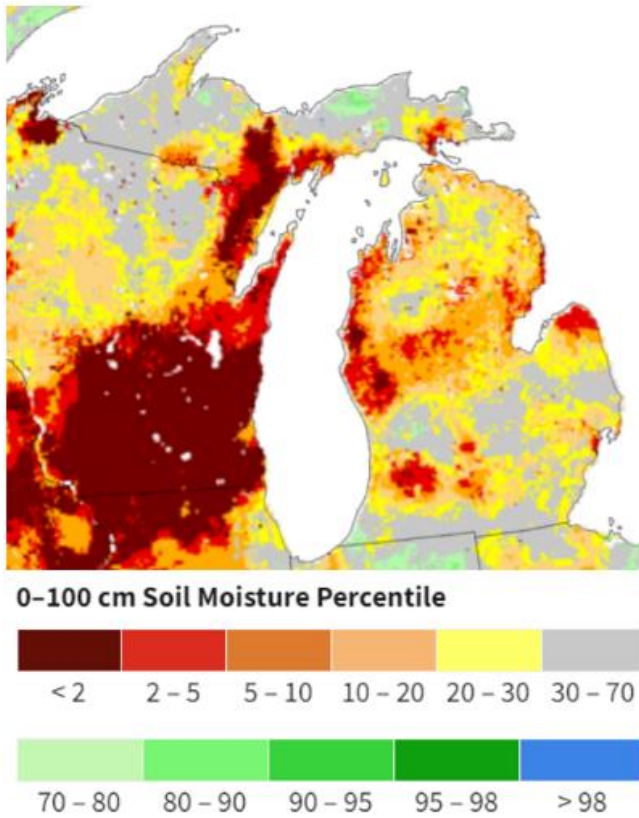
Statewide average temperature ranks in January (period 1895-2022).

Precipitation in February was above normal which helped to bring the whole-winter totals closer to normal. Soil moisture levels are more difficult to gauge during winter, but satellite models show levels in our region to be average to below-average...which might be a good thing given the wet fall and need to get into fields early to make repairs. The forecast calls for up to an additional 0.75 inch (water equivalent) this coming week.

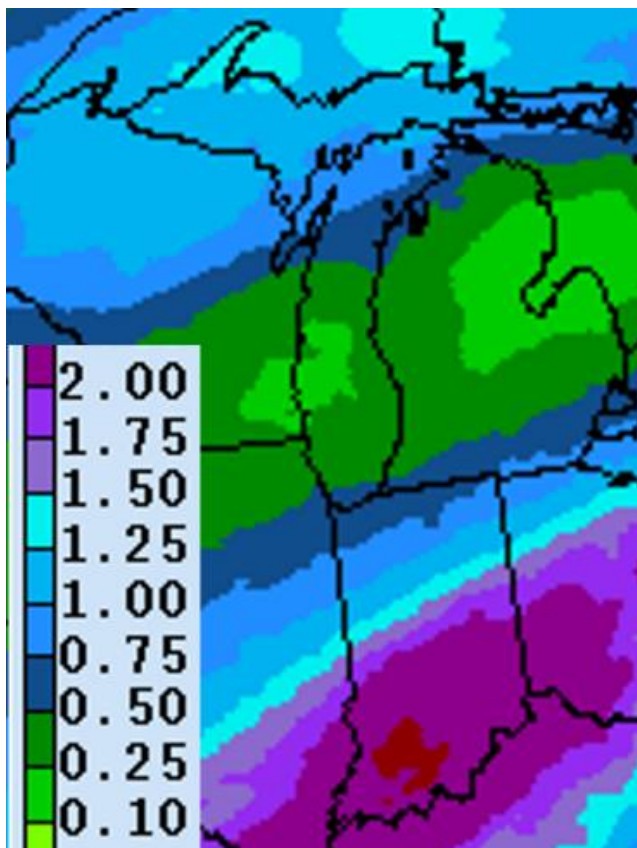


Precipitation percent of normal over the past 30 days (left) and 90 days (right) as of March 2.

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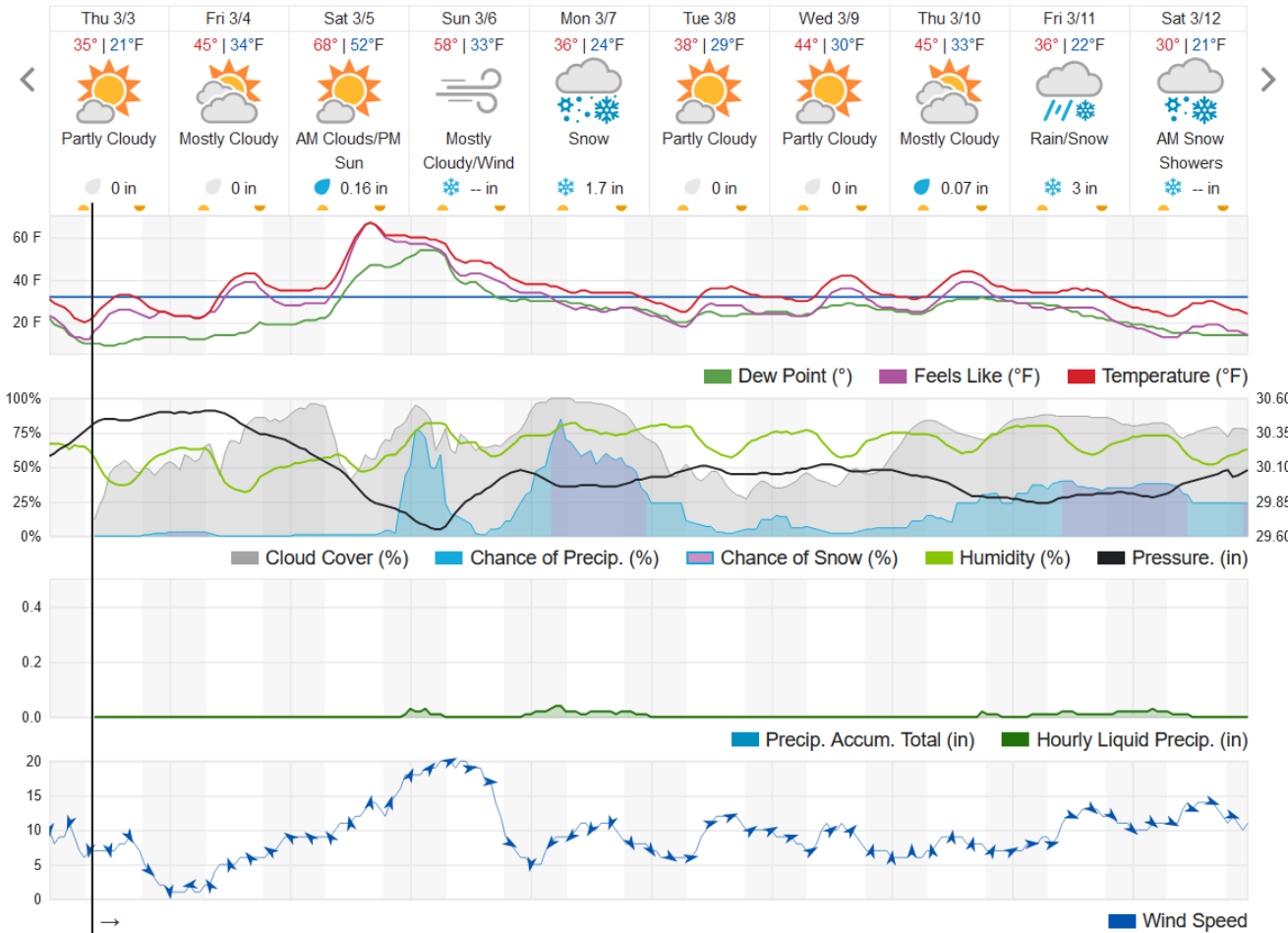


Current soil moisture level in the top 3 feet.

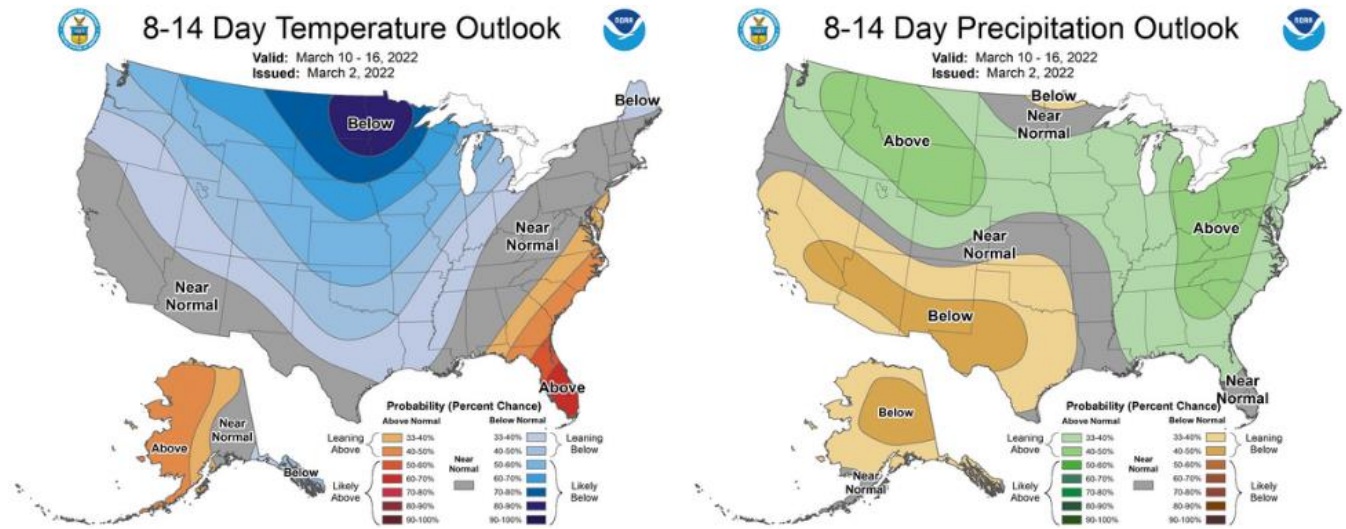


Precipitation forecast (in water equivalent) for Mar 3-10 with most of this predicted to fall Sunday through Tuesday.

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



The 8-14 day outlook (Mar 10-16) for temperature (left) and precipitation (right).

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Crops and Pests

The warm-up, snow thaw, additional precipitation and subsequent freezing temperatures earlier this month raised concern for overwintering wheat and forage crops. MSU Extension wheat specialist Dennis Pennington had this to share about potential danger for the wheat crop.



Water ponding and ice coverage can injure the crop. It interferes with normal gas exchange and you get a build-up of CO₂ and reduction or elimination of O₂ (extended periods).

It is difficult to know for sure how much damage there will be to the crop. And there is nothing that can be done now to help (unless you can make it drain away). Once we get into mid-late March when green-up occurs, that would be the time to go out in the field and scout. Dig up plants from the flooded or iced over areas, bring them inside for a few days and see if new leaves and roots begin to grow. This is the best way to tell. You can try to slice through the crown and examine it – it should be whitish color and turgid. If it is brown and mushy, likely the plant is dead or dying.

Here are some more resources:

<https://www.michiganfarmnews.com/will-winter-wheat-weather-the-weather>

https://www.canr.msu.edu/news/ice_sheeting_and_water_ponding_can_damage_wheat

https://www.canr.msu.edu/news/ice_and_water_may_lead_to_winter_wheat_crop_injury

On a positive note, MSU Extension field crop entomologist Chris DiFonzo and OSU field crop entomologist Kelley Tilmon talked about fall armyworm among other topics during the Field Crops Webinar series this week. They said that if you had severe FAW damage to your grass crops this fall, you should not expect subsequently high levels of pest pressure this year because it is a tropical pest that rides storm fronts and the larvae/eggs will not survive our winters.

Announcements & Jobs

- Bayer is looking for some people to take field notes (stand counts, pollination notes, etc.) this summer. The job would be outdoors for most of the summer collection data on our corn fields. The job would start around late May or early June and end around mid-August. Potentially interested people would need to be at least 18 years old or older and have a personal vehicle that they could drive from field to field. We do reimburse mileage for personal vehicle use. Starting pay will be between \$14-15/hour. Please call, text or email Taylor Houghton (taylor.houghton@bayer.com or 509-331-4077) if interested.
- [Regenerative Ag and Conservation Specialist in SW Michigan](#). Pheasants Forever is looking for a B.A.+ to work from a home office to advance sustainable agricultural practices and environmental outcomes focusing on soil health, water quality, and wildlife habitat on working lands throughout Southwest MI. Deadline to apply is March 21.

Calendar

Titles are clickable links to online content when highlighted and underlined

- Mar** [MI Ag Ideas to Grow With](#). Sessions related to field crops, animal ag, fruit and vegetable, farm management, home horticulture and other topics are planned. Register online for this free program. Once registered, you will receive the full agenda with links to all sessions.
- Mar 8-10** [2022 Drainage Workshop](#). 524 S Shaw Ln, Farrall Ag Eng Hall, Room 106, East Lansing. Workshop intended for producers, landowners, drainage contractors, consultants, NRCS soil conservationists, engineers, MAEAP or other agency technicians, technical service providers, and others interested in learning about drainage concepts and design of subsurface drainage systems for crop production and environmental protection. Cost is \$450.
- Mar 11** [CRP General Signup Closes](#). Agricultural producers and landowners can sign up for the [Conservation Reserve Program](#) (CRP) Jan. 31 to March 11, and the Grassland CRP signup will run from April 4 to May 13.
- Mar 15** [USDA's Risk Management Agency \(RMA\) Deadlines](#). ARC/PLC election and enrollment, and the Pandemic Cover Crop Program.
- Mar 31** [Virtual Breakfast Begins](#). 7-8am Thursdays. This hour-long broadcast from the MSU Extension Field Crops Team will run throughout the cropping season and feature a brief weather forecast and a presentation from a MSU specialist or educator on a timely topic. One RUP and one CCA credit will be available with each session. Cost is free. Register to receive the link that will be used throughout the season.

MSU Extension Digest Briefs

[2022 WEED CONTROL GUIDE FOR FIELD CROPS \(E0434\)](#)

PUBLISHED ON MARCH 1, 2022

This publication is a guide in assisting field crop growers in the selection of weed control tools for the coming growing season. This product is available in hard copy.

[AG AND SOLAR IS NOT A ZERO-SUM GAME](#)

PUBLISHED ON FEBRUARY 25, 2022

Land management and conservation practices provide options for ag and solar integration.

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REDUCING FARM ENERGY COSTS THROUGH ENERGY EFFICIENCY

PUBLISHED ON FEBRUARY 25, 2022

Power company rebates, federal grant dollars, and low interest loans can help pay for recommended energy conservation practices.

HOW TO USE THIS GUIDE

PUBLISHED ON FEBRUARY 22, 2022

This publication is set up as a series of chapters with information on biology, damage, management recommendations, and insecticides related to insect pests in field crops in Michigan and Ohio.

INSECT GUIDE FOR CORN

PUBLISHED ON FEBRUARY 22, 2022

This guide covers insecticide recommendations for corn.

INSECT GUIDE FOR FORAGES

PUBLISHED ON FEBRUARY 22, 2022

This guide covers insecticide recommendations for forages.

INSECT GUIDE FOR SMALL GRAINS

PUBLISHED ON FEBRUARY 22, 2022

This guide covers insecticide recommendations for small grains.

COMPOST HANDLING IN AGRICULTURE SYSTEMS: LAND APPLICATION

PUBLISHED ON FEBRUARY 19, 2022

Part five of a six-part series on compost utilization and management on farms.

NEW FARM MANAGEMENT EXPERIENCE RESOURCE GUIDE RELEASED BY MSU EXTENSION

PUBLISHED ON FEBRUARY 19, 2022

This publication is intended to assist beginning farmers in better understanding and demonstrating management experience.

ISSUES WITH FUSARIUM HEAD BLIGHT OF WHEAT?

PUBLISHED ON FEBRUARY 17, 2022

Come and listen to this live “Scabinar” on March 15 for the latest on head blight management, with CEU credits.

2022 MIDWEST COVER CROPS COUNCIL ANNUAL MEETING TO BE HELD IN ADA, OHIO

PUBLISHED ON FEBRUARY 16, 2022

The Midwest Cover Crops Council annual meeting will be in-person in conjunction with the Conservation Tillage and Technology Conference March 7-9, 2022, at Ohio Northern University.

PANDEMIC COVER CROP PROGRAM AGAIN OFFERS CROP INSURANCE DISCOUNTS, DEADLINE MARCH 15

PUBLISHED ON FEBRUARY 14, 2022

The USDA Risk Management Agency’s Pandemic Cover Crop Program offers a discount of \$5 per acre on a farmer’s 2022 crop insurance premium.

COMPOST HANDLING IN AGRICULTURE SYSTEMS: COMPOST TRANSFER AND EQUIPMENT CALIBRATION

PUBLISHED ON FEBRUARY 14, 2022

Part four of a six-part series on compost utilization and management on farms.

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AN UPDATE ON INCREASING THE ABUNDANCE OF SAMURAI WASPS FOR BIOLOGICAL CONTROL OF BROWN MARMORATED STINK BUGS

PUBLISHED ON FEBRUARY 9, 2022

Redistribution efforts of an important natural enemy of brown marmorated stink bugs show signs of success. Over 27,000 samurai wasps have been reared and released across 34 sites in Michigan and we have a second year of evidence of overwintering success.

COMPOST HANDLING IN AGRICULTURE SYSTEMS: APPROPRIATE STORAGE OPTIONS

PUBLISHED ON FEBRUARY 8, 2022

Part three of a six-part series on compost utilization and management on farms.

NOELLE IS LEARNING MORE ABOUT SUSTAINABLE FARMING IN HER M.S. DEGREE

PUBLISHED ON FEBRUARY 7, 2022

The best part of her Horticulture master's program is conducting applied field research on campus and on vegetable growers' farms.

MICHIGAN PESTICIDE APPLICATOR REVIEW SESSIONS, RECERTIFICATIONS CREDITS AND TESTING OPTIONS FOR WINTER 2022

PUBLISHED ON FEBRUARY 1, 2022

Frequently asked questions about when and where pesticide applicators can earn education credits or take the certification exam. Additional sites have been added for Restricted Use Pesticide Core Reviews and MDARD exams.

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