MICHIGAN STATE UNIVERSITY EXtension

Southwest Michigan Field Crops Updates September 1, 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.

MSU Soils Lab Closes Its Doors at End of 2022

MSU has provided soil chemical analyses and interpretation since the 1920s. This has been a valuable service for the Michigan agricultural community, homeowners, and MSU researchers. Unfortunately, due to declining soil test samples over time and the availability of similar services from commercial labs, it has been decided to close the MSU Soil and Plant Nutrient Lab (SPNL) (aka Soil Testing Lab) at the end of 2022. To assure that all submitted samples can be processed, the SPNL will continue to accept soil samples for analysis until November 18, 2022.

THIS WILL NOT IMPACT THE DIAGNOSTIC LAB. All SCN soil sample analyses and other diagnostics (diseases, insects, etc.) will not be affected.

MSU personnel are working on alternative options for Michigan residents to use for soil testing and can also assist in directing people to alternative soil testing laboratories to complete their soil testing needs. We will keep you informed as we update and expand our offering of tools for determining MSU fertilizer and soil amendment recommendations based on soil analysis data.

You could send your samples to any lab in the country, but typically local labs will be able to give recommendations better suited to our region. Here are a few fairly local options for getting soils tested. If you would like me or another Extension educator to also receive copies of your reports, just add our name and email address to your submission form.

Dairyland Labs – 4900 W Dickman Rd, Battle Creek, MI 49037

A&L Great Lakes Lab – 3505 Conestoga Dr, Fort Wayne, IN 46808

UW-Madison Soil and Forage Lab – 4702 University Ave, Madison, WI 53705

MSU Extension Beginner Grazing School 2022

The Beginner Grazing School will be offered as a hybrid program this year. Online classes run August 30 through October 6 on Tuesdays and Wednesdays from 12:00–1:00 pm via Zoom. All classes will be offered live and will also be available as a recording. You can register after the classes begin and will have access to the recorded sessions that you missed.

The in-person event will be held on October 6 from 9:00 am to 4:40 pm. EST at the Kellogg Biological Station, 10461 N. 40th St. Hickory Corners, MI (also held concurrently in Lake City, MI).

Southwest Michigan Field Crops Update – September 1, 2022 - 2

Online Sessions:

- August 30: Introduction to School and Overview of Grazing Terms
- August 31: Graziers are Grass Farmers!
- September 6: Soil Health and Fertility
- **September 7**: Nutrition, Health, and Welfare of Grazing Animals:
- **September 13**: Pasture Establishment and Renovations
- September 14: Fencing and Water Systems for Grazing Management:

September 21: Designing a Grazing Plan for Your Farm

• **September 20**: Introduction to Pasture Allocation, Stock Density, and Costs Associated with Fencing and Water



In-Person Session:

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• **October 6**: Addresses Pasture Allocation Activity, Water systems demonstrations, Forage identification, Pasture scoring, and Wrap-up discussion

Registration deadline is October 2 at 11:59pm. See event calendar below for registration details.

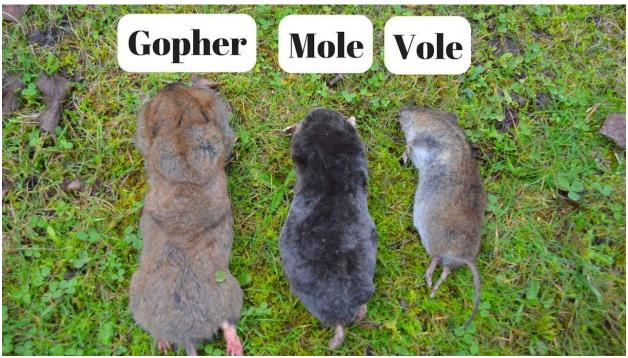
Check This Fall for Vole Damage

This year I am conducting an on-farm research project with a local farming family to try to quantify and manage vole damage in soybean. The project is being funded by the Michigan Soybean Committee, and the field day held recently in St. Joseph County included a presentation on this topic. I will be summarizing the study later this fall, but for now I would like to let you know what we're finding and encourage you to look for signs of possible vole damage in your fields.

Voles are 4-6" long with stocky bodies, short legs and short tails, small eyes with ears partially hidden, and are typically brown or gray. They are slightly smaller than moles (the ones that don't look like they have eyes) and much smaller than gophers. They are often mistaken for field mice which have leaner bodies, large eyes and ears, and have tails roughly the length of their bodies. They prefer areas with a heavy ground cover and construct many surface runways or shallow tunnels in dense grass with numerous burrow entrances, so it is easier to find signs of their presence than to actually see them.

Voles can have 5-10 litters per year, averaging 3 to 5 young per litter, so populations can increase quickly. Vole populations tend to increase every 3 to 5 years on a boom-bust cycle. Mild winters with good snowfall can increase populations and, as with any animal, increasing availability of the food source and limiting predator access will also favor higher populations.

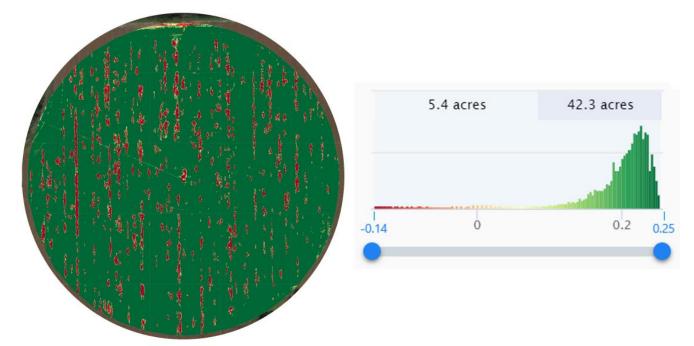
Fields that are more susceptible to vole damage include those under no-till and those that had thick cover crop late into the spring. When scouting or as you are harvesting, look for irregularly shaped voids in the field. These can usually be distinguished from groundhog feeding as there will not be a large hole and surrounding mound if in the middle of a field or a large, often semi-circular patch of feeding if near the edge of field. If you do find several patches that you suspect are from voles, contact me (<u>eander32@msu.edu</u>) and I will come out to take a look.



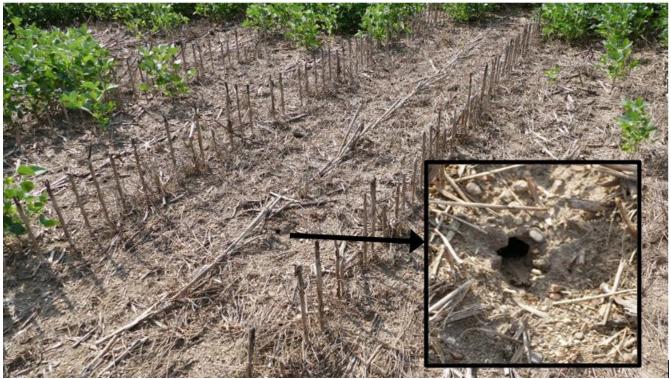
Relative size of a pocket gopher, mole and vole.



Meadow vole



The plant health image (left) of this irrigated soybean field suffered 10-15% vole damage, evident by the irregularly-shaped red patches that are void of soybean.



Patch void of soybean and a single vole den entry hole in the non-study field

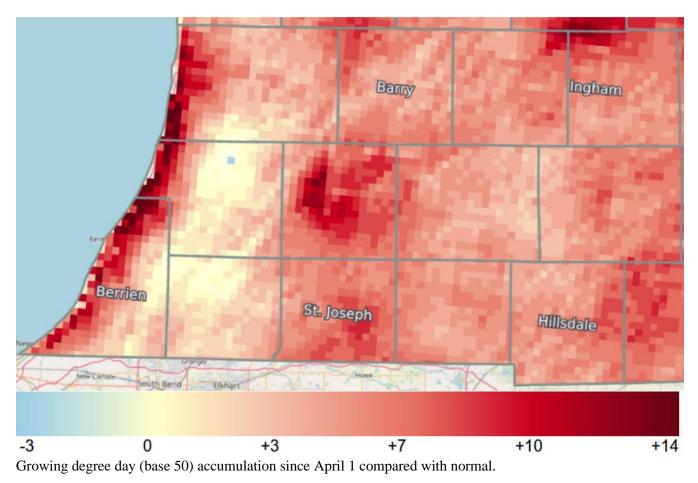
Upcoming Webinar on Atrazine

A webinar providing an update on the current status of atrazine and the impending comment period in the Federal Register will be presented by Syngenta on September 8, 2022 at 2 PM. EPA's recent atrazine announcement is about new proposed requirements to decrease atrazine runoff from treated fields. It is not a final decision, but instead is a proposal that is open for public comment/feedback. The webinar will provide information to help attendees understand the value of comments and the details/data most valuable to include during the comment period in the Federal Register (ends on October 7, 2022). Register in advance for this webinar.

Weather and Crop Update

Weather

Temperatures during the last week near normal. We accumulated 15 fewer GDD₅₀ less than the 5-year normal in August—less than one day's worth—in southwest and south-central Michigan according to Enviroweather data. We picked up 200 growing degree days (GDD, base 40 for alfalfa) or 130 GDD₅₀ (for corn and soybean) last week. The forecasted reference evapotranspiration (FRET) rate is roughly 1.1-1.2 inches for the week ending September 7. The forecast predicts the addition of another 216 GDD₄₀ or 146 GDD₅₀ in the coming week. Both the 6-10 day and 8-14 day outlooks call for above-normal temperatures during the first half of September.

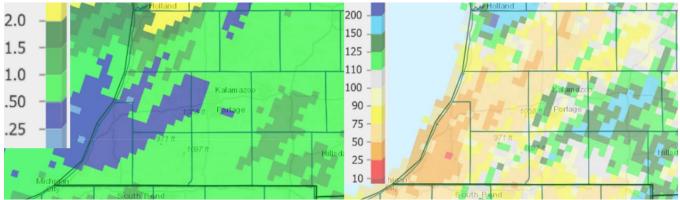


Southwest Michigan Field Crops Update - September 1, 2022 - 6

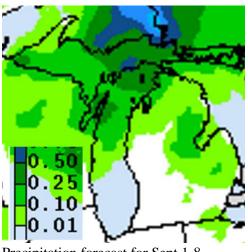


Weekly forecasted reference evapotranspiration rate for the week ending September 7.

Precipitation was low in most parts of the region this past week with most counties averaging between 0.5-1.0 inch. Aside from Calhoun, Branch and small portions of a few other counties, rainfall has been 0.5 to as much as 2.0 inches below normal over the past two weeks. The medium-range outlooks call for below normal to near-normal chances of precipitation during the second week of September.

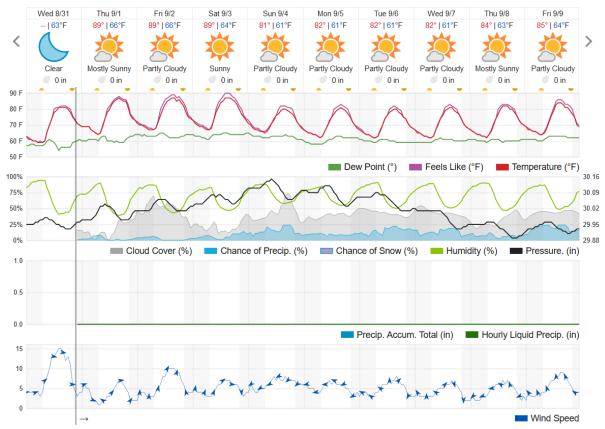


Precipitation totals from the past 7 days (left) and percent of normal for the past 14 days (right) as of August 31.

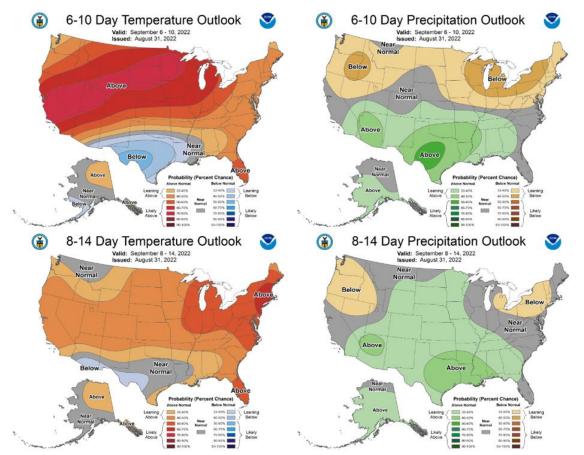


Precipitation forecast for Sept 1-8.

Southwest Michigan Field Crops Update – September 1, 2022 - 7



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



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

Southwest Michigan Field Crops Update - September 1, 2022 - 8

Crops and Pests

Corn and **soybean** continue to look healthy in the parts of the region visited although I did not travel to the extreme southwest part of the state. Corn in more advanced fields is well into the dent stage (R5) with one field visited at 50% milk line. Many seed corn fields have had a defoliant applied to them and harvest began in a few fields this week. Soybean in earlier-planted and early maturity group fields are turning yellow and starting to drop leaves while most are still at the full seed stage (R6, pod containing a green seed that fills the pod capacity at one of the four uppermost nodes on the main stem). No plants that I saw had any pods that had reached mature color.



Corn (102-day, planted May 13) at the dent stage (R5) that has nearly reached 50% milk line in St. Joseph County. Photos courtesy of Eric Anderson.

Diseases. With the dry conditions recently, incidence of tar spot has remained low throughout the region, and the tar spotter app shows mostly low risk of the disease for corn that has not yet reached the dent stage. The situation in soybean is similar with no white mold seen in fields visited and with few to no remaining flowers, the threat of that disease is also extremely low given the current forecast. The only diseases seen to date are Septoria brown spot (not normally a concern) and sudden death syndrome (SDS) in several soybean fields. As mentioned previously, scout now before the normal leaf color change occurs in your fields to identify incidence and severity of SDS and make appropriate variety and seed treatment decisions for next year.



Confirmed tar spot locations in 2022 (left) and current risk of tar spot infection according to the Tarspotter app as of Aug. 31.



Interveinal chlorosis and necrosis are typical signs of sudden death syndrome (SDS). Photos courtesy of Eric Anderson.

Irrigation. Corn at reproductive stages through beginning dent has a Kc of 1.2 and will require 1.3-1.4 inches this week. Soybeans from R3 (beginning pod) through R6 (full seed) also have a Kc of 1.2. Corn and soybean beyond these stages will require only 1.2-1.3 inches this week.

	Calendar (Note: Titles are clickable links to online content when highlighted and underlined)
Aug 30+	Beginner Grazing School Hybrid. Online classes held Tuesdays and Wednesdays Aug 30 – Sept 21 from 12-1pm EST, the in-person event will be Oct 6 from 9am-4:30pm EST at Kellogg Biological Station, 10461 N. 40th St., Hickory Corners, MI. Register online.
Sept 1	<u>Virtual Breakfast – Nematode Management Updates in Field Crops with Marisol Quintanilla</u> . 7-8am. 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.

Southwest Michigan Field Crops Update - September 1, 2022 - 10

- Sept 7 <u>Van Buren County Fall Farm Field Day</u>. 9-12pm. 56958 68th Ave, Lawrence, MI. Hosted by Van Buren Conservation District. Focus on nutrient efficiency and soil health topics. Cost is free, sign up by calling 269-657-4030 x 5.
- Sept 8 <u>Virtual Breakfast Reducing Soybean Harvest Losses with Mike Staton</u>. 7-8am. Register online once for the entire series.
- Sept 8Project Wingspan: Agricultural Lands & Habitat Management Workshop.9am-3:45pm.Kellogg Biological Station, 3700 E. Gull Lake Drive, Hickory Corners, MI. Learn about the
multiple benefits provided to agricultural lands from integrating pollinator habitat. Register online.
- Sept 14MSU Mechanical Weed Control Field Day.8:30-4:00. Southwest Michigan Research and
Extension Center, 1791 Hillandale Road Benton Harbor, MI. In-field demonstrations of cultivation
tools for vegetables and row crops. Registration is \$50 through Sept 11, includes breakfast and lunch.
- Sept 15Virtual Breakfast Herbicide Resistance? Now is the Time to Check! with Erin Hill.Register online once for the entire series.
- Sept 22 <u>Virtual Breakfast Fall Weed Control with Christy Sprague</u>. 7-8am. Register online once for the entire series.

MSU Extension Digest Briefs

PUBLISHED ON AUGUST 30, 2022

• <u>FREE DRAINAGE WATER MANAGEMENT CERTIFICATION COURSE</u> - Take this free course on Sept. 14-15, 2022, to learn about drainage water management with hands-on exercises.

PUBLISHED ON AUGUST 29, 2022

• <u>USDA FARMLAND CASH RENTAL RATES</u> - Rental rates per county taken from USDA's National Agricultural Statistics Services

PUBLISHED ON AUGUST 18, 2022

- <u>DR. LEONARDO VOLPATO RECEIVES NAPB EARLY CAREER AWARD</u> The National Association of Plant Breeders has awarded Dr. Leonardo Volpato the Early Career Award.
- <u>2022 SOYBEAN HARVEST EQUIPMENT FIELD DAY SCHEDULED FOR SEPTEMBER 15</u> -Participants will improve farm income by learning where soybean harvest losses occur and how to measure and reduce them at this field day.
- PUBLISHED ON AUGUST 16, 2022
- <u>SOYBEAN CYST NEMATODE MANAGEMENT AND SAMPLING</u> Now is the time to consider having a free soybean cyst nematode diagnosis on soybean fields as they are harvested this fall or on wheat fields going into soybeans next year.

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