



U.P. Ag Connections Newsletter

February 2025

Agricultural News from MSU Extension and AgBioResearch

Volume 29 Issue 2

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News and Views By Frank Wardynski

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- New to Chickens
- UPREC Now Hiring

I am writing this piece from the Region VI FFA Leadership competition in Traverse City. The competitions are currently taking place so I do not know who the winners are yet, but, I know this is going to sound cheesy, they are all winners here. I was able to come last year and I was truly inspired. I remember listening to presentations and as spectators they want you to not respond after presentations, but I did not just want to clap, I wanted to cheer.

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- Farmers Shares
Experience about grazing livestock in solar projects

And these UP kids do it by traveling all day to get there just in time to get their traditional FFA dress on and perform. We left the school this morning at 6:00am. Arrived at the competition at 3:00pm. One girl was car sick most of the day. Forgive the graphics but its part of the challenge to overcome. Puke down the side of the car, her hair, her face. Yet she cleaned up, drank some Sprite, chewed some gum and performed.

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- How do I know if Pesticide is safe for Bees

I was in attendance with the Gogebic Ontonagon Chapter, Lori Scott is their advisor and my daughter. I am pretty proud of what she has done in three years. Eight students advanced to the regionals from the district competition. Pat Wehner is the Carney Nadeau advisor, brings a career worth of experience to her program and it shows. She had a bus load of students competing in Traverse City.

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- Continue How do I know if pesticide is safe for Bees
- Annual Tree Sale Alger Conservation District

I had the privilege of driving three students that were competing in the demonstration competition. They demonstrated Artificial Insemination (AI). I listened to their presentation on the trip down and grilled them with questions. They really knew their subject matter.

It was interesting that they were demonstrating the original AI. Last week I was invited to talk with a class at Michigan Technical University about using AI in beef production Management. Only this time it was Artificial Intelligence. Their class project is to develop an AI product and market the product. They had ideas like monitoring health to get early indications of sickness, but that's already been done. I suggested monitoring soil health and forage quality with drones or by driving over with a four-wheeler. Or finding a way to interface all our data from soil and forage tests, production and financial information.

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- Advertisers

I am not certain where they are going to go with it but the fascinating part for me was how they came up with an idea focused on beef production technology. A few farm kids are going to be engineers and obviously they have not forgotten where their roots began.

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- Advertisers
- Classifieds
- Market Report

I know my excitement is bias since their subject matter is agriculture and agriscience. We older generations may like to speak in less than glowing terms of the current generations, but we are in good hands. I think they are looking to solve problems differently than we did probably with less blood, manure, and sweat.

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- UP Pesticide Applicator Training & Exams

A couple newsletters ago I went on a tangent about information sources and fake news. And I am suspicious of artificial intelligence. I asked one of the engineering students in that class, how do we know the AI information is accurate?

He very politely and calmly responded, "it's not." After our conversation I realized his point. We conduct research and talk about statistical differences at 95 or 99% confidence. Sometimes our research is inconclusive, and follow-up studies do not show the same results. So, AI is not perfect,

sometimes we are going to need to trust people are going to use tools to come up with the best answers they can, and a lot of those answers are going to come from our younger generations.

New to raising chickens? Check out MSU Extension's self-paced certification course for small scale chicken farmers

Owning chickens has become a popular past time in recent years. People who live in rural areas, subdivisions, and cities are becoming increasingly interested in raising birds to have fresh eggs for their families. [Michigan State University Extension](#) offers a self-paced online course, [Small Scale Poultry Farming](#), that can help people who are considering getting their own chickens or who are new to chickens learn the ins and out of raising chickens. This course is based on sound management practices based in science that apply whether one is raising one bird or a million birds.

This course will teach a host of basic management concepts such as bird selection and care, anatomy and physiology, flock health, and how to market chicken products. Participants will earn online badges to recognize their completion of each unit; digital badges can be shared through LinkedIn or other online platforms. Once participants have completed the course they will receive a certificate of completion.

This course is a great way to learn information that will prepare small scale and backyard chicken owners for a successful and enjoyable experience!



Agriculture Research Support Staff (Temp/On-call LABOR AIDE/OFF-CAMPUS) The MSU Upper Peninsula Research and Extension Center (UPREC) is seeking seasonal Agriculture Research Support Staff to assist with sustainable agriculture research and outreach projects at our facility in Chatham, Michigan and on working farms in the UP and Northeast Lower Michigan.

The MSU Upper Peninsula Research and Extension Center (UPREC) is seeking seasonal Agriculture Research Support Staff to assist with sustainable agriculture research and outreach projects at our facility in Chatham, Michigan and on working farms in the UP and Northeast Lower Michigan. Support Staff will assist with applied field crop, forage, organic vegetable and hemp research projects, while spending their days on an idyllic farm in Michigan's beautiful Upper Peninsula. Common tasks include seed handling and testing, planting, irrigation, fertilization, pest management, harvest, data collection, data entry and direct interaction with farmers and the general public. These seasonal positions will prepare individuals for careers in commercial agriculture, applied field research, agriculture and natural resources education, and more.

<https://careers.msu.edu/jobs/uprec-agriculture-research-support-staff-labor-aide-off-campus-alger-michigan-united-states-in-state>

Farmer shares experience about grazing livestock in solar projects



Michigan farmers interested in learning about grazing sheep and cattle in solar projects, as well as planning and zoning board members interested in learning about solar grazing, are invited to participate in a webinar featuring two farmers and a solar developer with solar grazing experience. The following is a brief description of each presenter and what they will speak about a question and answer session will follow the presentations.

Brooke and Chauncey Watson operate Illinois Solar Grazing and Watson Farms. They are experienced sheep producers. Using their expertise in livestock as well as commercial mowing, [Watson Farms](#) offers vegetation management services for solar sites throughout Illinois through their service company, Illinois Solar Grazing. They are members of the [American Solar Grazing Association](#). Brooke will share their experience grazing sheep in solar sites.

Paul Knowlton operates Knowlton Farms with his sons. In a collaborative solar project, the Knowlton's have brought crops and cattle back to the farm, thus preserving the family's 150-year farming tradition. In 2017, an innovative 2 MW AC community solar project with 1.4 MW AC of battery energy storage capacity was built on the farm. The elevated solar panels and spaced rows allow for machinery, grazing and crop science, enabling the family to return to full-time farming after a long hiatus. Paul will share his thoughts on how agrisolar has allowed his farm to remain a viable family business. Ensuring the viability of the farmland for the next generation has been a priority for Paul, who has been working with consistent dedication to ensure the farm remains true to family tradition.

Angie Burke is the Director of Operations & Maintenance for Pivot Energy. Under her leadership, Pivot Energy brought in more agrivoltaics projects than any other company—with over 30 sites in 2023 alone. There are thousands of sheep and dozens of new solar farmers digging into new opportunities under solar panels because of Angie and Pivot's commitment to building a 100% agrivoltaics portfolio, which is becoming a reality faster than anyone might have believed possible. She will share her thoughts on solar grazing from a solar developer perspective.

Due to the generous support of [Michigan State University Extension](#), this event is offered to participants at no cost. However, attendees must register to receive the necessary Zoom links. With free registration, you will gain access to attend as many sessions as you want and even switch between tracks, making it easy to tailor the conference to individuals needs and interests. RUP and CCA credits will be offered for several of the sessions. More information can be found at: <https://www.canr.msu.edu/miagideas/>

If you have questions about solar grazing opportunities, please contact [Charles Gould](#), Michigan State University Extension Bioenergy Educator, at 616-834-2812 or gouldm@msu.edu. The [MSU Extension Agricultural Bioenergy and Energy Conservation](#) website has additional information on renewable energy

How do I know if a pesticide is safe for bees? Five steps to protect bees from pesticides

A pesticide's risk to bees depends on two factors: exposure and toxicity. Pesticide users can reduce risk to bees by limiting bee exposure to pesticides and by choosing products that are known to be less toxic to bees.

The effects of pesticides on bees can vary widely depending on the pesticide and how it is applied. Some pesticide applications can kill bees outright, some can cause sublethal harm such as impaired memory or reduced lifespan and some have no noticeable effect. Pesticide effects on bees can be complex, and some long-term or chronic effects on bees may be understudied or unknown, so we can't guarantee with certainty that a pesticide is "bee safe." People managing pests can take steps to reduce harm to bees by selecting pest-resistant plants, considering non-chemical options, practicing integrated pest management, choosing products known to be less toxic to bees, following the pesticide's label and taking steps to reduce pesticide exposure of bees.

1. Select plants resistant to pests

Some plant species are more attractive to pests and susceptible to pest damage than others. Home gardeners and land managers can reduce the need to manage pests with pesticides by selecting pest-resistant varieties. These varieties may vary based on your geographic location, so you can reach out to your university extension or local gardening experts for advice on selecting plant varieties that are known to be resistant to pests. For example, [Michigan State University Extension](#) has an online article on [selection, planting and care of trees and shrubs to avoid the need for pesticides](#).

2. Consider non-chemical options to manage pests

Some pests can be effectively managed without chemical pesticides. University extension educators/agents and online resources may recommend alternatives to pesticides for managing specific pests.

[Integrated pest management \(IPM\)](#) is an approach to pest management that considers all the pest control options available. For example, some pests can be effectively managed through prevention measures, cultural/sanitation practices, physical/mechanical barriers or biological controls. Pest control options vary widely depending on the pest and situation. In some situations, pests can be effectively controlled without the use of chemical pesticides.

3. Choose pesticides known to be less toxic to bees

There can be many considerations for selecting a pesticide, including risk to humans, effectiveness, cost and application method. Another consideration is the pesticide's known harm to bees. The pesticide's label reflects the U.S. Environmental Protection Agency's (U.S. EPA's) [pollinator risk assessment](#). To further minimize risk to bees, the label includes a combination of advisory environmental hazard statements and mandatory directions for use to protect bees. Some crops have additional restrictions on the label, such as limiting the number of applications during the bloom period, which reduces potential exposure to bees.

If you are considering multiple pesticide options, you can compare their known effects on bees by using the [University of California Agriculture & Natural Resources Statewide Integrated Pest Management Program's bee precaution ratings](#). The platform allows users to look up a pesticide by its common or trade name and the query will result in a rating of known harm to bees. You may be able to compare pesticide options and select a pesticide that is known to be less toxic to bees than the others. Once you have selected a pesticide to use, you must review the pesticide's label for instructions to protect bees and other important information. Some pesticide labels, especially newer labels, have rate and use-specific recommendations to protect pollinators that [bee precaution ratings](#) do not take into consideration.

The word "pesticides" is a broad term that includes many types of active ingredients to control pests. U.S. EPA lists [types of pesticide ingredients](#), and the list includes insecticides, fungicides, herbicides and many other types of pesticides. Many insecticides are acutely toxic to bees. Other insecticides are chronically toxic to bees, resulting in sublethal harm. There is evidence that some fungicides are chronically toxic to bees or can work synergistically with insecticides in tank mixes to become acutely toxic. There is less evidence that most herbicides have chronic toxicity to bees, but they can have indirect effects by damaging plants that pollinators forage on. Some herbicide labels specify restrictions on their use around pollinator habitat. While pesticides are evaluated for risks to honey bees, they may not be evaluated for other bees or pollinating insects.

After-market adjuvants can harm pollinators, but unlike pesticides, their risks to pollinating insects are not evaluated. Whenever possible, reduce the application of pesticides around bee-attractive blooming plants and use care when using after-market adjuvants.

4. Follow the pesticide's label

The pesticide label can include important bee precaution information. The United States Environmental Protection Agency evaluates pesticides for many risk factors, including risks to pollinators. Learn [how the US EPA assesses risks to pollinators](#).

A pesticide must be applied according to its label. [The Protect Pollinators: Read Pesticide Labels card](#) has guidance on where to find bee precaution information on a pesticide label and a list of steps to minimize pesticide exposure to bees:

- Pesticides known to be harmful when exposed to bees are described as "highly toxic" or "toxic" to bees in the Environmental Hazards section of the pesticide label. Products that are "highly toxic" or "toxic" to bees should not be applied to flowering plants.
- If the label's Environmental Hazards section states to not apply the product or allow it to drift to blooming crops if bees are foraging or visiting the treatment area, then applicators should not apply it to flowering plants. If it says to not apply the product or allow it to drift to blooming crops if bees are "actively foraging" or "actively visiting" the treatment area, then applicators should wait until evening when bees are not flying to apply the product to flowering plants.
- Additional bee precautionary statements may be found in the Directions for Use section of the pesticide label.

5. Take steps to reduce pesticide exposure to bees

A pesticide's harm to bees can be reduced by limiting exposure. To protect bees, pesticide applicators should avoid applying pesticides to places where bees come into contact. Bee exposure to pesticides can be reduced by applying pesticides so they do not get into pollen, nectar, water and resins, nests or hives, or nesting materials. Applicators should also take care to avoid pesticide drift to these areas.

If allowed by the label, some pesticides with short residual times can be applied in the evening after bees stop flying. Applying a pesticide in the evening allows these pesticides to break down for several hours before bees will come into contact with it, however, applicators should be aware that evening pesticide applications may harm beneficial insects active at night, such as some moths.

1. OPEN THE LABEL.
STEP 1 - See if product is toxic and has more than 8 hour residual contact toxicity in the **ENVIRONMENTAL HAZARDS** statement.
STEP 2 - Look for general and crop-specific directions under **DIRECTIONS FOR USE**.

2. BEE TOXIC PESTICIDES will be indicated by the phrase **"TOXIC"** or **"HIGHLY TOXIC TO BEES"**. If toxic:

don't spray when in bloom → wait until over 80% of petals fall

3. Some bee-toxic pesticides BREAK DOWN IN A FEW HOURS. Learn if these pesticides can be applied at bloom in the evening:

- "FORAGING"** or **"VISITING"** = remains toxic for more than 8 hours. **DON'T APPLY TO FLOWERING PLANTS!**
- "ACTIVELY FORAGING"** or **"ACTIVELY VISITING"** = remains toxic for less than 8 hours **ONLY APPLY IN THE EVENING WHEN BEES ARE NOT ACTIVE!**

ENVIRONMENTAL HAZARDS
 This pesticide is toxic to mammals, birds, fish and aquatic invertebrates.

This product is **highly toxic** to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are **actively foraging** the treatment area.

4. GENERAL AND CROP-SPECIFIC USE DIRECTIONS
 Newer labels have **additional precautions** for using products around honey bees. Here you will find what practices to follow to keep bees safe and/or **restrictions around whether a pesticide can be applied around crop bloom time**. Instructions **may apply to all crops, or include crop-specific restrictions**. The label may also specify a value **RT25**, a measure of the time that field weathered residues remain toxic to bees on contact with foliage.

DIRECTIONS FOR USE
Protection of Pollinators
 APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER POLLINATING INSECTS.

Tree Nuts (Crop Group 14-12)

Pest	(oz/acre)
Aphids	0.75 - 1.5 (0.023 - 0.047 lb/acre)
San Jose scale	2.75 (0.086 lb/acre)

Advisory Pollinator Statement: Notifying known beekeepers within 1 mile of the treatment area 48 hours before the product is applied. The RT25 for this product is less than or equal to 3 hours.

Restrictions:
 - Do not apply this product any time between 3 days prior to bloom and until petal fall.

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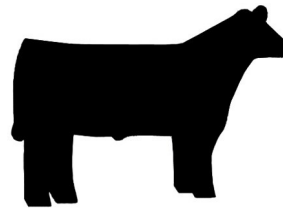
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Classifieds

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906-398-9865

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(906) 466-2672.

FOR SALE: small square bales of straw and small squares of
first crop hay. Call Marenger's Farm (906)384-6587.

**FOR SALE: Mixed Hay round bales 700# & 2nd cut small
square bales**, Call Alan or Karen Raynard @ (906) 647-6697,
Pickford.

Market Report

Choice Steers	\$188-\$230 per 100 lbs.
Holstein Steers	\$165-\$195 per 100 lbs.
Hogs	\$55-\$61 per 100 lbs.
Lambs	\$150-\$210 per 100 lbs.
Cull cows	\$100-\$155 per 100 lbs.
Calves	\$250-\$550 per 100 lbs.
Goats	\$250-\$375 per 100 lbs.

Breeding and Feeder Animals

Grade Holstein cows top \$2650/head

Grade Holstein bred heifers top \$3600/head

Feed Prices across the U.P.

	Avg. \$/cwt	Avg. \$/ton	Price Range
Corn	\$15.19	\$303.75	\$220-510
Soymeal	\$27.99	\$559.75	\$440-655
Oats	\$18.20	\$364.00	\$319-416
Barley	\$15.08	\$301.50	\$240-386
Average price/100 wt. for 1 ton lots			

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U.P. Pesticide Applicator Training & Exams

MSU Extension and MDARD will offer Pesticide Applicator Training and Exams in the Upper Peninsula on April 3rd, 2025. The program includes a core manual review (RUP credits), lunch and MDARD exams (Full training & exam participation required). Core exams (private and commercial) will be offered by MDARD, while commercial category exams will be available onsite through Bay College Testing Services.

Thursday, April 3rd, 2025 – Bay College in Escanaba, MI

Who: Pesticide applicators seeking MDARD exam prep, administration and/or RUP recertification credits

What: A four-hour core manual review, followed by lunch and MDARD exams

When: Thursday, April 3rd, 2025

- Core Manual review 8:00am – 12:00pm
- Lunch 12:00pm – 12:30pm
- MDARD core exams (included), and/or commercial category exams scheduled independently with Metro Institute at Bay College Testing Services 12:30pm – 4:00pm

Where: Core Manual review and MDARD core exams at Bay College, Besse Health & Tech Center (BHAT), Lecture Hall Rm. 421 – 2001 N Lincoln Rd; Escanaba, MI 49829

MDARD commercial category exams at Bay Testing Services, Student Success Center (HUB) Rm. 876 – 2001 N Lincoln Rd; Escanaba, MI 49829

Why: MDARD exam prep, exam administration, and/or RUP recertification credits

Registration: [Register online here](#) for the Core Manual review and MDARD core exams.

Schedule and pay for MDARD commercial category exams separately online at <http://michigan.metrosignup.com>, selecting the Escanaba, Bay de Noc College, location.

Category exams at Bay Testing services must be booked online at least 48 hrs in advance!

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