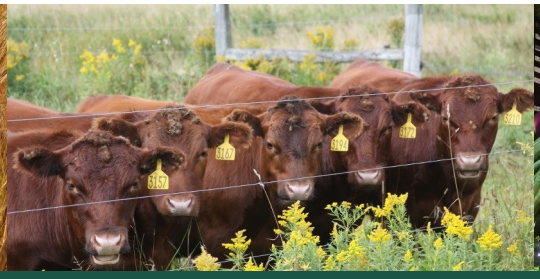




U.P. Ag Connections Newsletter

April-May 2025 | *Agricultural News from MSU Extension and AgBioResearch* | Volume 29 Issue 4-5

In this issue:

News and Views

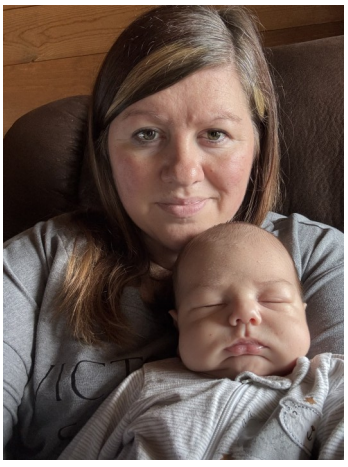
By Frank Wardynski

Governor Gretchen Whitmer proclaimed this past March 2025 as Michigan Agriculture Month, recognizing and celebrating the state's thriving food and agriculture industry. Michigan boasts one of the most diverse agricultural sectors in the country, and the Upper Peninsula has some of that diversity as well.

When people think of agriculture in Michigan's UP, they often think of grass and cows. While dairy and beef farming and tend to dominate the agriculture landscape, the UP agriculture landscape is far more diverse and vibrant than many realize.

The UP's unique climate and geography present both challenges and opportunities for farmers. Despite the short growing season and often harsh weather conditions, a variety of crops thrive here. Farmers in the UP produce dry beans, fruits, vegetables, small grains, corn, soybeans, other oil seed crops, potatoes, hay, and specialty crops like herbs and maple syrup. Other livestock beyond cattle also add to the numbers with sheep, goats, alpacas, llamas and hogs (and the occasional emu, if you saw the news recently).

The farmer-to-consumer portion of agriculture in the UP continues to increase. However, infrastructure challenges impact these opportunities, both in input purchasing, end-processing and distribution logistics. As inflation increases the cost of production, UP farmers face even higher production costs compared to national averages.



MSU-UPREC added a new baby to our farm family in April! Rene Sanderson, our Secretary, and her husband Tyler welcomed Henry Michael Sanderson on April 3rd. Henry weighed 10 lbs, 2 oz and measured 21.25 in.

Farmers in the UP must often be innovative, finding ways to make the most of the land and resources available to them. This includes utilizing sustainable farming practices and diversifying their crops to ensure economic stability. The UP offers opportunities to develop regenerative practices to protect and rebuild soil health as well as the natural landscapes that make the UP a beautiful place to visit and call home.

The Upper Peninsula of Michigan is a testament to the resilience and ingenuity of its farmers. While dairy farming and livestock may dominate the landscape, the region's agricultural diversity is a hidden gem, showcasing a wide array of crops and farming practices. This diversity not only supports the local economy but also enriches the community and ensures a sustainable future for UP agriculture.

MICHIGAN STATE UNIVERSITY | Extension

Michigan State University AgBioResearch

Michigan State University Extension and Michigan Potato Industry Commission potato seed spacing and depth research

Steve Whittington, Michigan State University Extension - April 17, 2025

MSU Extension, in partnership with the Michigan Potato Industry Commission, conducts potato seed spacing and depth research with published factsheets highlighting year one research.

Michigan is among the top 10 potato producing states in the United States, with a large portion of Michigan potatoes produced in Montcalm County. Michigan State University Extension has invested decades into research to advance the Michigan potato industry by advancing potato varietal development that supports the supply of potatoes for nationwide chip manufacturers. These varieties are developed to increase climatic resilience, improve agronomic traits and improve processing quality for the potato processing industry.

When varieties are developed to meet the agronomic traits for the commercial chipping industry, the optimal growing practices that maximize a grower's yield and economic profitability is still unknown. In general, it can take about 5 to 7 years of commercial production to develop the best production practices for a new variety.

One of the major agronomic factors that influences potato yield and quality for the commercial potato industry is plant spacing and seed depth. Each new potato variety developed for the industry can have its own preference for seed spacing and depth. Therefore, researchers at Michigan State University (MSU) Extension recognized this need for more research to optimizing potato variety agronomics and economic profitability.

MSU Extension specialists, educators, local producers and the Michigan Potato Industry Commission partnered and designed a three-year research study to identify the optimal seed spacing and planting depth for two newly released varieties: Mackinaw and Bliss, with an older variety, Lamoka.

Year one of the research study was conducted at the MSU Montcalm Research Center in Lakeview, Michigan, between May and September 2024. The trial procedure consisted of four different in-row plant spacings: 7 inches, 9 inches, 11 inches and 13 inches. The planting depths were 3 inches, 5 inches and 7 inches. The trial was set up as a randomized block designed with four replicates.

The trial was hand planted May 13 and 14, 2024, using trowels with vertically marked distances to estimate the planting depths during seed placement. All other agronomic practices followed local grower practices as recommended by MSU Extension for commercial potato production. Vines were killed at 112 days after planting and harvest was conducted 134 days after planting. The results of the study were compiled into two main categories, one for agronomics and one for economics.

Preliminary results – agronomics

The preliminary results for the agronomics in the study show that seed spacing statistically influenced total yield and U.S. #1 yield categories in terms of output. Seed spacing also influenced tuber size distribution for B and A2 grade yield. Seed variety statistically affected B and A2-grade yield while planting depth affected specific gravity as well. Seed spacing, variety and planting depth all affected tuber yield, tuber size distribution and specific gravity independently.

Preliminary results – economics

The economic analysis of the research study quantified the economic value of the effect of seed spacing and seed depth on yield outcomes and profitability. The analysis is based on the yield outcomes of the study for both total yield and U.S. #1 yield using a fresh price of $17 (cwt/ac). The only variable cost considered in the analysis was the additional seed cost for closer plant spacings. This was because the researchers first wanted to assess whether any additional yield achieved through closer seed spacing was economically viable given the additional seed costs in year one.

Seed spacing, seed variety and seed depth all affected economic profitability in terms of gross revenue, net returns and other metrics like specific gravity.

Factsheet summary results

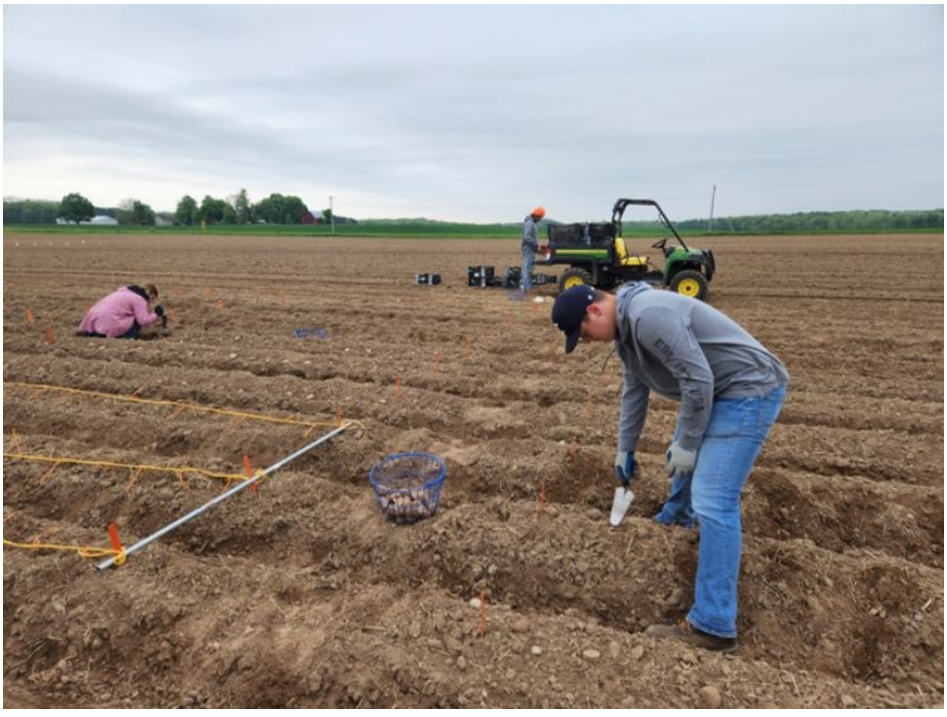
The results, data and graphs are further summarized in two MSU Extension factsheets. There is a factsheet based on the agronomics of the study, and a factsheet that shows economic considerations in terms of yield and profitability of different seed spacing and depths. The factsheets show a more detailed analysis on specific data in the study, including graphs, and preliminary conclusions of the study in year one. You can find the factsheets by clicking on the links below.

2024 Potato Seed Spacing and Planting Depth: An Agronomic Analysis

Economics of Potato Seed Spacing and Planting Depth in Potato Production

A special thank you to the Michigan Potato Industry Commission, Kipp Farm Services in Edmore, Michigan, MSU potato specialist Chris Long and research assistant Phabian Makokha for their partnership, hard work and dedication in this research to advance Michigan potato production.

Michigan State University will continue this research to further develop best practices to optimize commercial potato production, as well as optimizing producer's economic value with planting recommendations to maximize grower returns.



Insights into small swine producers: Survey results on health, management and sustainability

Casey Zangaro and Jonathan LaPorte, Michigan State University Extension - April 25, 2025

An overview into the practices, challenges and needs of independent swine producers and independent swine herd veterinarians from a 2024 National Pork Board funded survey.

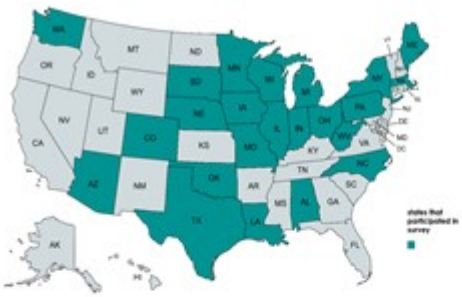
The swine industry is evolving, and with an increase in the farm-to-table movement, family swine farms are becoming more prevalent as large-scale producers hold a major impact on imports and exports from the United States. However, with more first-generation farmers coming into the livestock sector, less on-farm knowledge and experience is a major concern.

According to a survey conducted in 2024 that reached over 200 U.S. swine producers and 20 small swine herd veterinarians, 26% of swine producers focus on raising pigs for commercial markets, while 23% focus on freezer meat and direct sales. Smaller-scale operations were the target contributors of the survey, with 9% of swine producers surveyed managing fewer than 100 pigs and 17% managing between 251 and 999 pigs.

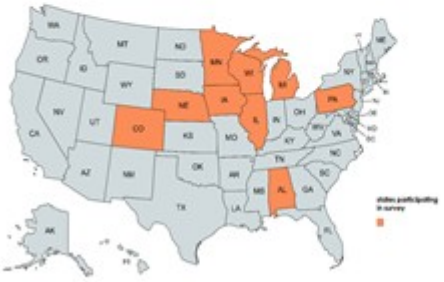
Swine herd health is a top priority for producers and veterinarians, with respiratory issues being the most significant concern for 48% of producers and 72% of veterinarians. Reproductive issues and scours (diarrhea) are notable concerns, affecting 40% of producers and 61% of veterinarians. Vaccination plays a critical role in addressing these challenges, with 66% of producers using and 78% of veterinarians recommending vaccines to prevent diseases like circovirus (PCV2), which is targeted by 74% of producers.

Producer Survey Question: If you are using a vaccination program for your herd, what are more likely to use for your herd?

- Circovirus (PCV2), 74%
- Leptospirosis, Erysipelas, Parvo (PLE), 73%
- Mycoplasma Hypopneumoniea, 70%
- PRRSv, 52%
- E. Coli, 38%
- Ileitis, 36%
- Swine Influenza, 32%
- Clostridium, 23%
- Rotavirus or Coronavirus, 22%



Producer survey respondents by state



Veterinarian survey respondents by state

Veterinarian Survey Question: What vaccination do you typically recommend and/or prescribe to your producers?

- Circovirus (PCV2), 93%
- Mycoplasma Hypopneumoniea, 79%
- Leptospirosis, Erysipelas, Parvo (PLE), 79%
- Swine Influenza, 64%
- Clostridium, 50%
- PRRSv, 43%
- Ileitis, 43%
- E. Coli, 36%
- Rotavirus or Coronavirus, 7%

Regarding antibiotic use within swine farms, 67% of producers reported using antibiotics in the last year, with 46% using both in-feed and injectable antibiotics. The other third of reported producers who did not report using antibiotics suggest they do not treat their herds or are using alternative management strategies. At the same time, the primary therapy of antibiotics is still the first choice among producers for ill pigs.

Biosecurity practices are another central area of focus within the swine industry, as 75% of producers and 78% of veterinarians implement biosecurity measures to prevent the spread of disease, such as cleaning and disinfecting

equipment and pens to shower or change clothes around their herd. Both producers (62%) and veterinarians (44%) reported concerns about managing disease outbreaks such as Porcine Reproductive and Respiratory Syndrome virus (PRRSv), Leptospirosis, and Circovirus.

The survey responses highlight the importance of biosecurity and disease management as foundational practices to protect herds. Feeding practices also affect a swine herd's overall health and growth, with 55% of the producers using purchased complete feed and only a third of them mixing rations for their herd. Pigs need a balanced and nutritious diet to promote growth, health, and reproductive performance.

Both producers and veterinarians indicated educational needs in their responses to the survey. Education emerged as a recurring theme in the survey results, with 42% of producers expressing a need for more knowledge in nutrition, 39% in health, and 41% in marketing. These areas underscore the necessity for improved farm management through better feeding practices, disease prevention strategies, and effective pork product marketing. Similarly, veterinarians also voiced a need for more training, with 4% seeking education in health and 39% in environmental management. The responses also stressed the importance of more client-focused education, with nutrition, health, and biosecurity being top needs for swine producers across the United States.

Producer survey question: What education or knowledge about pig production would you like to know? (Select all that apply)

- Nutrition, 42%
- Marketing, 41%
- Health, 39%
- Reproduction, 33%
- Genetics, 28%
- Housing/Pastures, 21%
- Environmental (manure handling, soil and water management), 20%
- Biosecurity, 18%
- Home Processing, 18%

Veterinarian survey question: What education or knowledge about pig production would you like to have? (Select all that apply)

- Health, 44%
- Environmental (manure handling, soil and water management), 39%
- Nutrition, 33%
- Housing/Pastures, 33%
- Reproduction, 28%
- Genetics, 22%
- Biosecurity, 17%
- Marketing, 17%
- Home Processing, 17%

Veterinarian survey question: What education or knowledge about pig production do you believe your swine clients need? (Select all the apply)

- Nutrition, 67%
- Health, 61%
- Biosecurity, 50%
- Housing/Pastures, 44%
- Reproduction, 44%
- Environmental (manure handling, soil and water mgmt), 39%
- Genetics, 33%
- Marketing, 11%
- Home Processing, 5%

The survey identifies areas for improvement and exemplifies the potential for significant progress across multiple areas, including health management, nutrition, biosecurity, and education. Based on the survey, swine experts can work closely with producers and veterinarians to help ensure long-term success and sustainability of the industry. By promoting collaboration, continuous learning, and best practices, we can tackle the challenges of both small and larger-scale operations face. This approach will lead to healthier herds, more efficient farm management and a stronger, more sustainable swine industry.

Pig Production Educational Meeting

May 29, 2025, 6:00pm EDT at the Upper Peninsula Research and Extension Center in Chatham.

Casey Zangaro, Michigan State University Extension Educator specializing in swine production, will discuss the challenges and concerns of raising two litters of hogs in the UP. Focus will be the environment, climate and production challenges with sows, weaning piglets and finishing hogs. Please call 906-884-4386 to RSVP so that we can contact everyone in case the meeting needs to be canceled or rescheduled

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Robert Filhart, Owner (989)330-6005
Haley Filhart, Owner (989)430-2055

Classifieds

Wanted: Pasture for 25-35 cow calf pairs for the summer of 2024 in the Eastern UP. Will consider a custom grazing arrangement as well. Call Ben (989) 370-3570.

FOR SALE: Hay, mixed round bales, 700# stored inside. Also small square bales of straw. Call Jim Myers (906)399-1649 or (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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Upper Peninsula Research and Extension Center
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BEGINNING FARMERS "TRAIN THE TRAINER" WORKSHOP

BEGINNING FARMERS

Tuesday, June 17, 2025 | 1:00 PM - 5:00 PM
📍 **MSU Upper Peninsula Research and Extension Center**
- South Farm Conference Room - Main Office
E3774 University Dr., Chatham, MI 49816
Site contact: James Dedecker, PhD. (989)225-3221

🌱 *Join us for a engaging, hands-on Train the Trainer workshop! This workshop is designed for educators working with beginning farmers .*

WHAT TO EXPECT:

✅ Receive a printed copy of the curriculum textbook & resources, and completion certificate 📖
✅ Engage in interactive and hands-on training 🛠️
✅ Network with fellow educators 🤝
🍏 Pack your own lunch—light refreshments will be provided!
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