

Spartan Dairy

Newsletter

Winter 2024 Vol.4 No.1

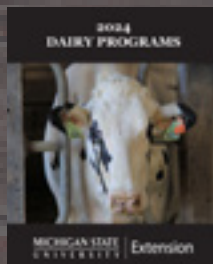
Westvale-View Dairy Named 2024 MSU Dairy Farm of the Year

Westendorp family of Westvale-View Dairy



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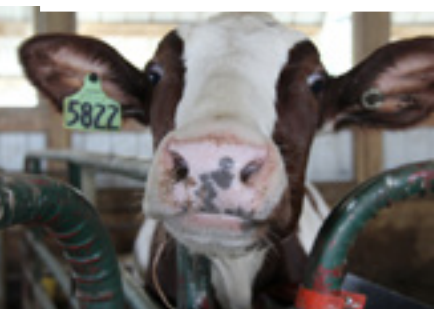


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Dairy Farm of the Year

Westvale-View Dairy

The Michigan State University (MSU) Department of Animal Science recently named Doug Westendorp of Westvale-View Dairy in Nashville as the recipient of the 2024 Dairy Farm of the Year.

Since 1958, this recognition has been awarded to dairy farmers who exhibit outstanding management of their dairy operation and leadership within the Michigan dairy industry and their surrounding communities. The Dairy Farm of the Year Award is the highest honor given by the Department of Animal Science to individuals within the dairy industry.

“Doug Westendorp’s dedication to quality and efficiency and his innovative approach have made Westvale-View Dairy and MOO-ville Creamery the success they are today,” said Cathy Ernst, chair of the Animal Science department. “We especially appreciate Doug’s support of our undergraduate and 4-H dairy programs, and his willingness to host students at their farm. We are excited to recognize Doug Westendorp of Westvale-View Dairy as the 2024 Dairy Farm of the Year.”

Established in 1992, Westvale-View Dairy is a family-run operation based in Nashville, Mich. The operation, spanning 1000 acres and overseen by Doug and Louisa Westendorp, began with a foundation of only 50 milk cows.



Westvale-View has grown significantly over the years and now milks approximately 240 Holsteins, with a herd average production of over 100 lbs. of milk per cow per day. They also manage an additional 250 youngstock and implant 150 embryos yearly.

In 2005, the Westendorps expanded their business by opening MOO-ville Creamery, located adjacent to Westvale-View and offering homemade ice cream and dairy products, a gift shop and farm tours. The creamery business has now expanded to include four retail locations, with additional products located in over 140 retail stores and 50 ice cream shops. The dairy’s operations evolved again in 2012 with a new milk barn and the incorporation of four Lely milking robots, increasing automation and allowing for more flexibility to expand the business. In 2020, Westvale-View upgraded to Lely Astronaut A5 robots, capitalizing on the latest robotic milking technology and showcasing the dairy’s passion for innovation.

According to his colleagues, MOO-ville was Doug’s ultimate dream, and the combined success of the dairy and creamery is a testament to his hard work and passion for furthering the dairy industry. Doug helms both Westvale-View and MOO-ville Creamery and is known for continually improving processes and increasing efficiency, demonstrating what can be accomplished through dedication and a forward-thinking mindset.



Dairy Farm of the Year

Westvale-View Dairy



Doug works closely with Louisa and his children, many of whom play active roles in the growth and success of the family business. Their oldest son Carlyle works in day to day management of the crops and together with Eric in herd management. Troy and Levi split their time between the farm and the creamery, with Troy managing the ice cream production and calves and Levi focusing on other milk products. Tina manages employees and product sales for several of MOO-ville's retail locations. Brittany's contributions to the family and community are presently in her role as an adoptive and foster parent. She still enjoys selecting and organizing the show string with Levi at the MSU dairy shows.

Doug gives back to the dairy community by sharing his knowledge and contributing his time, including his service as a member of the Advisory Committee for Michigan Milk Producers Association (MMPA). His work has earned numerous accolades, such as Westvale-View's first place win in the BMR Corn Silage Division in 2020's World Forage Analysis Superbowl. Doug also received the Michigan Holstein Association's (MHA) Master Breeder Award in 2018, the highest honor given to Holstein breeders in the state. In 2009, Westvale-View received a gold award in the National Dairy Quality

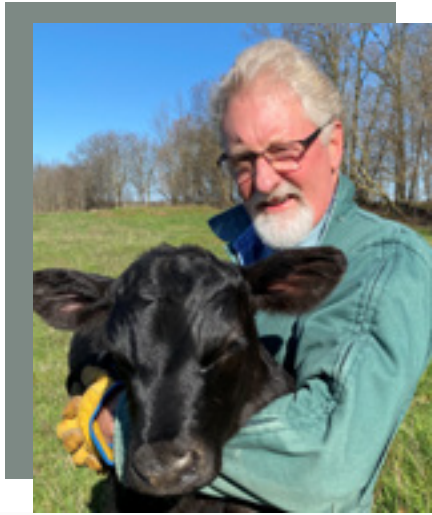
Awards (NDQA), a program highlighting dairy producers who prioritize producing milk of the highest quality. Over 200 operations were nominated for the NDQA in 2009. Doug's early career achievements were also honored in 1996 when he received the Outstanding Young Farmer award from MMPA.

"As an educator, I value Doug's support of educational programs, from opening the farm's doors to program participants to serving as a guide to other farmers who want to learn more about their model," said Martin J. Mangual, an Extension Dairy Educator. "The disposition to educate is one of the many attributes that make this farm deserving of this award."

To learn more about the MSU Dairy Farm of the Year Award and past recipients, go to the [MSU Dairy Farm of the Year webpage](#).

Dairy Spotlight

Mike Vandehaar and Kendra Van Order



**Mike Vandehaar:
Animal Science Professor**

If you graduated from MSU Animal Science in the past 30 years, you probably had Mike Vandehaar (Dr. V) as your nutrition teacher. Mike has been a professor of dairy nutrition at MSU since 1988 and has taught ANS 313 Animal Nutrition to 4430 students so far. For most of those years, the class was required of all ANS majors and often for entrance into vet school. Even if you didn't take his class, chances are that your nutritionist or veterinarian did!

Mike grew up on a dairy farm near Pella, Iowa, and attended Dordt College. He later completed his M.S. and Ph.D. degrees at Iowa State University. Mike's position is 65% research and 35% teaching. He started his career researching dry cow and heifer nutrition and was the lead author of the Spartan Dairy 2 and 3 computer programs.

While he has worked on many different projects, feed efficiency has been his focus. For the past 13 years, he has led a group of US researchers to develop genomic tools to improve feed efficiency. This work led to the inclusion of a new trait "Feed Saved" in the US Net Merit Index. In response to the needs of the dairy industry, his group now examines the genetics of methane emissions. Other projects include studies on protein efficiency and on the value of high inclusions of byproduct feeds in cows, and studies to improve the health of milk-fed calves. Mike recently served on the National Academy committee to update the Nutrient Requirements of Dairy Cattle, the guidebook for dairy nutritionists. He serves as the Vice President and President-elect of the American Dairy Science Association.



**Kendra Van Order :
Extension Educator**

New beginnings start by leaving your comfort zone. I grew up in Hamilton, MI, but not on a farm. I was introduced to the agriculture & livestock industries by my uncle and his family when I was eight years old. With their help and support, I raised and exhibited both beef cattle and sheep on local, state, and national levels. I also competed on the Allegan County 4-H & Hopkins FFA Livestock Judging Teams for three years. During my time exhibiting, my family and I raised multiple national champion bulls, I was a multi-time state winner in beef showmanship, and I placed in the top 10 of multiple national showmanship contests.

After I aged out of my time as a junior exhibitor, I enrolled as a 4-H volunteer and started, managed, and coached my county's livestock judging team. During that time, those teams were multi-time state champions and never placed below 6th at any national contest. I also help families find their livestock projects and travel to shows to

coach showmanship and help the exhibitors clip and fit their projects. From these experiences, I learned the value of hard work, communication, selflessness, and the importance of trying new things.

I graduated with my degree in Animal Science with a livestock industries concentration from Michigan State University in 2016. I worked in the commercial swine industry upon graduation and then spent some time in agricultural sales that focused on the dairy industry. From there, I worked as a veterinary technician. Throughout my life, I always knew that I would end up with a career that focused on youth development within the agriculture industry. I became a 4-H program coordinator in Kent County in April 2021. During that time, I established new formats for traditional programming, formed new community partnerships, and helped with statewide animal science programming. I have always had an interest in dairy cattle so when the statewide Michigan 4-H Dairy Educator position opened, I knew that I needed to apply. I am excited to take on that role in January 2024. I'm looking forward to meeting and working with the Michigan dairy community to provide and support the best possible 4-H dairy programs for the youth and volunteers throughout the state!

News & Updates

All things dairy at MSU

MSU DAIRY EDUCATION FALL UPDATES

The MSU Dairy Education Program welcomed over 20 new students this fall and continues to expand practical hands-on learning experiences for students at every level of their academic career. Here are a few examples from this fall:

DAIRY JUDGING

The MSU Collegiate, Ag Tech, and Michigan 4-H Dairy Judging teams traveled to the All-American Dairy Show (Harrisburg, PA), World Dairy Expo (Madison, WI), and NAILE (Louisville, KY) this fall and represented the state of Michigan well in each of these contests. A few notable achievements include the Michigan 4-H team placing 1st overall in Harrisburg with Olivia Black and Chloe Steiner individually placing 1st and 2nd respectively. Additionally, the MSU Collegiate Team placed 2nd overall in Harrisburg with Drew Neyer and Brianna Hill individually placing 2nd and 4th respectively. Congratulations to all who competed this season! To see a complete list of results, check out our website: www.canr.msu.edu/dairyjudging/



DAIRY CHALLENGE

The MSU Dairy Challenge kicked off the 2024 season with the Internal Dairy Challenge Contest in December. Three divisions provided students of all levels within the program the opportunity to participate. Over 50 students participated in this year's event which included 6 intermediate division teams, 3 advanced division teams, and an academy experience. A banquet with over 100 students, alumni, and industry professionals celebrated student success. Brianna Hill, Adalee Thelen, Irie Moussiaux, and Lauren Ringewold placed first in the advanced division while Grant Gasper, Calle Loew, Bette Eggink, and Rhianna Bruursema placed first in the intermediate division. Thank you to Preston Farms for hosting this year's internal contest.



MSU DAIRY EDUCATION ACADEMY

The Dairy Education Program hosted the 2nd Dairy Education Academy in November which provided 23 high school students and their parents the on-campus opportunity to learn about the program, meet students and professors, and visit a dairy. The next Dairy Academy will be hosted in the fall of 2024. If you are a high school student or recent graduate interested in studying dairy science at MSU, be sure to look for the application to apply for this fully funded opportunity in the summer of 2024. In the meantime, if you are interested in learning more about the Dairy Education Program at MSU contact Joe Domecq, Coordinator of Dairy Education (domecqjo@msu.edu).



Follow the Michigan State Dairy Education Page on Facebook and Instagram to stay up to date on everything happening with the dairy program!



[@Michigan State Dairy Education](https://www.facebook.com/MichiganStateDairyEducation)



[@Michigan State Dairy Education](https://www.instagram.com/MichiganStateDairyEducation)

News & Updates

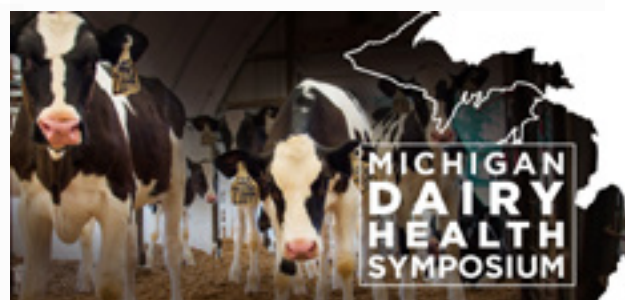
All things dairy at MSU

MICHIGAN DAIRY HEALTH SYMPOSIUM

If you are in the dairy industry, register now for the 2024 Michigan Dairy Health Symposium February 29, 2024 on the Michigan State University campus. The Michigan Dairy Health Symposium is organized every other year by the Michigan State University College of Veterinary Medicine and the Michigan State University Extension Dairy Team. This one-day event focuses on a different area of dairy health management each time, with this year's focus on calf health management.

Calf management is a critical area of cattle operations worldwide. The pre-weaning period is critical for the growth and future productivity of heifers. However, dairy cattle producers and veterinarians continue to face important ongoing and emerging challenges regarding calf management. Diseases during the pre-weaning stage negatively impact the lifelong productivity of replacement heifers. Therefore, ensuring adequate health and growth of calves is critical. Since replacement rearing represents between 15 - 20% of total dairy production costs, practices that contribute to better growth and reduced disease incidence are critical for ensuring the sustainability of the dairy industry and its capacity to meet food demands for the growing world population.

Much research related to calf health has been conducted in the last decade, and recommended calf management practices have evolved tremendously. In this one-day event, internationally renowned calf experts will discuss some of the most recent research regarding calf nutrition, welfare, behavior and health management, focusing on providing evidence-based recommendations that producers and veterinarians can implement in their farms immediately. In addition, we will have lightning research talks and poster sessions to showcase some of the more recent dairy research from MSU.



[Register here](#)

ARTISAN CHEESE WORKSHOP

Michigan State University Extension is offering an Artisan Cheeseworkshop February 29 to March 2, 2024 at the MSU dairy plant. This three-day course is designed for both those who already make cheese and want to improve their knowledge and skills and those who have not made cheese. The workshop is primarily designed for those who are considering commercial, rather than home, cheesemaking. Whether you are someone involved in the production of milk (cow or otherwise) or might consider cheesemaking from the purchase of milk, the sales of this value-added dairy product has business potential.

In the workshop, taught by veteran cheesemakers and current owners of Leelanau Cheese, participants will also learn what happens in milk that results in cheese, the interplay of time, temperature and pH on cheese, the intricacies of inoculation and ripening, cutting the curd and finishing of cheese. They will learn what can happen to reduce cheese quality and what might be done to rescue cheese. Food safety will be taught and practiced and participants will work with others to produce several different types of cheese, followed by an evening tasting session for all to enjoy.

Cheesemaking can be a hobby, or it can be a business. During the workshop, retired Extension Farm Management Educator Stan Moore will discuss the business of cheese and marketing considerations.

Registration for the cheesemaking workshop does not include lodging but does include lunches. Additionally, there will be a cheese tasting session as participants are asked to bring a favorite cheese or a cheese they made. This time of fellowship over cheeses also offers an opportunity to learn about judging cheese quality from our instructors who have won international cheese awards.



[Register here](#)

News & Updates

All things dairy at MSU

TRI STATE DAIRY FIELD DAY

The third annual Tri-State Dairy Field Day was held on November 14, 2023, at SwissLane Farms in Alto, Michigan. This year's event was called "Managing for the Best and Planning for the Worst on Dairies." It included a panel discussion about managing dairy farms at multiple locations, a talk on crisis planning, and discussions on indoor feeding centers. The tour of SwissLane Farms showcased the robotic milking equipment and education center on this family-owned Centennial Farm.

The Tri-State Dairy Nutrition Conference is a collaboration between Michigan State University, The Ohio State University, and Purdue University. The conference is held in April each year to provide continuing education for dairy nutritionists and others interested in dairy cattle feeding. The annual fall field day associated with the conference rotates between the three states each November and is targeted to a broader audience interested in dairy management. To receive text messages about future conferences and field days, text "tsdnc" to 517-201-2010.



News & Updates

All things dairy at MSU

SHARING EXPERIENCES MANAGING BOVINE LEUKEMIA VIRUS

The 2023 International All Things BLV Conference was hosted by Michigan State University. Producer and veterinary experiences were a critical part of this conference largely devoted to results characterizing Bovine Leukemia Virus (BLV) found by researchers. They addressed how BLV happens on the ground, what types of management decisions were made and remade to manage BLV and provided practical recommendations to producers. The panelists were Don Niles, DVM and operations manager for Pagel's Ponderosa Dairy and Dairy Dreams farms in Wisconsin, Brent Wilson, owner and health manager of Wilson's Centennial Farm of Carson City, Mich., and Shaun Huser, DVM, field veterinarian with Kansas State University. Each presented lessons they have learned over years of combating the disease.

VETERINARY PERSPECTIVE

At the time of initial testing of the Dairy Dreams herd in 2017, more than 21% were positive for BLV. Both testing and biosecurity are essential to eradicate the disease. Since BLV is bloodborne, their biosecurity began with changing needles after every injection. Needles can harbor microscopic blood on them after use and using the same needle in the next animal transfers that blood. The farm switched to a needleless compressed gas injection system which cut down on time and waste. Still not getting the reduction in new infections, they further looked at transmission routes. First, they began changing exam sleeves after every rectal palpation. Exam sleeves can also harbor blood, though maybe not noticeable, which can be transferred to the next animal. Dr. Niles wears a long-sleeve nylon smock that allows exam sleeves to go on and off quickly. Lastly, even though they thought they were doing a good job with fly control on the farm, they consulted with an entomologist. The entomologist showed them how the very tiny flies, when smashed, each had a drop of cow blood in them, likely transmitting blood between animals. Approaching fly control with an intentional program of observation and treatment ahead of population explosions has reduced flies significantly and they are using less chemicals by working ahead of the problem rather than behind. As a result of all these measures, herd prevalence of BLV was down below 2% in 2021.



COMMERCIAL DAIRY PRODUCER PERSPECTIVE

Brent Wilson started paying serious attention to BLV after a herd test as part of a study with Michigan State University showed herd prevalence to be around 37%, much higher than he had believed. They were already changing needles and continue to do so. Later, herd personnel and veterinarian began changing exam sleeves on all heifers and cows. One of the things that testing showed him was that 18% of heifers were apparently freshening with the disease. This showed there is a problem of disease spread before heifers have their first calf which made Wilson wonder when the heifers became infected. Wilson volunteered to be a cooperator on an MSU project where heifers were sampled at key points in their lives beginning soon after birth. Infection rates were very low at this but increased right before first breeding. He also noted that positive heifers usually came from positive dams, even if the offspring shows up later as infected. Therefore, he has been trying not to breed positive dams, while managing the number of heifer calves he needs for an expanding herd. Through all these changes, they have been successful in reducing BLV to below 20% .

BLV IN BEEF CATTLE

Dr. Huser began a BLV project in conjunction with MSU to characterize BLV infection in beef cow-calf herds in northeastern Kansas. Data on beef cattle infection was outdated and seemed to indicate that BLV was mostly a dairy cattle disease problem. He and his students sampled almost 3,000 beef cattle from 45 individual herds. 95% of herds had at least one cow infected with BLV and cow prevalence was 55%. They did not find any correlation between BLV-positive results and conception rates in beef cattle, nor did they see any effect of breed or pasture stocking density on prevalence. At this time, we don't know the impacts of the disease on beef cattle. As we learn more, it may be more imperative to control this disease.

By Phil Durst

[View full article here](#)

2024 DAIRY PROGRAMS



MICHIGAN STATE

UNIVERSITY

Extension

2024 MSU Extension Dairy Programs

Michigan State University (MSU) Extension Dairy Team:
Educators and Specialists with a commitment to enhance the competitive advantage of Michigan dairy producers and Michigan's dairy industry

The MSU Extension Dairy Team fulfills this mission in a variety of ways.

- Educational programs are held throughout the state focusing on issues identified by the industry
- Research and demonstrations are conducted directly with dairy producers
- Farm visits reinforce and help to apply research-based information and concepts to your unique farm operation
- Educational resources and event information are shared through our website <https://www.canr.msu.edu/dairy/>, news releases and emails

Call us if you need help with problem-solving, evaluating alternatives, planning for the future, or learning another perspective on your operation. Please don't hesitate to call!

You can find any MSU Extension employee at:

<https://www.canr.msu.edu/dairy/experts>

Follow Us!

Use the QR code below to receive occasional text message updates from the MSU Dairy Extension team:



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PROGRAMS

VIRTUAL COFFEE BREAK WITH THE MSU DAIRY TEAM PODCAST

Overview: Listen to podcast episodes covering a wide variety of dairy related topics from your phone or smart speaker. New episodes are released in Spring and Fall. The podcast is available on Spotify, the Apple podcast app, and the most popular platforms.

More information: Contact Martin Mangual at 616-994-4581 or email carrasq1@msu.edu.

BECOMING THE EMPLOYER OF CHOICE

Overview: For farm managers seeking to improve their farm's employee engagement. This program is a series of four modules offered virtually for self-study with a facilitated discussion for the workshop cohort after each module. This program, developed at the University of Wisconsin in collaboration with Michigan State University and the University of Minnesota, helps participants develop the leadership skills to attract and retain talented employees.

More information: Contact Phil Durst at 989-387-5346 or durstp@msu.edu.

FACEFARMLIVE! PROGRAM

Overview: This program provides information on farm issues and important procedure improvements to enhance dairy operations. The information will often be shared live through social media groups. Videos will also be posted in two dairy groups, including "Young Progressive Dairy Group of West Central Michigan" and the "Thumb Dairy Group".

Details: For information about how to access and register with the group contact Martin Mangual at 616-994-4581 or email carrasq1@msu.edu.

4-H ANIMAL SCIENCE CAREER QUEST

Overview: Join this workshop held on MSU's campus to learn more about being a Spartan, careers in animal science, and tour animal science facilities. Open to youth ages 12-19 as of January 1, 2024.

Contact Persons: Autumn Converse at conver20@msu.edu and David Lindsay at lindsa75@msu.edu

Location: Anthony Hall and South Campus Animal Farms; MSU campus in East Lansing

Date: February 17, 2024

Registration: Registration through ANR Events forthcoming

Cost: \$35 per person



MICHIGAN 4-H DAIRY CONFERENCE

Overview: This weekend workshop will focus on all things dairy cattle nutrition. MSU and MSU Extension faculty, industry partners, and MSU students will lead educational sessions throughout the weekend. Join MSU Extension Gold Volunteers and 4-H youth (ages 12-19 as of January 1, 2024) from across Michigan for a weekend of learning, leadership, and fun!

Contact person: Kendra Van Order (vanorde4@msu.edu)

Location: TBD

Date: TBD

Registration: Kendra Van Order (vanorde4@msu.edu); registration will take place through ANR Events

Cost: TBD

WEST MICHIGAN DAIRY EDUCATIONAL DINNER

Overview: The event features Dr. Roger Thompson and Dr. Ron Erskine to discuss ways to improve the performance of the milking parlor in a dairy operation. Dinner, educational seminars followed by an open discussion with attendees are the event's theme.

Contact person: Martin J. Mangual, (carrasq1@msu.edu)

Location: District 5 Schoolhouse, Zeeland, MI

Date: January 23, 2024; Planning for Jan. 2025

Registration: Martin J Mangual (carrasq1@msu.edu); registration will take place through ANR Events by calling 616-994-4581

Cost: \$15

FEEDER SCHOOL PROGRAM

Overview: This in-person program will provide important information to improve the skills and knowledge of dairy feeders.

Details: The event provides theoretical and practical information to evaluate, improve, and troubleshoot the on-farm feeding program. It includes hands-on activities for TMR evaluation and DM testing. This program is targeted at dairy farm feeders.

Contact Person: Martin J Mangual (carrasq1@msu.edu)

Location: TBD

Date: TBD

4-H EXPLORATION DAYS

Overview: This MSU pre-college program welcomes youth ages 12-19 to explore their future, try new things, and experience college life! During this three-day event, youth will gain confidence and independence through hands-on learning and making lifelong friendships.

Contact Person: Laura Potter-Niesen, 4h.expodays@msu.edu

Location: MSU Campus, East Lansing

Date: June 19-21, 2024

Registration: https://www.canr.msu.edu/4_h_exploration_days/

Cost: \$220

MICHIGAN 4-H YOUTH DAIRY DAYS

Overview: A week for Michigan youth to showcase their dairy knowledge and skills, earn awards and scholarships, and vie for a place on national teams representing Michigan in dairy cattle judging, management skills, and quiz bowl.

Contact Person: Kendra Van Order (vanorde4@msu.edu)

Location: MSU Pavilion, East Lansing

Date: July 15-19, 2024

Registration: Kendra Van Order (vanorde4@msu.edu); online registration to come

Cost: \$10/head of cattle entered in the youth show or showmanship; no cost for youth to participate in educational events

NATIONAL 4-H DAIRY CONFERENCE

Overview: A youth leadership conference for 4-H youth to learn about the global dairy industry, visit historical sites in the greater Madison area, and visit the World Dairy Expo! The event is open for 4-H youth ages 15-18 (as of January 1, 2024); spaces are limited!

Contact Person: Kendra Van Order (vanorde4@msu.edu)

Location: Madison, Wisconsin

Date: September 29-October 2, 2024

Registration: Kendra Van Order (vanorde4@msu.edu/517-432-4306)

Cost: TBA

BREAKFAST ON THE FARM

Overview: These consumer education events provide an on-farm opportunity to learn about modern agriculture. Visitors will learn firsthand how farmers care for animals, protect the environment and produce safe and nutritious food.

Dates and Locations: July to October with specific dates and locations to be determined in early 2024.

Registration: More information is available at www.breakfastonthefarm.com or you may contact Ashley Decker at 586-469-7616 / kuschela@msu.edu or Mary Dunckel at 989-354-9875 or dunckelm@msu.edu.

2024 FARM BILL PROGRAM (Part of Farm Policy and Risk Management Series)

Overview: These sessions will help agricultural producers explore their options for 2024 Farm Bill commodity programs. MSU Extension experts will provide information on current policy updates and how these relate to the 2018 Farm Bill. Program statistics and payments from 2023 will also be highlighted. Speakers will explain how current and new program payments, such as Price Loss Coverage and Agricultural Risk Coverage, are calculated. They will also review how Farm Bill programs interact with crop insurance policies. The session will also provide examples using the MSU Extension Farm Bill calculator. The calculator helps showcase which programs may produce the most benefits for a producer's individual needs.

Dates and Locations: January 23, 2024 at 1 p.m. or February 13, 2024 at 6:30 p.m. Online via Zoom

Registration: events.anr.msu.edu/fprms/

Cost: Free



BEEF QUALITY ASSURANCE

Overview: Every beef and dairy producer is obligated to utilize judgement and management which leads to a safe and positive eating experience for beef consumers. Beef Quality Assurance (BQA) is a voluntary program, promoted through the Beef Checkoff since 1982, to educate about accepted management skills and scientific knowledge to prevent beef product defects. The program's goal is to ensure that all cattle are healthy, wholesome; managed to meet USDA, FDA, and EPA standards; produced with environmentally-sound production practices; and handled within acceptable animal welfare guidelines. Some major regional packer/processors are now requiring BQA certification of their fed cattle suppliers. Join the nearly 2,500 Michigan producers who are BQA certified. More information on BQA training and certification options are at: canr.msu.edu/courses/beef-quality-assurance

MSU MANAGING FARM STRESS

Overview: We provide free resources and services to support farmers' mental health and wellbeing. Our services include teletherapy, educational presentations, farm financial analysis, business management strategies, free online courses, mental health first aid, and other farm stress resources.

More Information: Contact Dr. Remington Rice at riceremi@msu.edu or visit extension.msu.edu/legacygrants



Employee On-Farm Trainings

Trainings are offered upon request on dates and times that accommodate the farms' schedules. The content of each training is customizable to reflect the farm's specific protocols. All trainings are available in English and Spanish.

To request an on-farm employee training, please contact any MSU Extension dairy educator.

STOCKMANSHIP

This on-farm training session will cover general stockmanship and animal handling. This training meets the requirements of the National Dairy FARM program.

DOWN COW MANAGEMENT

Farm staff will learn about the care of down cows and why these cases should be considered emergencies.

CALF CARE

Dairy farm employees, managers, and owners will learn, hands-on, the basics of calf care, along with new management practices and research to grow calves to their full potential.

DEHORNING WITH PAIN MITIGATION

This hands-on training will cover the use of a hot iron dehorner and caustic paste, and the proper medication administration techniques for pain management in calves.

MATERNITY

This on-farm training goes over the do's and don'ts for a dairy feeder while focusing on explaining the why of their tasks and standard operating procedures.

HANDS-ON EUTHANASIA

Using portable models and a captive bolt stunner, this on-farm training teaches placement and protocols for proper euthanasia.

FARM TEAM COMMUNICATION

The objective of this training is to improve the communication of teams by reviewing the concepts of active listening, effective communication, and conflict approach.

Employee On-Farm Evaluations

These evaluations are available upon request.

To request an on-farm evaluation, please contact your MSU Extension dairy educator.

FEEDING PROGRAM EVALUATIONS

With this assessment, the farm will have a thorough evaluation of the feeding program. The evaluation focuses on 6 core areas: efficiency, mixing, production, shrink, hygiene, and safety. A detailed report of findings and recommendations for improvement is provided for farms. Focus areas also include pushup routine, mixing procedure, and equipment evaluation, among others. After this assessment most farms elect to participate in the feeder training.

PARLOR PERFORMANCE EVALUATIONS

Evaluations combine the use of digital vacuum recorders (VaDia) and other metrics to analyze milking protocols and parlor efficiency and provide recommendations to address issues such as bimodal milking and poor milk quality. Data can also be used to tailor milker-training programs for the participating farms.

HEAT STRESS ASSESSMENT

This assessment will thoroughly evaluate the farm heat stress abatement strategies. The evaluations include wind speed mapping, barn temperature, THI (temperature humidity index) measurement, and other indicators of heat stress. In addition, a detailed report of findings and recommendations for improvement will be provided to the farm.

EXTENSION DAIRY ADVISORY TEAM:

The MSU Extension Dairy Advisory Team is a group of progressive dairy producers and professionals selected to provide input on needs in the industry and feedback on MSU Extension activities. It is also a great opportunity to network with and learn from peers and MSU personnel. Members serve two-year terms and meet regularly by phone and in person twice per year.

2023 - 2024 MEMBERS:

Miguel Acevedo	Evelyn Okkema
Andrew Arens	Joe Packard
Nathan Brearley	Jennifer Roberts
Jake Buning	Ron Rusk
Carrie Ceh	Sarina Sharp
Husbaldo Dominguez	Maddy Sokacz
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Richard Pursley	Reproduction	517-281-7289	pursleyr@msu.edu
Zelmar Rodriguez	Milk quality	612-261-9797	zelmar01@msu.edu

Management Tips

MSU Dairy Extension Team



Sarah Fronczak

Liquid manure pit closure: guidelines for risk management

Farms and farm enterprises change over time. As your farm acquires property or shifts goals you may find that you have an unwanted liquid manure storage facility on your property. These facilities can be an unnecessary risk to people and the environment. Below is a guideline to the steps of closing a manure storage facility.

1. **Use precaution:** Communicate with farm staff where and when there will be earth moving activities. Also, communicate that the facility is not to be used for waste disposal in the future. Use appropriate lock-out-tag-out procedures during confined space entry while cleaning and closing the facility.
2. **Remove existing waste:** Agitate and pump liquid and slurry waste. Transfer the waste to another storage facility, considering the impact on capacity the transferred waste will cause, or utilize all waste and soil removed from the facility.
3. **Remove structural components:** There are three options for decommissioning liquid waste storage ponds that are in the ground: breaching the embankment impoundments, backfilling excavated impoundments, or conversion to freshwater storage.

Please note that this guidance to close these facilities and additional assistance isn't exhaustive and should serve to help aid the process of closing these facilities but should not be your only source of assistance.

By Sarah Fronczak

[View full article here](#)



Farmers have plenty to glean from MI Ag Ideas to Grow With

The MI Ag Ideas to Grow With virtual conference is an annual event held during Michigan State University's Agriculture and Natural Resources Month celebration. This year's conference will be held February 19 through March 1. Michigan State University Extension educators coordinate the educational offerings for this event.

With over 40 educational sessions to choose from, the event is rich in learning opportunities. Depending on what you grow, there are a variety of sessions on field crops, animal agriculture, irrigation and water, solar, farm stress, and beginning farmer specific topics throughout the two-week period. The following are just some of the many educational options that may be of interest:

- **Feb. 20 - The Three F's of Farmland: Finding It, Funding It, and The Future of It:** Learn tools to find farmland, fund it and to keep it farmland for future generations.
- **Feb. 27 - Soil Health for Beginnings: Caring for Your Farm from the Ground Up:** Learn how to care for your soil and how to support better crop production.
- **Feb. 28 - Farm Budgets: Growing Your Farm Into A Business:** Join as we discuss how attention to details and effective planning can help your farm continue its growth into a successful business.

This event is offered to participants at no cost. However, participants must register at <https://www.canr.msu.edu/miagideas/registration>.

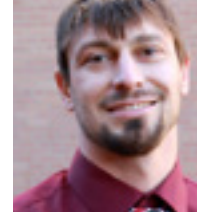
By Mariel Borgman and Jon LaPorte

[View full article here](#)



Management Tips

MSU Dairy Extension Team



Jerad Jaborek

A valid veterinarian-client-patient relationship is key to successful cattle health

Regulations now require veterinarian oversight in providing medical treatment to animals since medically important antimicrobials are no longer available for purchase over the counter. This is one of many regulatory changes implemented regarding administering antimicrobials to food producing animals over the last decade due to the growing concerns of metaphylactic treatment (antimicrobial treatment of at-risk but asymptomatic animals) of food-producing animals and antimicrobial resistance.

As beef or dairy cattle producers, we must maintain a valid veterinarian-client-patient relationship (VCPR) with a licensed veterinarian in order to obtain the antimicrobial drugs needed to treat sick cattle. Below are tips on how to develop a VCPR with your veterinarian:

- Set up regular farm visits to keep your veterinarian accustomed to your farm's animals and management practices
- Work with your veterinarian to develop biosecurity protocols for your farm to prevent incoming disease threats
- Work with your veterinarian to develop a herd health protocol/schedule for disease treatment, control and prevention throughout the year

Take the time now to have meaningful conversations with your veterinarian about preparing your cattle or dairy operation for herd health events.

By Jerad Jaborek

[View full article here](#)



2023 MSU Custom Work Rates Report

Many farm operations reach out to other farms to help fulfill production activities. These custom operators can fill a gap that would otherwise make it difficult to meet farm goals. The MSU Custom Work Costs report offers a base to determine a fair exchange value for both provider and recipient of custom work.

The 2023 Custom Work Rates report covers a wide number of basic field machine operations. It provides a summary of the estimated costs of these operations based on the University of Minnesota's Machinery Economic Cost Estimates worksheet. The Michigan State University Extension version published here provides Michigan-based estimates of the costs of operating machinery in these different production tasks. This publication also divides the costs into some of their component parts.

Keep in mind that rates can be different in areas of Michigan depending upon several factors. These can include field size and shape; ease of access; amount of non-farm traffic to get to the field; machine size and road or bridge widths; trash in the field; weed history; trees or brush hindering work; depth and amount of field drainage tile; payment arrangements; and other factors.

Custom operators need to consider relevant factors that impact their costs and adjust their custom rate charge accordingly. In some cases, adjustment may be needed for changes in the price of fuel and differences in size or efficiency of the machine work done. It is common for small custom jobs to have a 20% to 30% higher cost of operation than a larger job.

[View the 2023 Custom Work Rates report here](#)

By Corey Clark



Management Tips

MSU Dairy Extension Team



Phil Kaatz



Erin Burns

Managing the top five toughest weeds in Michigan hay fields

When hay producers go to the field this summer to harvest forage crops, one of the challenges they face is how to address the weeds that creep in over time. Starting with a vigorous forage stand is the best way to prevent weeds from getting established. The first step in controlling any pest is to properly identify the weeds. Secondly, if control methods include using pesticides, always follow label recommendations since the label is the law. Additionally, many herbicides outlined below have long residual activity or restrictions on forage and manure management.

Wild carrot (Queen Anne's lace)

This biennial is a deep-rooted plant that emerges in year one as a rosette, bolts in year two and forms flowers as early as June.

- **Mechanical control:** Mowing or clipping at late flowering stage reduces size and seed production.
- **Chemical control grasses:** Crossbow.
- **Important considerations:** Widespread 2,4-D resistance and careful grazing management and clipping plants before they set seed is effective and economical.

Horsenettle

Horsenettle is a perennial weed that reproduces by seed and vegetatively. The plants flower in late spring to early summer forming yellow berries. Vegetative parts of this weed and its fruit can poison livestock.

- **Mechanical control:** Tillage at any depth can spread horsenettle. Mowing is not highly effective.
- **Chemical control grasses:** Milestone, Crossbow, and GrazonNext HL
- **Important considerations:** Optimal time to apply herbicides is at the flowering stage, prior to formation of berries.



Hoary alyssum

This is an annual to short-lived perennial weed with a long taproot that spreads by seed. Controlling hoary alyssum is critical prior to the initial seeding of the hay field.

- **Mechanical control:** Tillage will control emerged plants prior to planting.
- **Chemical control legumes:** Metribuzin (dormant alfalfa and alfalfa/grass).
- **Chemical control grasses:** 2,4-D and dicamba
- **Important considerations:** Nutrient management is important to maintain competitiveness of desired forage over hoary alyssum.

Curly dock

This is a perennial weed with a large, thick taproot that often shows up in older stands of alfalfa, alfalfa and grass, or all grass hayfields. Reproduction is by seed. This plant can be toxic when consumed in large amounts.

- **Mechanical control:** Mowing can help reduce populations.
- **Chemical control legumes:** Raptor and Pursuit
- **Chemical control grasses:** Cimarron plus, 2,4-D, dicamba, GrazonNext HL, and Crossbow.
- **Important considerations:** Problematic in older stands.

Canada thistle

This perennial spreads by seed and rhizomes. Emergence occurs in the spring and plants flower when days are the longest.

- **Mechanical control:** Tillage at any depth can spread Canada thistle. Infrequent mowing is not effective.
- **Chemical control grasses:** Cimarron plus, Crossbow, Milestone, GrazonNext HL, and Stinger.
- **Important considerations:** Most susceptible to herbicides between the bud and early flower stages or in the early fall prior to frost.

By Phil Kaatz and Erin Burns

[View full article here](#)

Research Drill Down

Zelmar Rodriguez

Investing in excellence: Milk quality and udder health training

Following an appropriate milking routine has a profound effect on reducing mastitis and improving food safety and milk quality. Our research has shown that training of farm workers generates knowledge, satisfaction and a willingness to adhere to milking protocols resulting in quantifiably better milk quality, food safety and udder health.

Milking routine in the context of milk quality and udder health

Clinical and subclinical mastitis are among the costliest diseases in dairy farming given their negative effect on milk quality and milk yield, ultimately affecting profitability of the dairy. Among the procedures occurring on a dairy farm, there are very few with a more profound effect on reducing mastitis and improving food safety and milk quality than an appropriate milking routine. Multiple studies have evaluated each of the recommended steps of the standard milking routine reporting overwhelming benefits. Nevertheless, the variability in milk quality among dairy farms may be partly explained by poor protocol compliance.

Training as a milking routine limitation

Based on my experience, an important limitation to effectively following a milking routine by farm personnel is the lack of understanding of the reasons behind and

importance of this essential part of the milking process. In other words, people need to know why they have to do what they have been told to do.

Multiple studies underscore the positive impact of training programs on various aspects of dairy farm operations which ultimately results in a positive return on equity. While there is no “one-size-fits-all” solution for mastitis management procedures, general training tailored to the specific needs of the farm may be impactful. However, there is limited follow up assessment of milking routine training program effectiveness to achieve improved protocol compliance and udder health on dairy farms.

Evaluating the impact of training - Research at MSU

Therefore, together with Dr. Pamela Ruegg from MSU and Drs. Mario Lopez and Marianna Gentilini from DeLaval, we carried out an experimental study to address the following questions:

- What is the current knowledge of farm workers about milking routines and how much can they learn about it?
- What is the impact of training farm workers on milking procedure compliance, udder health and milk quality?

From April to September 2023, I visited 16 dairy farms, three times each. The initial visit involved a visual parlor evaluation, the second visit was to deliver a bilingual training session on milk quality and milking routine compliance, and the final visit was to conduct a post training parlor evaluation (Fig. 1). The parlor evaluations included recording pre-milking preparation times, such as contact time of pre-milking teat disinfectant, stimulation time, and milking time, along with assessing parlor and operator performance.

The training session (about 1 hour) covered the pathogenesis, identification and risk factors of mastitis,

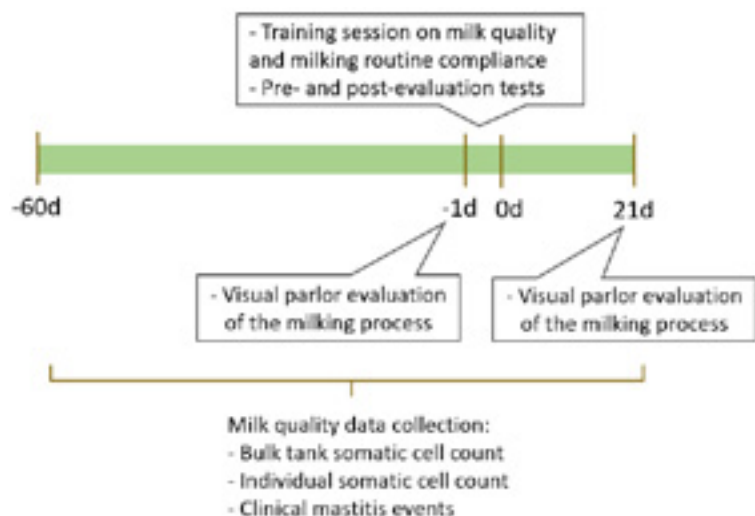


Figure 1. Study timeline: 16 dairy farms from Michigan (9) and Ohio (7) were visited 3 times each to do a visual parlor evaluation before and after the delivery of a training session focused on milk quality and milking routine compliance.

and the reasons for each of the steps in the milking routine on that particular farm. The milking routine was discussed, and any necessary adjustments were agreed upon by workers and employers during the training session based on the first parlor evaluation. All participants took voluntary and anonymous pre- and post-evaluation tests with 10 questions each, completed socio-demographic questions, and rated their level of satisfaction with the training material.

Through this article, I will highlight the most relevant results from this research:

1) Dairy workers participating in the study mirrored the national dairy workforce.

The study involved 112 farm workers from 16 dairy farms who care for 17,205 cows. All farms had parallel or herringbone parlors. The median herd size was 1,101 cows and ranged from 280 to 2,330 lactating cows. The average number of employees was 15, ranging from 8 to 32.

The sociodemographic information of participants largely reflected national trends in the dairy farm workforce, suggesting a good generalizability of our findings. Specific results included:

- 75% of participants spoke Spanish, highlighting the importance of considering language barriers in training programs.
- The diverse educational background of workers represents a challenge for educators when generating training content for all participants.
- 70% of employees have less than 1 year of experience, likely related with the 33% turnover during the previous year (ranging from 0% to 125%) in the participating farms. Considering the limited experience by most employees, training workers to understand the milking protocol became crucial to achieving optimal milking performance.



Figure 3: During the training session, we discussed how achieving optimal milk quality and udder health doesn't originate at the parlor, but instead begins with the proper cleanliness of pens.

2) Dairy workers gained knowledge on the reasons and importance of adhering to the milking routine on their farms.

- As compared to pre-test scores, dairy worker knowledge of the milking routine increased by 18% (Fig. 2) on average.
- During group discussions, milking technicians, managers, and owners had the opportunity to reach consensus on various topics. For instance, they clarified procedures for managing abnormal milk, particularly in mild clinical cases.
- The least clear topic was the importance and function of pre-milking teat disinfection (Fig. 3-4) followed by concepts related to milk letdown. However, there was substantial improvement in both topics after training (Fig. 2).
- Employees rated the training as highly beneficial (average score 4.5 out of 5) in terms of improving their understanding of the milking process, ease of comprehension, and immediate practical applicability in the field (Fig. 5).

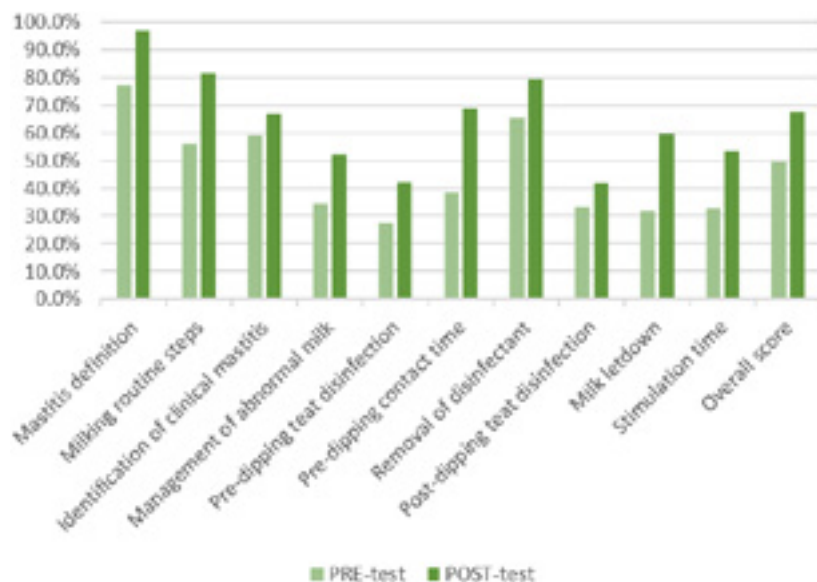


Figure 2. Knowledge change by topic immediately after the training session on milk quality and milking procedure compliance.

3) The training session generated a positive impact in milking routine compliance, milk quality and udder health

- Inadequate preparation time decreased from 41% of cows before training to 16% after training.
- Insufficient teat coverage decreased from 9.8% before training to 5.9% after training.
- Average stimulation time was reduced to 105 seconds/cow (target between 60 to 180 seconds).
- Pre-milking teat disinfection contact time increased 9 seconds/cow (recommendation is > 30 seconds).
- Milking time was reduced 25 seconds, likely due to reinforcement during training on avoiding unnecessary reattachment, and special attention if reattachments are set in manual.

There was improvement in milk quality and mastitis identification. The main findings were:

- Bulk tank somatic cell counts after training stopped the seasonal increasing trend during the 21 days after intervention.
- An increased number of clinical mastitis cases were recorded during the week after the training, likely because of reinforcement of forestripping as the best method to identify clinical mastitis.



Figure 4: Part of the training session focuses on common mistakes related to post-milking teat disinfection and its negative impact in milk quality and udder health.

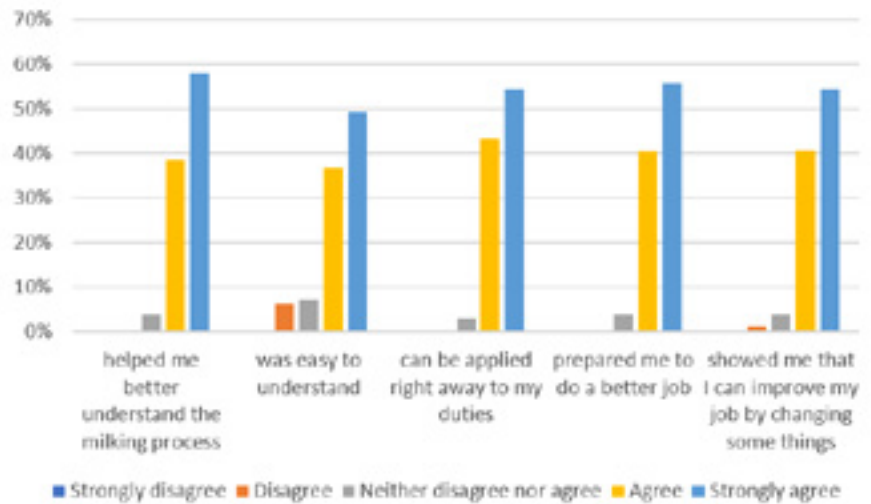


Figure 5. By the end of the training session participants were asked their thoughts about the training session on milk quality and milking procedure compliance.

What to remember?

Training farm workers generates knowledge, satisfaction, and a willingness to adhere to the milking protocol, resulting in quantifiably better milk quality and udder health. Thus, investing in a well-trained workforce in your dairy will result in better job performance and increased job satisfaction.

MSU Extension educators are available to provide on-farm training for employees throughout Michigan, covering multiple areas of dairy management both in English and Spanish. Educational resources, event information, and list of dairy experts are shared through our website www.canr.msu.edu/dairy. Also, you can reach out to me to zelmar01@msu.edu.

Meet the Author



Zelmar Rodriguez

Assistant Professor
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Michigan Dairy Recognition

Shining a light on industry leaders



Hudsonville Ice Cream Receives Dairy Food's Plant of the Year Award

Located in Holland, Hudsonville Ice Cream has been making dessert for Michigan since 1926. The Ellens family, owners since 2003, focus on technological advancement and the people behind the product. Adding automated packing lines, a new freezer, and foreign material controls help the company remain competitive and agile. A daily ice cream taste test and food safety training ensure that employees have the tools they need to make the best products. Committed to community relationships, Hudsonville sources all milk from farms less than 60 miles from the plant.

What is the secret to their success? CJ Ellens, head of sales and marketing, says it best. "We make a great product that is real ice cream. What makes it even richer is who we make ice cream with. It's all about our employees, customers, vendors, and equipment manufacturers."



Eric Frahm Continues to Serve the Michigan Dairy Industry

The recent service and accomplishments of Eric Frahm, owner of Golden Elm Dairy, are too numerous to list. Since graduating from MSU with a dairy science degree, his career has been defined by his service to others. Most notably, he is the treasurer of the Michigan Milk Producers Association and has served on the board since 2006. Eric was re-appointed to the Michigan Dairy Market Program Committee in 2023 and has held this position for 19 years. Finally, he has helped administer over \$126,000 in scholarships for the 2022-2023 academic year as the president of the Michigan Dairy Memorial Scholarship. Thank you for all you do!



Paul Windemuller: Positive change, Partnerships, and Podcasts

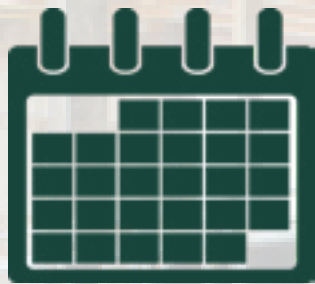
2023 was a busy year for Paul Windemiller of Dream Winds Dairy in Coopersville. Besides serving on the review committee for the design of the new MSU Dairy Research facility, he also served on the Dairy Farmers of America Mideast Area Council Board. Instead of taking it easy in 2024, he is embarking on a new set of challenges to benefit the dairy industry.

He was awarded the 2024 Nuffield Scholarship to investigate artificial Intelligence implementation in ruminant livestock, allowing him to further his knowledge by traveling and subsequently presenting his findings at the Nuffield Farming Conference. Paul also launched AgCulture, a podcast that shares diverse perspectives on agriculture through conversations with agripreneurs. To listen, go to agculturepodcast.com.

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Mark your calendar

Want to connect with your local dairy extension educator? Find them here:



- [MI Ag Ideas to Grow With Conference](#)
Online - Feb. 19 - March 1
- [Michigan Dairy Health Symposium](#)
East Lansing, MI - Feb. 29
- [Artisan Cheese Workshop](#)
East Lansing, MI - Feb. 29 - March 2
- [Field Crops Breakfast Series](#)
April - September
- [Michigan Dairy Expo and Michigan 4-H Youth Dairy Days](#)
East Lansing, MI - July 15-19
- MSU Dairy Education Academy
East Lansing, MI - Fall