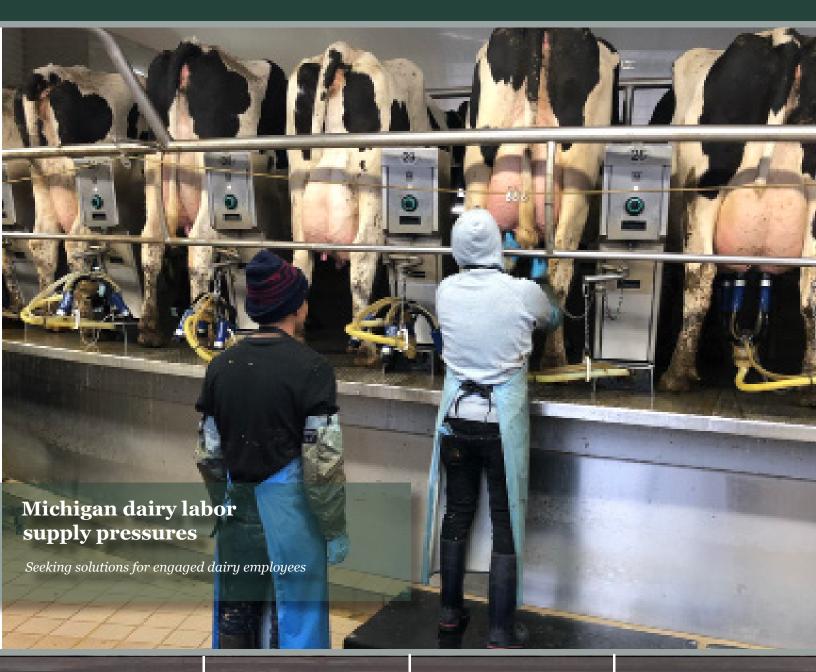
Spartan Dairy

Newsletter

Fall 2023 Vol.3 No.3



Feeder Training Program hosted by MSU Extension dairy team

pg. 4

MSU shines at American Dairy Science Association Annual Meeting **pg. 5** Low colostrum yield in dairy cows

pg. 8

Taking care of young calves in cold weather

pg. 10





Table of Contents



Dairy Spotlight.....pg. 2

- Angel Abuelo
- Melissa Elischer

News and Updates.....pg. 3

- 2023 Michigan 4-H Youth Dairy Days in review
- Update on new MSU dairy facility
- Feeder Training Program hosted by MSU Extension dairy team
- MSU researchers link auto and dairy industries to explore sustainable climate solutions
- MSU shines at American Dairy Science Association Annual Meeting
- Attend the All Things Bovine Leukemia Virus Conference
- MSU Dairy Industry Tailgate
- Great Lakes Regional Dairy Conference

Management Tips.....pg. 8

- Concentrate feeding strategies for maximizing performance in automated milking systems
- · Low colostrum yield in dairy cows
- Mindful manure application
- Can isoacids improve dairy cow productivity?
- Natural ventilation during the winter months for dairy barns
- Taking care of young calves in cold weather

Research Drill Down.....pg. 11

· Michigan dairy labor supply pressures

Michigan Dairy Recognition.....pg. 14

- Stan Moore
- Stephanie Schafer
- Matt Wood

How would you like to receive this newsletter?







Dairy Spotlight

Angel Abuelo and Melissa Elischer



Angel Abuelo: Dairy Extension Veterinarian

I grew up in northwest Spain. My parents were the first generation off their respective dairy farms, meaning that I spent all the weekends and breaks helping at the farms. It was here where I developed a passion for cattle care, and this led me to study veterinary medicine at the University of Santiago de Compostela. After a short stint in practice, I went back to pursue a masters and a PhD on transition cattle immunobiology. I also completed a residency (clinical specialism training) in bovine health management in Munich, Germany, and a masters in veterinary education at the Royal Veterinary College in London, UK. Currently, I am a registered specialist in cattle health management in North America, Europe, UK, and Australasia.

When I was done with schooling, I spent almost 3 years on faculty at Charles Sturt University (Australia) before taking my current position at MSU. At the College of Veterinary Medicine, I maintain federally funded research and extension programs,

teach a final-year rotation on dairy production medicine, and provide continuing education to veterinarians. My team focuses on strategies to improve immunity in the neonatal and periparturient periods of dairy cattle utilizing strategies such as nutritional interventions or vaccination protocols. Working with many dairy farmers and veterinarians through my role as MSU's dairy extension veterinarian is also a facet of my position I thoroughly enjoy. The level of support of the Michigan dairy industry for applied research and extension is second-to-none and makes our work more impactful.

Outside of work, I like to exercise (I'm an early-morning gym goer now), cycle, kayak, hike with my dog, and overall enjoy the Great Lakes. I also like to cook and read, as well as traveling to new places.



Melissa Elischer: Academic Specialist

My path to the dairy industry was far from linear. I grew up in Northwest Indiana, the land of steel mills and sand dunes. At Purdue University, I started a degree in the College of Liberal Arts. One class away from graduation I was burned out and very much regretting my educational choices. After seeking advice and taking a variety of skill assessment tests, the results came back: equally adept in arts and science...so now what?

A valuable piece of advice came to mind, "Think about what you wanted to be when you were kid." Path #1 didn't work, so I went Path #2: pre-vet. I did NOT have the stomach for medicine, but I excelled with animal behavior and welfare topics. I worked with several faculty members and their grad students with swine, laying hens, beef cattle, mice, and turkey poults. I had livestock experience, but not dairy.

A graduate position at MSU opened to study periparturient dairy cattle health and welfare in a pasture-based automatic

milking system. Interesting questions, new species – I'm in! This was my start with the dairy industry and it was one of the best professional choices I've made.

Not only did I have the pleasure of working with dairy cattle, youth, and farmers, but I also earned my master's degree, had a ten-year career with MSU Extension as the 4-H Dairy Educator for the state, and recently started a new adventure as a teaching Academic Specialist in the MSU Department of Animal Science. Thank you to the dairy industry for the people, opportunities, and cattle I've had the pleasure of working with.

All things dairy at MSU

2023 MICHIGAN 4-H YOUTH DAIRY DAYS IN REVIEW

Eighty-three youth from 24 counties gathered at the Michigan State University Pavilion for Livestock and Agricultural Education to participate in Michigan 4-H Youth Dairy Days, July 17-21. The program is hosted by Michigan State University Extension 4-H and the Department of Animal Science. Youth demonstrated their skills in handling cattle during the showmanship and breed shows and their dairy science knowledge during the management, judging and quiz bowl contests held throughout the week. The main topic of the event this year was dairy nutrition, and many stations during the management contest and questions in the quiz bowl contest focused on this subject. Specifically, topics included identifying feed components, use of the Penn State Particle Separator, metabolic diseases, digestive tract anatomy, and more.

Individual and team awards were presented at the event in three age divisions for each of the educational contests. Youth in the novice (ages 8-11), junior (ages 9-14), and senior (ages 15-19) divisions compete against their peers from all over Michigan to take home a blue ribbon. Youth in the junior and senior divisions may also earn an additional award for their performance during the week – Overall High Rank and Reserve High Rank. Junior and senior 4-H members who participate in at least three of the four events are eligible. Their placings in each event throughout the week are tallied and the top two juniors and seniors are recognized with an educational scholarship.

Congratulations to all the participants for their hard work before and during the week! Thank you to families, volunteers, and coaches for their continued support of the 4-H dairy project and Michigan 4-H Youth Dairy Days!

View full article here





UPDATE ON NEW MSU DAIRY FACILITY

Planning for the new MSU dairy research and teaching facility is progressing! Over the summer, the design team developed plans for a tunnel-ventilated freestall barn with 680 stalls, barns for calves up to 6 months of age, and a sand recovery system compatible with the anaerobic digester. In addition, the facility will accommodate school tours as well as space to hold two concurrent MSU classes on site. The team has now moved into the detailed design phase, and the project remains on track to move cows into the new facility in 2026.



All things dairy at MSU

FEEDER TRAINING PROGRAM HOSTED BY MSU EXTENSION DAIRY TEAM

Did you know that more than 60% of the costs on a dairy pass under the eye of the feeder? On August 2, the MSU Extension dairy team hosted a bilingual feeder training program for 12 feeders from farms around central Michigan to provide dairy feeders with the esstential skills needed to excel in their role.

The free training covered accurate diet mixing, commonly used feedstuffs, managing feed ingredients, efficient mixing and feed bunk troubleshooting. The training took place at the MSU Dairy Cattle Teaching & Research Center and was supported by Caledonia Farmers Elevator and the Michigan Alliance for Animal Agriculture. Interested in organizing a similar training in your part of the state? Contact Martin Mangual at carrasq1@msu.edu for more information.





MSU RESEARCHERS LINK AUTO AND DAIRY INDUSTRIES TO EXPLORE SUSTAINABLE CLIMATE SOLUTIONS

One of the next climate change solutions might be found at your local dairy farm. A team of Michigan State University researchers is studying ways to generate renewable energy from dairy farm waste to charge electric vehicles (EVs).

On July 19, Wei Liao, a MSU Department of Biosystems and Agricultural Engineering (BAE) and the director of MSU's Anaerobic Digestion Research and Education Center (ADREC) led a workshop demonstrating the research findings. He was joined by MSU animal science professor Barry Bradford, BAE professor Ajit Srivastava, dairy farm manager Jim Good and BAE research specialist and ADREC manager Sibel Uludag-Demirer.

Liao said his hope is to implement mobile EV charging units on small and medium-sized dairy farms to reduce carbon emissions from gasoline-powered vehicles. This innovation could help to encourage the dairy industry to become carbon neutral or have net zero carbon emissions.

While there wouldn't be enough power to charge a whole dairy operation, producers would be able to use it for other operational activities. For example, the energy from these units could charge batteries of emerging electric skid-steer loaders, or small low-power tractors used to clean animal pens.

Electric charging stations on dairy farms could bring additional economic opportunities. As EVs become more popular and people look for places to charge them, dairy farms could become a viable option that allow visitors to charge their cars while also experiencing the work of local farms.

View full article here



All things dairy at MSU

MSU SHINES AT AMERICAN DAIRY SCIENCE ASSOCIATION ANNUAL MEETING

The American Dairy Science Association (ADSA) is an international organization of educators, scientists, and industry representatives who are committed to advancing the dairy industry. The ADSA held its annual meeting in June 2023 in Ottawa, Ontario, Canada, with over 1,500 attendees participating.

The annual meeting includes symposia and workshops that enable in-depth discussion of the latest scientific findings and dairy industry issues on a global platform. Dozens of MSU faculty and students participated in the meeting, contributing to many presentations, and several recieved awards for their work in the industry.





Dr. Pam Ruegg was awarded the Zinpro Award for Excellence in Dairy Science.

Dr. Richard Pursley won the Delaval Dairy Extension Award.

Paul Zeltzer won the MS student Dairy Foods Literature Review Award.

Several MSU dairy graduate students competed in scientific presentation contests at the meeting, and they performed exceptionally well. Notably, Madison Sokacz won 3rd place in PhD student Dairy Production Poster Contest



Dr. Pam Ruegg's research is focused on ensuring responsible antibiotic usage on farms. She holds the David J. Ellis Endowed Chair in Antimicrobial Resistance and Large Animal Clinical Sciences in the College of Veterinary Medicine.



Dr. Richard Pursley's work focuses on understanding and developing strategies to eliminate pregnancy loss following conceptus attachment in lactating dairy cows. He is a professor in the Animal Sciecnce department.



Paul Zeltzer holds a bachelors in biosystems engineering with a food concentration and masters in food safety and toxicology. He has a professional background in food safety roles in meat, dairy, and snack manufacturing operations.

All things dairy at MSU

ATTEND THE ALL THINGS BOVINE LUKEMIA VIRUS CONFERENCE NOVEMBER 8 - 10, 2023

The International All Things BLV Conference is planned as a welcoming and collaborative gathering place for sharing ideas, successes, challenges, and needs regarding BLV – while providing career development, mentorship, and training to early career individuals and students.

The international gathering for discussion and learning among researchers, extension specialists, producer, veterinarians, and students is vital for progress in global bovine leukosis diagnosis, management, and control. The conference includes presentations in BLV from leading researchers across the globe, as well as accounts of success and challenges of BLV management from engaged producers and veterinarians.

Registration closes Oct. 27. Conference price increases after Oct.15.

Register here





4 Hours Before Game Starts - Through the End of the Game Southwest Corner of Mt. Hope and Farm Lane

After a busy harvest season, spend a day with Spartan fans and fellow dairy enthusiasts at the inaugural MSU Dairy Industry Tailgate!

Join us on campus for complimentary food and drinks in advance of the MSU vs. Nebraska football game. Stay and watch the game on a big screen TV or take the shuttle across the street to the stadium.

For more information:

Bring the family, reconnect with old friends and meet some new ones!

If you are unable to access the material online, please contact ANR Event Services at 517-353-3175 or events@anr.msu.edu.

MSU is an affirmative-action, equal-opportunity employer.



Register here 6

All things dairy at MSU



GREAT LAKES REGIONAL DAIRY CONFERENCE

February 8-9, 2024

Soaring Eagle Casino & Resort | Mt. Pleasant, Michigan

Connect with experts, farmers and others in the industry to learn new tools, techniques and strategies to help your dairy thrive!

Topics:

- Dairy market and policy outlook with Marin Bozic.
- Management strategies to improve your crops, everyday cow health and labor relations and profitability.
- A deeper look at reproduction, the future of nutrition and transition planning.
- What's new in sustainability, practical health monitoring, and calf health.

Don't miss the FREE English and Spanish herdsperson sessions Thursday night, focused on cattle movement, maternity care, communication, and much more! Early Registration Ends Jan. 28!

www.glrdc.org | 989-666-3773 | honkemeg@msu.edu

Management Tips

MSU Dairy Extension Team



Victor Malacco

Concentrate feeding strategies for maximizing performance in automated milking systems

The return of an age-old practice is gaining popularity within the dairy farming community with the increasingly rapid adoption of automated milking systems (AMS) – feeding part of the ration concentrate during milking. AMS farms routinely feed concentrate at the milking robot to incentivize cows to voluntarily go to the milking robots. However, concerns and questions about the amount provided, nutritional composition, physical form and effects on overall feed efficiency, health and the economics of the system need to be addressed.

Recommendations include:

- Use pelleted feed. Reasons include reduced waste in the bowl, ease of handling and higher intake per minute.
- Do not feed more than 5 lbs. of concentrate per milking.
- Avoid feeding more than 9 lbs. of concentrate daily.
- When working in a pen where cows have homogeneous milk production, formulating a more nutrient-dense PMR and feeding less concentrate in the robot.
- There will be a difference between the amount programmed, delivered and consumed, so minimizing the amount of pellets fed will minimize the variation between amounts delivered and consumed.
- Feed high-quality forages and having good feeding management is essential for AMS as for any other dairy system.

As AMS are a relatively new technology, research-based information on the best practices for concentrate feeding strategies for AMS herds is still limited. Nonetheless, given the rapid adoption of this technology, it is imperative that such recommendations are established to optimize AMS performance. By Victor Malacco



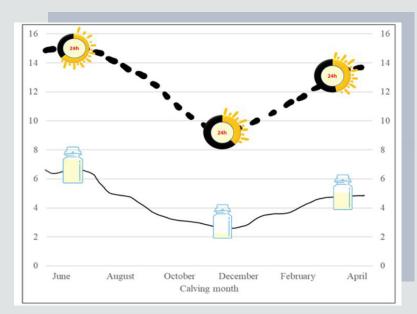


Low colostrum yield in dairy cows

Have you ever noticed that cows produce less colostrum during the fall and winter months? Despite these observations, little is known about its causes.

The reduction in colostrum yield seems to be a seasonal variation, with dry cow management and cow factors playing only a minor role in this phenomenon. Since providing extra daylight is not possible for many farms, the potential adverse effects of the colostrum shortage on calf health must be addressed through well-planned banking of high-quality colostrum and the use of colostrum replacement strategies when necessary.

Another strategy already adopted for farms that have a low prevalence of failure of transfer of passive immunity and recommended by Michigan State University Extension is the second feeding of 2 to 3



quarts of colostrum 6 to 12 hours after the first feeding. Calves that received a second colostrum feeding were less likely to develop morbidity, had better growth rates in the pre-weaning phase and tended to produce more milk in the first lactation. *By Victor Malacco*

Management Tips

MSU Dairy Extension Team



Sarah Fronczak

Mindful manure application

Frozen soil and the potential for snow build-up followed by a spring thaw, winter spreading of manure, or any other crop amendment carries with it a greater degree of risk and potential for runoff into surface waters.

Listed below are some of the risk factors and management practices Michigan State University Extension recommends considering when selecting fields for winter manure application:

- **Residue cover** helps hold nutrients in place, slow down runoff and will act as a filter by capturing manure and soil suspended in runoff before they reach surface water.
- Living roots of cover crops and buffer strips can hold nutrients.
- Field slope can increase manure application risk. The greater the slope, the higher the risk.
- **Setbacks** should be growing established vegetation or covered with undisturbed crop residue
- Monitor weather forecast and avoid manure applications if a warmup in temperature or rain is predicted to prevent nutrient loss.
- Apply manure early in winter and avoid spreading in late February to early March.
- Follow the normal farm manure application rates based on the nutrients in the manure and the needs of the crop.

Farmers should recognize the associated environmental risks with winter spreading. Individually evaluating each field and utilizing the practices listed above helps reduce those risks.

By Sarah Fronczak

View full article here



Can isoacids improve dairy cow productivity?

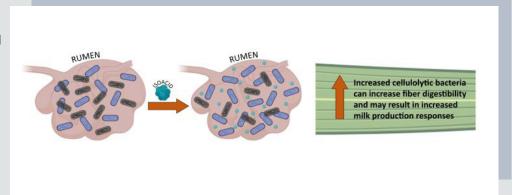
Isoacids role in rumen function has been studied since the 1950s but they have recently gained more interest from researchers. An isoacid is a chemical produced from the degradation (breakdown) of amino acids in the rumen. Learning the mechanisms involved and results of supplementing isoacids to dairy cattle, as well as their application in industry and how they can be applied can potentially increase a farm's profitability.

Isoacids are naturally produced in the rumen through digestion of protein and can improve fiber digestion. Increasing fiber digestion can increase the nutrients produced in the rumen that are used for creating milk fat, thus there is a potential to positively impact milk fat yield. Incorporation of isoacids into dairy cow diets may improve milk production performance, but it can take time to see results. Producers wanting to invest in an isoacid supplement may wait three weeks or more for a measurable boost in milk component output.

As with all supplements, profitability is the main driver of supplement use, and minor increases in milk component yields

may not overcome the cost associated with the incorporation of an isoacid product in a diet. However, the potential for an isoacid product to improve efficiency of lactation of today's dairy cow should spark discussions between dairy producers and nutritionists. By Alycia Bales

View full article here



Management Tips

MSU Dairy Extension Team



Cora Okkema

Natural ventilation during the winter months for dairy barns

Michigan regularly sees days well below freezing. Farmers can use natural ventilation basics for dairy barns using these suggestions for ventilation practices and preparation for winter weather. Controlling the internal barn environment during winter weather can be a tricky thing. With thorough preparation and an understanding of the main goals of ventilation, managing the barn temperatures and moisture can be done, even in extreme winter weather. Michigan State University Extension recommends the following steps to address winter ventilation:

- 1. Test your current air flow. Look for areas with stale air as these will be your high problem areas for moisture control. Your ventilation equipment dealer may provide this service.
- 2. Unroll all curtains, checking for holes, and patching holes when present.
- 3. Ensure all curtain mechanisms are working properly and complete repairs prior to colder weather conditions.
- 4. Assess all electric components, drive units, and gearboxes for automated systems
- 5. Checkforgaps between curtains, doors, and other openings. Sealthem minimize drafts.
- 6. Assess, clean, & repair fans that may be utilized during winter months, such as HVLS fans or variable speed fans.
- 7. If using paneling, inspect the panels for any damages and repair accordingly.
- 8. Inspect, clean, and repair ridge spaces, clearing them of bird nests other blockages.
- 9. Encourage your staff to make note of areas in the barn that may not getting adequate ventilation, drafts, and ice buildup on walkways and buildings.

By Cora Okkema

View full article here



Taking care of young calves in cold weather

Calves expend energy to keep warm. The thermoneutral zone is defined as the temperature at which the animal's heat loss equals the heat production. The animal does not have to expend extra energy to control its temperature when in the thermoneutral zone. The thermal neutral zone for a new born calf is 50-78 degrees F. This is affected by many variables including wind, moisture, hair coat and bedding. By one month of age, the calf is able to tolerate more cold and the thermoneutral zone expands to 32-78 F.

Normal milk replacer or milk feeding will not be sufficient to meet the extra energy requirements of young calves to keep warm in extreme temperatures. The pounds of milk replacer needed to meet maintenance requirements of a 100 pound calf increases 44 percent when temperatures are 15 F, compared to 50 F. If the temperature drops to 5 F, then the requirement for maintenance increases 55 percent. Ensure that milk is delivered to calves at 105 F degrees. When preparing milk replacer, follow tag instructions to properly mix the milk replacer at the correct temperature. Energy intake can be increased by adding

an additional feeding of milk or milk replacer. In addition to providing increased calories via milk, supplying calves with warm water will aid to maintain body temperature and improved hydration for physical development and immune system readiness.

Dry newborn calf coats as soon as possible to prevent drastic heat loss from the calf. This can be done in a calf-dryer box or with towels. Extra bedding will help the calf keep warm and dry. Deep bedding will trap warm air in addition to keeping the calf dry. A calf blanket can also be used with deep bedding to give the newborn calf extra protection. Be sure that the calves are not sweating underneath the coat resulting in wet hair and being chilled as temperatures drop.

By Cora Okkema



Research Drill Down

Zachariah Rutledge and Phil Durst

Michigan dairy labor supply pressures

Oh, the labor pains! How often we hear from farm owners that they can't find enough people willing to work on the farm. Dairy production is labor-intensive, with cows being milked, fed, moved and managed around the clock. Compounding these challenges, the labor market is increasingly tight for a number of reasons, including a declining interest in farming among younger generations, a declining pool of workers who are willing to do farm work, and few legal channels for immigrant labor. While labor-saving technology has increased productivity, people are still an integral part of cow care. In this article we'll provide context and highlight strategies to help address labor challenges.

Background

Most hired farm employees in the United States were born in Mexico. Mexico's close proximity to the US, and its relatively poor economic conditions, incentivized migration to the US during the 1900s and early 2000s. Many of these migrants entered the US without legal authorization and sought work on US farms. High levels of Mexico-US migration enabled US agricultural producers to maintain access to an abundant supply of relatively inexpensive labor and expand production to satisfy increased demand.



MSU Interim President Teresa Woodruff visits with Kyle Jandernoa during a visit with Dutch Meadows Dairy in recognition of Farmworker Appreciation Day on August 6. *Photo courtesy of Brandon Gross*.

However, in recent years, US farm labor markets have undergone substantive structural changes that have increased the prevalence of labor shortages. Labor supply pressures drive farm wages up, stunt growth opportunities for American farmers, accelerate the adoption of labor-saving technologies, and force production to other countries that have lower production costs. These trends raise concerns about the economic viability of dairy farming in Michigan and the production capacity of Michigan's dairy industry.



Figure 1. Real hourly wage (\$2022) for Lake Region animal employees, 2000 – 2022.

Dairy labor costs are rising and employment is declining

The year 2015 marked an inflection point in Michigan's dairy labor market, when the growth of real labor costs (i.e., adjusted for inflation into 2022 dollar values) started rising and employment growth started tapering off. Figure 1 shows that between 2000 and 2015, the real average hourly wage (in \$2022) of animal-related farm employees in the Lake Region was relatively stable in the \$13.00 to \$14.00 range. In 2017, the average real wage (in \$2022) reached an all-time high of \$15.65 and has continued to rise. In 2022, the average real wage was \$16.90.

Dairy employment has dropped every year since the 2017 peak, and there were 500 fewer year-round-

equivalent jobs on the books of Michigan dairy farmers in 2022 relative to 2017 (Figure 2). Economic theory suggests that when a labor market is experiencing a decline in the supply of labor, wages will rise, and employment will drop. These recent trends are consistent with a declining supply of dairy farm labor in Michigan.

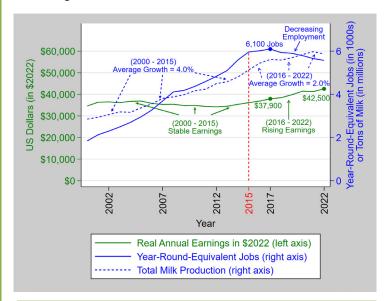


Figure 2. Michigan milk production, dairy employment, and annual employee earnings, 2000 – 2022.

Since 2015, the growth in total milk production declined to an average 2 percent per year. While there are many factors that can slow milk production growth (including increased building costs and processing capacity limits), a decrease in labor availability, as indicated by the reduction in farm employees, may also be a factor limiting growth.

Value for investment

Rising income for dairy employees is not the problem, as long as productivity increases faster than wages. Therefore, it is important to look at efficiency and consistency in work. Unfortunately, many farms report problems with their employees, including failure to show up for work, a lack of concern about the success of the farm, and employee turnover. These problems decrease efficiency and consistency and exacerbate the farm labor availability problem. Figure 2 shows that dairy production growth started declining in the wake of rising labor costs and reduced employee availability. In fact, in 2018 and 2022, Michigan experienced declines in milk production relative to the previous year.

Employee disengagement and turnover are costly, not only in terms of wages wasted, but also in terms of employee morale, quality of work and product, and safety for all. Many farmers recognize the importance of developing positive relationships with the people who work for them. Open and honest communication regarding expectations, farm goals, how the employee's work contributes to those goals, and employee performance are key factors that can help employees develop a personal commitment to the success of the farm.

A study published by Moore et. al. (2019) concluded that "the importance of an employee's relationship with their supervisor and other employees cannot be overstated. The relationship can have a positive or negative effect on (employee) satisfaction, longevity and recruitment." Employees serve a critical role in job recruitment efforts because they are often the ones that refer other workers to the farm. Satisfied employees are more likely to recommend the farm as a place to work to individuals who share their commitment to work. As such, when farm owners and managers develop good relationships with their employees, they will improve the quality of the work environment and expand the pool of quality employees seeking to work on their farm. In a tight labor market, this factor can make the difference between a farm that is able to grow and one that cannot because it cannot attract or retain a high-quality workforce that is committed to the farm.

Employee Leadership Tips

- Consistently build team mentality; teach and model an attitude of helping one another and being responsible to others.
- Communicate regularly about business performance; provide individual feedback soon for both good and lacking performance.
- Respect employees as people; listen to them and ask them to respect your decisions. Teach them why you set your methods and standards the way you do.
- Provide regular opportunity for employee development; teach cattle evaluation practices, have visiting consultants talk with employees, and don't underestimate their desire to learn.
- Involve employees in making decisions; whether hiring or purchasing decisions, employees can provide valuable input that makes them vested in the results.

While the availability of immigrant farm employees is declining, foreign-born workers will continue to serve a critical role in the farm workforce.

If farmers want to expand the pool of employees that are able and willing to work on their farms, they may want to consider participating in agricultural labor policy reform discussions that are being held at the local, regional, and national levels. Moreover, developing business management strategies that improve the work environment and help employees feel connected to the business can help retain and expand the pool of high-quality employees.

Conclusion

Labor is a critical component of any farming operation. Labor supply constraints can reduce the economic viability of farming and reduce production capacity. In some cases, automation may replace labor inputs and reduce labor costs, but these types of investments can be expensive. For many farming operations, investing in costly technology solutions is not economically feasible, and having access to employees who are qualified and willing to perform farm work is the only viable option. Based on the current trajectory of employment and production in Michigan's dairy sector, the dairy industry in the state may be constrained by labor availability. If employment continues to decline and solutions are not found, milk production capacity could decline within the next few years. Farmers can take steps in their own businesses to foster positive relationships with their employees and enhance the work environment, which can help improve efficiency and reduce employee turnover.

Michigan State University is committed to understanding the labor challenges our state is facing, exploring potential solutions to the problem, and helping farmers improve their employee leadership skills.

Upcoming Dairy Labor Availability Survey

Michigan State University understands that there is a lack of research documenting dairy producers' preferences for labor and workforce development policies. This type of information is important to the current debate surrounding farm labor availability, and we are working to bring producers' voices into that discussion. To address this information gap, we are developing a survey to give Michigan dairy farmers an opportunity to have their voices heard on this important issue. All survey participants will remain anonymous, and the findings will be disseminated to the public via outreach reports intended for Michigan dairy stakeholders and other interested parties, presentations at industry group meetings, extension workshops, research conferences, and a policy roundtable event that will be open to the public. Please keep an eye out for the survey from Michigan State University in the upcoming months.

MSU Farm Labor Conference Understanding and Addressing Agricultural Labor Challenges in the United States

What: In-person conference hosted by Michigan State University's Department of Agricultural, Food, and Resource Economics When: November 2, 2023

Where: University Club of MSU (Heritage Room) Why: The main goals of the conference are to:

- Discuss the most pressing farm labor challenges
 - Disseminate research findings
- Connect local stakeholders with information and resources to help address their labor challenges
- Discuss potential policy and regulatory solutions

Speakers include the nation's leading farm labor experts in academia and the US government, top Michigan state government officials, and key industry stakeholders representing both employer and employee interests.

A continental breakfast and hot lunch will be provided, and coffee and refreshments will be available throughout the day at no cost to attendees. While the conference is free to attend, registration is required. You can register for the conference here. The conference agenda can be found here.

Meet the Authors



Zachariah Rutledge Assistant Professor Department of Agricultural, Food, and Resource Economics



Phil Durst
Beef and Dairy Educator
MSU Extension

Michigan Dairy Recognition Shining a light on industry leaders



Stan Moore retires after serving Michigan agriculture for more than 30 years

Moore officially retired from Michigan State University Extension earlier this year. He started out as an agricultural agent in Eaton County, before becoming the Extension dairy educator for Eaton, Barry and Calhoun counties, and later served 11 years as the Antrim County MSU Extension director.

Stan provided leadership for the MSU Extension Dairy Team and the MSU Animal Agriculture Work Team. In the last several years he contributed to the Farm Business Management team as well.

Congratulations to Stan on his retirement and we thank him for his tireless service over 3 decades!



Stephanie Schafer devotes life and career to the Michigan dairy industry

Stephanie Schafer, dairy farmer in Westphalia, is the District 5 Director on the Michigan Farm Bureau Board of Directors and is very involved at the county level with the Clinton County Farm Bureau.

Outside of Farm Bureau, Schafer volunteers her time in the community as a 4-H leader, Dallas Township trustee, chair of the Pewamo-Westphalia Community Foundation, and a member of the Michigan Milk Producers Resolution Committee. As a Michigan State University alumna, she also serves on the industry review committee for the new MSU dairy facility design process.

We appreciate all of the time and service that Stephanie has contributed to the MSU dairy program and the Michigan dairy industry!



Matt Wood continues selfless service to Michigan dairy industry

Matt Wood joined Vita Plus corporation in 1992 after graduating from Michigan State, and he currently serves as East region sales manager for the company. Throughout his career, Matt has devoted countless hours to supporting dairy students and professional development opportunities for those in the industry. He has served on advisory boards for the Tri-State Dairy Nutrition Conference, the MSU Dairy Extension team, and for the new MSU dairy design process.

Matt championed creation of the MSU Vita Plus Dairy Fellowship, which to date has supported and mentored 4 students through graduate degree programs. He has also served on the Michigan Dairy Memorial Scholarship Fund Board of Directors since 2017, and he is currently the Vice Chair of this board. We appreciate all of the time, passion, and wisdom that Matt shares to strengthen the MSU dairy program and our industry!

MICHIGAN STATE | Extension

2265K Anthony Hall 474 S. Shaw Lane East Lansing, MI 48824



Mark your calendar

- MSU Farm Labor Conference | East Lansing | November 2
- MSU Dairy Industry Tailgate | East Lansing | November 4
- Bovine Lukemia Virus Conference | East Lansing November 8-10
- MSU Dairy Education Academy | East Lansing November 10-12
- MSU Dairy Challenge Banquet | East Lansing | December 7
- Farm Policy and Risk Management Series: Dairy | Online December 20
- Michigan Manure Management Summit | St. Johns January 31, 2024
- Great Lakes Regional Dairy Conference | Mt. Pleasant February 8-9, 2024
- Michigan Dairy Health Symposium | East Lansing February 29, 2024

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

