

MILKING ROBOTS: ARE THEY THE FUTURE?

Valuable insights into the benefits and challenges of AMS technology, strategies for maximizing profitability and efficiency, and firsthand experiences from dairy farmers who have implemented robotic systems.



PROGRAM

Two Locations: in MN and WI

Paynesville, Minnesota

Wednesday, Feb. 26, 10 a.m. – 4 p.m.
Shady's Bar and Grill Railside
28603 W Hwy 55

Eau Claire, Wisconsin

Thursday, Feb. 27, 10 a.m. – 4 p.m.
Eau Claire Library
400 Eau Claire St

Conference development team:

Jim Salfer, Univeristy of Minnesota Extension

Dana Adams, Univeristy of Minnesota Extension

Brenda Miller, Univeristy of Minnesota Extension

Karen Johnson, Univeristy of Minnesota Extension

Carolina *Pinzón* , Univeristy of Wiscosnin-Madison Division of Extension

Stephanie Plaster, Univeristy of Wiscosnin-Madison Division of Extension

Shaheer Burney, Univeristy of Wiscosnin-River Falls

Luis Peña-Lévano, University of California-Davis

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under agreement number 2022-38640-37486 through the North Central Region SARE program under project number LNC22-467. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Minnesota Agenda

10:00 AM	Registration & Welcome
10:30 AM	Are AMS Worth It? Impacts on Farm Profitability, Herd Health, and Owner Well Being According to AMS Adopters <i>Shaheer Burney (University of Wisconsin-River Falls)</i> <i>Luis M Peña-Lévano (University of California - Davis)</i>
11:15AM	Maximizing Profit and Labor Efficiency with Robotic Milking Systems <i>Jim Salfer (University of Minnesota-Extension)</i>
11:45AM	Lunch <i>Comments from our Sponsors</i>
12:30PM	Data-Driven Diagnostics for Robotic Milking <i>Douglas Reinemann (University of Wisconsin-Madison)</i>
1:00PM	Discussion with Morning Speakers
1:15 PM	Are You Ready for Robots? Key Considerations Before Making the Switch <i>Stephanie Plaster and Carolina Pinzón (University of Wisconsin-Extension)</i>
2:00PM	Lessons Learned by Installing Robots followed by Q&A <i>Producer Panel - Roerview Farm, Merryville Farm, Green Waves Dairy LLC</i>
3:30PM	Networking and Refreshments

Wisconsin Agenda

10:00 AM	Registration & Welcome
10:30 AM	Are AMS Worth It? Impacts on Farm Profitability, Herd Health, and Owner Well Being According to AMS Adopters <i>Shaheer Burney (University of Wisconsin-River Falls)</i> <i>Luis M Peña-Lévano (University of California - Davis)</i>
11:15AM	Maximizing Profit and Labor Efficiency with Robotic Milking Systems <i>Jim Salfer (University of Minnesota-Extension)</i>
11:45AM	Data-Driven Diagnostics for Robotic Milking <i>Douglas Reinemann (University of Wisconsin-Madison)</i>
12:15PM	Discussion with Morning Speakers
12:30PM	Lunch <i>Comments from our Sponsors</i>
1:15 PM	Are You Ready for Robots? Key Considerations Before Making the Switch <i>Stephanie Plaster and Carolina Pinzón (University of Wisconsin-Extension)</i>
2:00PM	Lessons Learned by Installing Robots followed by Q&A <i>Producer Panel - Roerview Farm, Merryville Farm, Green Waves Dairy LLC</i>
3:30PM	Networking and Refreshments

Are AMS Worth It?

Impacts on Farm Profitability, Herd Health, and Owner Well Being According to AMS Adopters.



Shaheer Burney, MBA, PhD

Director, Survey Research Center (SRC)
Associate Professor
Dept. of Agricultural Economics
University of Wisconsin - River Falls

shaheer.burney@uwrf.edu
715-425-4226



Luis M Peña-Lévano, PhD

Assistant Professor
Dairy Cattle Production, Health and
Management Economics
UC Davis School of Veterinary Medicine

lpenalevano@ucdavis.edu
768-764-4203



Notes Page



Maximizing profit and labor efficiency with robotic milking systems



Jim Salfer

Extension Educator - Dairy
University of Minnesota Extension

salfe001@umn.edu
612-360-4506



Notes Page



Data Driven Diagnostics for Robotic Milking



Doug Reinemann

Milking Machine & Farm Energy Extension Specialist
UW-Madison Department of Biological Systems
Engineering

doug.reinemann@wisc.edu
608-262-9812



Notes Page



Are you ready for robots? Key considerations before making the switch



Carolina Pinzón

Bilingual Dairy Outreach Specialist
UW-Madison Division of Extension

carolina.pinzon@wisc.edu
608-890-2961



Stephanie Plaster

Farm Business Development Specialist
UW-Madison Division of Extension

stephanie.plaster@wisc.edu
262-277-6809



Notes Page



Lessons learned by installing robots

MN Producer Panel

Roerview Farm, Swanville MN

Owned by the Craig and Stephen Roerick families. Their barn is cross ventilated barn with perimeter feeding with one pen with three Lely robots. The barn has waterbeds and use Lely Discovery robotic manure scrapers to remove manure from the barn. They also have a Juno feed pusher. They achieve very high production with good components and high-quality milk.

Merryville Farm, Waverly MN

Owned by Steve and Bill Uter. They retrofitted a drive through freestall barn in 2020 to milk with 4 DeLaval robots in a guided flow configuration. Other technologies that they have include Valmetal bedding robot and a Delaval feed pusher. They use manure alley scrapers to remove manure. They have a hybrid system and continue to milk fresh and slow milking cows through their old parlor. They consistently achieve over 7 lbs of solids per cow per day.

Green Waves Dairy LLC, St Michael MN

Owned by the Mark & David Berning families. Their barn is a six-row cross ventilated barn containing eight robots in a toll booth configuration with sort gates. The barn has waterbeds and an automatic manure removal system. A manure separation system is used, and the liquid is stored in a slurrystore system. Calves are raised on automatic calf feeders. They have achieved high production in a well-designed labor efficient system. Close-up animals are housed in the robot barn which allows them to pre-train their heifers.

Lessons learned by installing robots

WI Producer Panel



Jessica Pralle-Trimner

Farm: Miltrim Farms Inc. | Robots: 30 Lely

Jessica Pralle-Trimner is a co-owner of Miltrim Farms Inc. in Athens, Wisconsin, where she operates alongside her husband and partners. In 2019, Miltrim Farms transitioned to robotic milking and is now Wisconsin's largest robotic milking facility, utilizing 30 Lely A5 robots to milk 1,800 cows. The farm also maintains its original parlor, bringing the total herd to 3,200 cows. Jessica manages herd operations and leads the dairy teams responsible for animal care. She developed her expertise at her family's farm, Selz-Pralle Dairy—home to Selz-Pralle Aftershock 3918, the world record-holder for milk production. Jessica holds a degree in Dairy Science from the University of Wisconsin-Madison and is passionate about team development and operational efficiency in dairy management.



Brock Bailey

Farm: Bailey Farm | Robots: 6 Lely

Brock Bailey farms in Tomah, Wisconsin, alongside his parents, Mike and Jean, and his brother Brent. His wife, Nelda, a teacher, also assists on the farm, with their children helping when not in school. The dairy transitioned to robotic milking nearly a year ago, utilizing six Lely robots. The Baileys integrated the robots into their existing freestall barn with strategic additions to optimize cow comfort and workflow. All heifers are raised on-site. Brock is dedicated to leveraging technology and family-driven management to enhance efficiency and sustainability in their dairy operation.

Lessons learned by installing robots

WI Producer Panel



Jake Peissig

Farm: JTP Farms | Robots: 9 DeLaval

Jake Peissig, alongside his wife Tolea, owns and operates JTP Farms in Dorchester, Wisconsin. Since its establishment 13 years ago, JTP Farms has expanded from an initial four DeLaval robot setup milking 240 cows to its current eight DeLaval robots, with a ninth being installed. JTP was the first robotic herd in the world to average over 100 pounds of production, back after installation in 2013. His current herd growth was done in his existing barn, where he maximized milk per stall while maintaining high cow comfort levels. The farm now milks 500 cows, houses dry and prefresh cows, and integrates automated feeding through the Lely Vector system. JTP Farms purchases all replacement cows and sells crossbred calves before seven days of age. The operation employs two full-time and one part-time employee while also managing 1,000 acres dedicated to feed production. Jake prioritizes efficiency, sustainability, and innovation, continuously adapting strategies to ensure the long-term success of the family dairy.



Jason Baroun

Farm: Baroun Family Farms LLC | Robots: 2 DeLaval

Jason Baroun is a first generation dairy farmer. He started milking cows in 2003 in a rented facility. In 2011 he married Katie, who is a certified agricultural appraiser for Greenstone Farm Credit, along with purchasing the dairy farm he was operating. In 2015 they completed a 120 cow free stall barn, milking their cows in a flat barn parlor. In the fall of 2024, they retrofitted two DeLaval VMS V300 robots into their existing freestall barn. The retrofit added 30 feet onto the end of the barn, incorporating the robots in a free flow design, a post sort area, a milkhouse and utility room. Jason is excited for the future of the farm with his two children showing interest in the operation. He continues to innovate and utilize more technology and data, while prioritizing the continued growth and establishment of his family in the dairy industry.



Notes Page





Connections & Resources



Thank you to our generous
sponsors!

