



**U.S. Dairy
Sustainability Awards**
Innovation Center for U.S. Dairy®

2014 Awards Recipients

**May 14, 2014
Washington, D.C.**

 **INNOVATION
CENTER FOR U.S. DAIRY®**
HEALTHY PEOPLE • HEALTHY PRODUCTS • HEALTHY PLANET

A More Sustainable Future. Thanks to Your Efforts.

The third annual U.S. Dairy Sustainability Awards recognize and honor the U.S. dairy industry's long-standing commitment to a healthy future for the next generation of dairy farmers, industry leaders and consumers. Sustainability is a commitment that enables us to continue to contribute to a safe, affordable and nutritious food supply for our country and the world. A commitment to serve our local communities, while at the same time preserving the land, air and water for the future.

This year's recipients include large and small dairy farms and operations from across the country, and all represent multigenerational family businesses.

Winners are recognized in the following categories:

- Outstanding Dairy Farm Sustainability
- Outstanding Dairy Processing & Manufacturing Sustainability
- Outstanding Achievement in Renewable Energy
- Outstanding Achievement in Energy Efficiency

An independent panel of judges, which included leading experts on the economic and environmental issues and opportunities facing the dairy industry today, evaluated nominations on the following criteria:

- ✓ Program's or project's results as measured by triple-bottom-line success: economic, environmental and social
- ✓ Evidence of shared learning, innovation and improvement
- ✓ Potential for adoption by other dairy farms and businesses

The 2014 U.S. Dairy Sustainability Awards are part of the U.S. Dairy Sustainability Commitment, an industrywide effort to measure and improve the economic, environmental and social sustainability of the dairy industry. Launched in 2008 under the leadership of dairy producers, the Sustainability Commitment has the support and participation of hundreds of organizations across the industry as well as support from academic, government and nongovernmental organizations.

For more information, visit USDairy.com/Sustainability/Awards.

Outstanding Dairy Farm Sustainability

Maddox Dairy



Pioneer spirit paves the way for others

The pioneer spirit of the Maddox family has been a source of pride and growth for the second-generation, 3,400-cow dairy farm in Riverdale, Calif. With a passion for animal care and advancing innovative ideas, owner Steve Maddox aims to do more than discover and test new solutions — he shares his experiences with other farmers so that they may find similar success.

Maddox is passing down his philosophy — which he learned from his father — as he trains the third Maddox generation to manage the dairy. “My dad was a strong leader, and he taught me that we have a responsibility to lead in all aspects,” Maddox says.

To date, early adoption has resulted in improved herd health and sustained business growth. By demonstrating their learning through tours of the facility, media coverage and public presentations, the Maddox family has opened the door to different ways of dairying. For example, the total mixed ration feeding method, the use of drive-through freestall barns and galvanized self-locking stations — standards in today’s industry — are techniques trail-blazed by Maddox Dairy.

Local experts, organizations and funding programs are a crucial component to any Maddox research project. Most recently, such resources have enabled the family to determine better ways to use electricity on the farm; pilot a dual fuel program that would reduce their dependence on diesel; and install a 1-megawatt solar power generator. The results shared so far: reduced costs; lower environmental impact; healthier, more productive livestock for the dairy; and cleaner air and energy for the surrounding community.

Outstanding Dairy Farm Sustainability

McCarty Family Farms



When every drop counts, a community flourishes

Kansas farmers know every drop of water counts. One dairy's quest to conserve this resource spurred a first-of-its-kind partnership that brought new life to an entire community.

At McCarty Family Farms, brothers Mike, Clay, David and Ken are at the helm and they know viability means limiting volatility in milk prices. In 2012, the Rexford, Kan., farm partnered with The Dannon Company, Inc., to reduce water consumption, stabilize prices and allow the business to double down on long-term, community growth investments.

The partnership paved the way for construction of a condensed milk processing plant that extracts more than 14 million gallons of water from milk each year. This water is reused for animal and crop care, including cow cleaning and irrigation, helping move the dairy closer to becoming a water-neutral operation. Because the milk is condensed, there has been a 75 percent reduction in the number of trucks and amount of fuel required to haul milk from McCarty Family Farms.

McCarty Family Farms is working to create sustainable communities, too. The farm has brought more than 100 new jobs to the rural region and is lauded as a successful economic development project by the Northwest Kansas Planning & Development Commission, "These jobs translate into more children in the local school districts ... increased housing demand ... and tax revenues for the county and state." This also means increased investment in infrastructure and schools.

As the brothers say, "Our survival is dependent on these communities, and when they grow and prosper, so do we."

Outstanding Dairy Farm Sustainability

Sensenig Dairy



Dairy perseveres with creativity and collaboration

Cliff and Andrea Sensenig wanted to ensure their farm would be financially successful both now and in the future for their three children. Traditionally, anaerobic digester systems have not been practical on small dairy farms, but this didn't stop the Sensenigs from pursuing their goal, and it is delivering triple-bottom-line benefits.

With a herd of 100 cows, the Kirkwood, Pa., dairy needed a way to collect enough additional manure to fuel the digester. With the help of a team of consultants and nearby relatives who own hog and poultry farms, they embarked on a three-year process, from concept to breaking ground.

The Sensenigs engaged their community in the planning process to ensure they had its support for the sizeable project that required not only a large amount of funding, but also permission from neighboring farms to build a pipeline underneath their properties. At the community meeting where the fate of their project was on the line, the Sensenigs received community approval within 30 minutes — they had earned their neighbors' support.

"The project required collaboration from many different resources and our community," Andrea Sensenig notes. "That teamwork is what made it successful."

Today, the digester infrastructure delivers manure from 200 dairy animals, 2,000 hogs and 30,000 chickens from neighboring farms to the digester. Local food waste also is added to fuel the digester. All feedstock combined, the digester has reduced greenhouse gas emissions by an amount equivalent to removing 206 cars from the road.

"Our work proved it's possible for a small dairy to run and benefit from a digester," Cliff Sensenig says. "We hope it encourages others to look into this type of technology for their operation."

Outstanding Dairy Processing & Manufacturing Sustainability

Joseph Gallo Farms



A heritage of sustainability contributes to the long-term success of Joseph Gallo Farms

Sustainability is simply a new word for an age-old concept at Joseph Gallo Farms and Joseph Farms cheese brand, a leader in sustainable cheese making. Making the most of nature's bounty always was the vision and is reinforced throughout the Atwater, Calif., company today. Founder Joseph Gallo, an avid outdoorsman and naturalist at heart, sowed the seeds of stewardship from the beginning, teaching his son that sustainability and profitability go hand in hand.

Now, Mike Gallo delivers on his father's dream and realizes significant business value from his efforts. "The need for sustainability is pervasive and critical, and encompasses all areas of business to remain profitable," he says.

Joseph Gallo Farms holds true to its time-honored tradition of environmental stewardship with cutting-edge technology. Milk is piped directly from the on-site dairy to the Joseph Farms cheese plant, and whey is piped from there to the processing facility, eliminating the need for thousands of deliveries each year.

Upgraded equipment and a methane digester reduce energy use, and Joseph Gallo Farms reclaims 100 percent of the cheese effluent for use in other farm and factory applications. This practice — in addition to accepting as much as 10 million gallons of stormwater and wastewater each day from local communities to use for irrigation — helps the plant conserve at least 2.9 billion gallons of water each year.

Over time, these steps proved a crucial measure to increase efficiency and competitiveness. Joseph Gallo Farms now is one of the largest employers in its county and is creating green-collar jobs. This cheese maker proves that when sustainability helps businesses succeed, it's the communities that win.

Outstanding Achievement in Energy Efficiency

Marshik Dairy



Image from Faust Photography



Modernizing operations for the long-term good delivers other unexpected benefits

Dean Marshik and his wife, Clare Palmquist, want a business that does right by its cows, its employees and the community, making sustainability and a good quality of life a top priority. In 2010, this fifth-generation family farm implemented a new, technologically advanced and energy efficient barn design on their 155-cow dairy in Pierz, Minn. The new design included robotic milking facilities, energy efficient lighting and ventilation, and renewable wind and solar power.

Marshik and Palmquist sought improvements that would make Marshik Dairy strong enough for the next generation, and robotic milking facilities were their answer. Robotics not only helped them run their farm more efficiently, it also improved their lifestyle and that of future generations on the farm through milking automation and increased cow comfort. The system features computerized identification tags, automatic cow traffic control and integrated software that helps manage feed, record milk yields and monitor cow activity.

“The farm had to survive as a dairy for the next generation, and this is how we were going to make sure of it,” Marshik says.

When designing the new barn, the couple implemented time-controlled fluorescent lighting, natural ventilation and heat retention, motor efficiency, heat recovery and milk cooling. Wind energy has produced a portion of their electrical needs since 2008. An unexpected benefit of the turbine was the knowledge they could use wind to cross ventilate their barn. Through renewable energy and automation, the dairy now is milking 60 percent more cows and has increased milk production by 48 percent.

“It’s not about size of your farm,” Palmquist says. “These technologies can be implemented on any size dairy, as long as you’re willing to search for the opportunities.”

Outstanding Achievement in Renewable Energy

Vander Haak Dairy



Cross-industry partnership helps advance dairy technology

In 2004, an unprecedented collaboration between a dairy farm, university and corporation built Washington's first dairy digester — and the first digester system of its kind in the western U.S.

Together, Steve Vander Haak of Vander Haak Dairy in Lynden, Wash., Washington State University (WSU) and Andgar Corporation built a DVO, Inc., two-stage Mixed Plug Flow™ anaerobic digester system on Vander Haak's dairy as a test bed for technology development and monitoring. They monitored how efficiently the digester system converted cow manure into biogas, animal bedding and liquid fertilizer.

They analyzed the opportunities the system provided the farm for reduced operating costs and experimented with new revenue streams, including selling electricity to the local utility, trading carbon credits and earning tipping fees from food processors who added their food waste to the digester. Data collected from the research was used to improve Vander Haak's system as well as the DVO digester technology.

Vander Haak has transparently communicated about his system in many academic publications and through dairy industry speaking engagements. As a direct result of the team's innovative work, Andgar has developed and constructed 11 additional digester projects. WSU has relied on Vander Haak's collaboration and personal financial investment to receive more than \$10 million in grant funding for additional research.

"After nearly a decade, it is safe to say that Steve's digester is literally the little engine that's been powering a renewable energy revolution in the U.S. dairy industry," says Steve Rowe of Darigold, Inc.

Sponsors

From the start, the strength of the U.S. Dairy Sustainability Commitment has been the unprecedented collaboration with leaders and experts from within and outside the dairy industry. The Innovation Center for U.S. Dairy® is pleased to recognize the following organizations for their support of the 2014 awards program:

Gold Sponsors



Silver Sponsors

Dolphin WaterCare
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Meet Our Expert Judging Panel.

An objective judging panel assessed the nominations and selected this year's winners. This panel included experts from academic institutions, government, dairy science organizations, nongovernment organizations, business and trade media, and environmental and dairy industry leaders:

- Dr. Ann Bartuska, deputy under secretary for research, education and economics, U.S. Department of Agriculture (USDA)
- Sarah Bittleman, senior agricultural counselor, U.S. Environmental Protection Agency
- Jim Carper, chief editor, *Dairy Foods*
- Susan Forsell, vice president, sustainability, McDonald's Corporation
- Dr. M. Gatz Riddell, Jr., executive vice president, American Association of Bovine Practitioners
- Dr. Molly Jahn, professor, Laboratory of Genetics and Department of Agronomy, University of Wisconsin-Madison
- Larry Jensen, chair, Innovation Center for U.S. Dairy®, and president, Leprino Foods Company
- Steve Larson, editorial consultant, *Hoard's Dairyman*
- Phil Lempert, founder, SupermarketGuru.com
- Dr. James Linn, professor emeritus, University of Minnesota, and consultant, Waconia Farm Supply and Milk Specialties Global
- Joel Makower, chairman and executive editor, GreenBiz Group Inc.
- Randy Mooney, dairy producer and chairman, National Milk Producers Federation
- Paul Rovey, chairman, Dairy Management Inc.™, and owner, Rovey Dairy
- Brian Sloboda, senior program manager, Cooperative Research Network, National Rural Electric Cooperative Association
- Connie Tipton, president and chief executive officer, International Dairy Foods Association
- Jason Weller, chief, Natural Resources Conservation Service, USDA

Past Winners

2013

- Ballard Family Dairy & Cheese, Gooding, Idaho
- Green Valley Dairy, Krakow, Wis.
- Petersen Dairy Farm, Appleton, Wis.
- Prairieland Dairy, Firth, Neb.
- Skyridge Farms, Sunnyside, Wash.
- Unilever – Henderson Ice Cream Plant, Henderson, Nev.
- Honorable Mentions:
 - Fulper Family Farmstead, Lambertville, N.J.
 - McCarty Family Farms, Rexford, Kan.

2012

- Blue Spruce Farm, Bridport, Vt.
- Brubaker Farms, Mount Joy, Pa.
- Darigold, Inc., Seattle, Wash.
- Dean Foods Company and AgPower Partners (DF-AP, LLC), Gooding, Idaho
- Holsum Dairies, LLC, Hilbert, Wis.
- Werkhoven Dairy, Inc., Monroe, Wash.
- Honorable Mention:
 - Oakhurst Dairy, Portland, Maine

Share Your Story With Us!

What's the secret to sustainability? According to research conducted on behalf of the Innovation Center for U.S. Dairy®, sustainability isn't about the size, age or location of a dairy operation. It's the management practices that make the difference. The most sustainable aspects of the dairy industry come from the way we run our businesses every day. And telling our stories of good stewardship helps to ensure that our customers can continue to feel good about choosing their favorite dairy foods and beverages. That's why we want to hear your story.

Visit USDairy.com/Sustainability/Awards to learn more about how others are implementing sustainable practices and share your story by emailing InnovationCenter@USDairy.com.

