U.S. Dairy Sustainability Awards

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2012 Awards Recipients

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Blue Spruce Farm: *Elanco* Award for Outstanding Dairy Farm Sustainability

Leading the way to a sustainable future is exactly what this year's winner, Blue Spruce Farm of Bridport, Vt., is doing. The Audets shared some of their best practices during a recent visit.

Sharing their story

Marie Audet's workweek has changed since her family's Blue Spruce Farm in Bridport, Vt., has become a leading innovation model for other dairy farms. As the first farm to join Central Vermont Public Service's Cow Power™ program (CVPS) seven years ago, the Audet family made an ongoing commitment to share what they have learned with interested visitors.

"It wasn't our natural instinct to think that someone has to be out here to tell our story, but we are so impressed with people's desire to learn about dairy farming today that we are happy to do it," Audet says.

Forward-thinking perspectives like this date back to 1958 and Blue Spruce's original 35-cow dairy. Today, the farm milks 1,300 cows and perseveres to remain as efficient as possible. Achieving that efficiency requires vision, hard work, a positive attitude and family commitment. Marie and her husband Eugene never pressured their kids to join the farm, but their son returned post-college, offering fresh perspectives and expertise.

Efficiencies gained through water recycling

Blue Spruce's water recycling exemplifies efficiency. The farm's primary water supply precools the milk using a plate heat-exchanger that then brings the cows' drinking water to their preferred consumption temperature. Water used to clean the milking system is collected and reused to wash the parlor and holding area.

"It's all about sustainability. The more we know, the more we can plan, and the better job we can do. There's always new information, new knowledge and new technology," Marie Audet says.

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Digester simplifies manure management

Installation of an anaerobic digester system in 2005 was motivated by efficiency, as well. The Audets inject their post-digester liquid fertilizer through a drag line system, and they benefit from noticeably improved crop yields and weed seed control in their hay and corn silage. Working with University of Vermont Animal Science Department researchers, the Audets verified that the separated post-digester solids make a high-quality, valuable bedding material for the cows.

The digester project was a leap of faith for the Audets, one that has now evolved into a model for dairies around the country.

Contributing to quality cheese making

Blue Spruce is part of the Agri-Mark cooperative, which produces world famous Cabot cheese. "Every day, our fresh milk only has to travel 10 miles down the road to our farmer-owned cheese plant in Middlebury. Our Cabot cheese plants are economic engines that help support our surrounding rural economies here in Vermont," Marie Audet says.

Not only that, but a byproduct of the cheese making process, whey, is returned to the Audets' farm and added to the digester. The waste from the cheese making helps produce more energy than manure alone — yet another example of the sustainability of the cycle.

To learn more about Blue Spruce Farm's sustainability initiatives, visit USDairy.com/Sustainability/Awards.

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Holsum Dairies, LLC: *Elanco* Award for Outstanding Dairy Farm Sustainability

During a recent visit to Holsum Dairies manager, Bob Nagel shared how sustainability practices are woven into the farm's foundation.

Communication with partners is key

Holsum Dairies in Hilbert, Wis., is comprised of two nearby sites, Holsum Irish and Holsum Elm. Managers frequently give tours to local community organizations to promote a greater public understanding of how Holsum Dairies functions.

"We're always going that extra mile to make sure we're up front and well-communicated," Bob Nagel, dairy manager, says. This communication takes place between many local businesses as well, with Holsum Dairies contributing $24 million annually for plumbing/electric, hauling, equipment repair, agricultural work, etc., within Calumet County

Green Tier recognition since 2004

Holsum Dairies has been a valued member of Wisconsin's nationally recognized environmental leadership program Green Tier since its 2004 inception. Partner Kenn Buelow worked closely with Green Tier in choosing a site and designing the dairy operation, also developing a comprehensive Environmental Management System. Today Nagel and Buelow work with their third manager, Kirk Vander Dusse, to maintain the profitable and positive dairy.

The Green Tier designed Holsum Dairies provides a happy home for cows, crops and people. Holsum Dairies is saving big: $64,000 a year in fuel usage costs, 1,000 gallons of water a day in the washing parlor and $95,000 a year in electrical reductions. The power of thorough planning and positive relationships has been paramount for the dairy. According to Nagel, "Relationships can either be win-win or lose-lose, but if any of us are in a win-lose relationship for very long, we're going to give up." Nagel and Holsum Dairies, LLC, are proving that when a community is taken care of, win-win is not just a goal. It's a reality.

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Bringing the right people together to do the job

Seventy-five percent of the dairy workers live within 10 miles of the dairy. Nagel attributes the farm's success to creating the right culture and bringing the right people together. "Nobody ever shows up for work today and says 'I'm gonna do a bad job.'…My job as a manager is to figure out their strengths and weaknesses and position them so that they win and feel good about it," Nagel says.

Holsum Dairies offer a competitive wage, good health insurance, paid vacation time and a company-funded retirement plan.

This respect goes both ways. Employees often extend courtesies to management; not too long ago, two employees provided nine months' notice before leaving. This courtesy is made more extraordinary when the same departing employee supplies a reliable replacement candidate when he or she goes.

Attentive and individualized animal care

A few years ago, a Holsum breeder befriended one of their 4,000 cows. He began feeding her chocolate cookies after discovering she had a sweet tooth. She got spoiled — so much so that for a month after the breeder left Holsum, Nagel had to keep a pack of Oreos adjacent to the milking parlor. "She wouldn't leave the parlor until she had been fed her cookie," Nagel says.

This story speaks to Holsum Dairies' attentive, individualized animal care. According to Nagel, "We're here to serve the animals and do the best care we can for them. As a result, the rest of the business flows through that."

Nagel also credits the cows' natural recycling abilities for the dairies' successful savings. Cows consume what would otherwise be landfill waste—corn gluten, cotton seed, hominy, corn kernel, malt sprouts, wet brewers' grain. "We can't digest it, but the cows can – and it helps them produce high-quality milk for you and me," Nagel says.

To learn more about Holsum Dairies' sustainability efforts, visit USDairy.com/Sustainability/Awards.

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Werkhoven Dairy, Inc.: *Elanco* Award for Outstanding Dairy Farm Sustainability

During a recent visit to Werkhoven Dairy, Jim and Andy Werkhoven shared how their unique partnerships are yielding benefits for the community and the environment.

Community connections formed to preserve land

Before their involvement with the local Native American Tulalip Tribes and the Northwest Chinook Recovery, Andy Werkhoven did not know how his family's Werkhoven Dairy could hold its ground against rising land values in Monroe, Wash., outside of Seattle. Today Andy and his brother Jim are thrilled to be a part of an unlikely alliance that has the strength to preserve land and enrich the community.

As a nonprofit organization, Qualco Energy's goal is to generate enough revenue through tipping fees and power sales to invest in recycling projects, fish and wildlife habitat restoration, state-of-the-art farming practices and renewable energy. The project has been invigorating for business and personal relations. Jim is thrilled by the newfound connection he's made with like-minded business partners; and equally enthused about the digester's capacity to accept a variety of substrates that lessen Werkhoven's need for fertilizer and feed purchases while purifying the air and ground.

"Cows are better than condos"

Jim's wife Dolores and Andy's wife Gloria are partners at Werkhoven and work together to manage and care for their cows, employees and neighboring dairies. The Werkhovens share their post-digested liquid fertilizer with neighbors at no cost, saving fuel and the need for commercial fertilizer transport.

The Werkhovens love the slogan: "Cows are better than condos." Through Qualco Energy, cows and people do their jobs to help preserve the land for agricultural use.

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A vision for sustainable growth

Qualco Energy's digester runs on a variety of substrates, and it currently produces two times as much gas as their single 450-kilowatt generator can use. Their generator powers 300 homes, but Qualco has dreams brighter than the flame that burns tall with excess gas from the digester. As active community members, the Werkhovens are planning with local government officials to ensure a second generator can deliver maximum benefit to all involved. They also allow access to Washington State University researchers, who study manure management and nutrient management. Qualco Energy enables the researchers to work on what otherwise be off-limits tribal ground, changing perspectives about the land's utility. "It's not about us," Andy repeats. "This is a partnership that will change the game."

To learn more about the sustainability initiatives underway at Werkhoven Dairy, visit USDairy.com/Sustainability/Awards.

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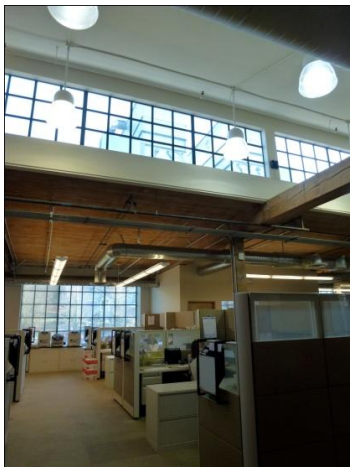
Darigold, Inc.: *U.S. Dairy Export Council* Award for Outstanding Dairy Processing and Manufacturing Sustainability

During a recent visit, Darigold shared how its adoption of a systematic approach to achieving companywide results has helped transform their business.

Triple bottom line goal helps achieve success



Seattle-based Darigold, Inc.'s systematic commitment to best practices is transforming dairy processing and giving verifiable meaning to the triple bottom line goal. At Darigold, sustainability is a combination of community interaction, economics and environmental harmony working together to achieve success.

Working closely with its 550 innovative producers, Darigold, a producer-led cooperative, is in the vanguard for pinpointing performance areas that need improvement and strengthening them with all sectors in mind. Since 2008, Darigold has reduced its CO_2 emissions by more than 14,000 metric tons per year. As a conscientious cooperative, the co-op is proud of the journey its milk makes around the world as a natural, nutritious food, nourishing families everywhere.

Producers instrumental in Darigold's success

Currently recycling about 50 percent of the waste across 13 plants brings Darigold closer every day to achieving its Zero-Waste-to-Landfill goal within three years. Packaging and supply-chain improvements have saved the company more than a million dollars in the last year alone. Since its 2009 initiative, Darigold has been honest about presenting challenges through its first Corporate Social Responsibility report, which spoke volumes about improved safety measures, energy savings, community building and operational efficiencies. The producers are an instrumental part of the cooperative's success.

"Producers wake up on the land on which they were born, very often on which their father was born. And the processes today are more efficient than they ever were. Producers are listening carefully and they're engaged. They know the right answers," Darigold Senior Vice President Steve Rowe says. With their help, Darigold is learning the right answers to all kinds of questions.

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Updates to fleet increase efficiency

Darigold has installed GPS software on the trucks that enable drivers to discuss disparities in routes and delivery times. New refrigeration units that use 70 percent less energy than their predecessors on heavy-haul trailers make minimal noise at an in-town plant — a gesture Darigold's neighbors appreciate. Drivers work with customers buying the milk to adjust delivery times to avoid the worst city traffic. After measuring pickup time and pump patterns, they're able to talk with producers about increasing efficiency. These measures have saved more than 216,000 gallons of diesel fuel a year — a 50 percent improvement in fuel usage per trucking unit.

Darigold employees support local community

At Darigold, all three legs of the sustainability stool need to be strong for the operation to succeed. Bettering the community begins in the Darigold office, where charity is a top priority.

Each week, Senior Vice President Steve Rowe reviews a number of employee matching-gift charitable donation requests. With few exceptions, the company will match dollar-for-dollar donations their employees have made to charitable organizations. Volunteer opportunities are posted in the office for corporate employees to participate in, and Darigold always strives to support its dairy producers' causes. Darigold frequently participates in a number of local community events, and they give plenty of product to local food banks. "Darigold needs to be the leader. There's no reason an industrial facility shouldn't run as efficiently as possible and have good relations with its community," President and CEO Jim Wegner says.

To learn more about the sustainable efforts underway at Darigold, visit USDairy.com/Sustainability/Awards.

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Oakhurst Dairy: *U.S. Dairy Export Council* Award for Outstanding Dairy Processing & Manufacturing Sustainability

Honorable Mention

Portland, Maine-based Oakhurst Dairy's commitment to preserving the splendor of their home state is more than a slogan. The Bennett family shared some of their sustainable initiatives during a recent visit.

Rooted in community enrichment

The Bennett family's Oakhurst Dairy in Portland, Maine, has been enriching the local environment and dairy industry for two decades. From 1993 to 2000, Oakhurst spearheaded the Millennium Tree Challenge, which resulted in the planting of more than 1,000 trees in Portland, Maine. The success of the Millennium Tree Challenge inspired other Maine cities to follow suit with similar projects.

"We didn't think of it as sustainability back then … it was the right thing to do for our community," President Bill Bennett says, adding that those initiatives make the Bennett family "even more proud of the city we grew up in and that our business started in."

A commitment to continuous improvement

Oakhurst remains at the forefront of sustainable efforts — meeting 14 percent of their company's fuel needs with biodiesel fuel and using an innovative hybrid delivery truck system.

Oakhurst is striving to improve every facet of its operation by 2014. Over a two-year period, Oakhurst reduced its greenhouse gas emissions, transportation fuel use, water use and plant energy by approximately 10 percent each.

"It's an evolving journey. We have to continuously find new ways to move ahead, reducing our carbon footprint and the amount of water that we use, trying to be leaders in those areas," Bennett says.

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Sustainability makes good business sense

Receptiveness to new ideas and long-term foresight are two of many qualities that distinguish Oakhurst. In 2008, Oakhurst Dairy became home to one of the largest commercial solar thermal systems in the Northeast with the installation of 72 thermal hot water solar panels — approximately 2,500 square feet — on the roof of its headquarters. The panels preheat domestic water and reduce consumption of heating oil by more than 7,500 gallons per year.

According to Bennett, these values focus on preserving the environment while running a "sustainable," profitable business. "We're going to be doing sustainable projects forever. It's just part of who we are."

To learn more about Oakhurst Dairy's measurable results, visit USDairy.com/Sustainability/Awards.

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Brubaker Farms: *Center for Advanced Energy Studies/Idaho National Laboratory* Award for Outstanding Achievement in Energy

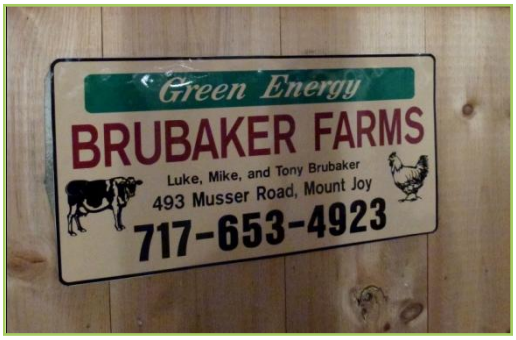
Leading the way to a sustainable future is exactly what this year's winner, Brubaker Farms of Mount Joy, Pa., is doing. The Brubaker family shared some of their best practices during a recent visit.

Sharing the message of sustainable dairy

On two recent occasions when Luke Brubaker hosted former Secretary of Agriculture Ann Veneman and the governor of Pennsylvania at Brubaker Farms in Mount Joy, Pa., you may have heard them discuss things like the viability of the dairy industry and the future of renewable energy on Brubaker Farms. Always the advocate for the dairy industry, Luke serves as chairman of the Pennsylvania Milk Marketing Board and has been a long-time board member of the Farmland Preservation Board of Lancaster County and Preservation Committees. He has hosted innumerable farm visitors to learn about the profitability of their manure digester system on their farm.

He also is an appreciated neighbor, father and dairy innovator. Whether meeting with state senators or school children, the Brubakers want to explain how their innovative smart practices have improved their energy efficiency. "Best management to some might sound like stress or a job, but best management practices mean money in the pocket," Luke says.

Brubaker family takes on role of educator



Elizabethtown sends a class of students out to the farm every semester to learn from the successful recycling model. Franklin Marshall has contacted Brubaker Farms to learn more about composting options. Luke Brubaker and his son Mike have hosted doctoral and master students, and they taught high school for a day at the behest of an agriculture teacher.

"I really like when students visit. Most of them are from nonfarm background and the questions they ask are really interesting. It reminds you why you're doing this," Mike says.

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A team approach to decision-making

What began as an eight-cow operation in 1929 is now a 950-cow, forward-thinking farm with Luke's sons Mike and Tony sharing partnership. Together with the local community, the Brubakers have developed a successful economic and environmental model for a manure digester system on a relatively small dairy farm. That model involves plenty of family meetings where Mike's wife Lisa, Tony's wife Rebecca, and Luke's wife Barb brainstorm potential projects for Brubaker Farms.

The younger generation is involved too, with the teenagers rooting for an ice cream parlor next. But Mike approaches this project with as much care and diligence as every other aspect of the operation. "That's what they're pushing for, and I said, 'I love your idea and I'd love to do it. We just need to make sure we can do it in a way that can survive long-term … it has to be something special.'"

Manure management and more

Through the digester, the cow's manure, combined with food waste products from nearby Elizabethtown College, provides energy for a six-cylinder Guascor genset. That generator produces 200 kilowatts a day — enough to power approximately 200 local homes through the local utility grid. Underground lines run to the milking center, and the system's excess heat is enough to preheat water for the parlor and calf feeding prep room, break room, laundry machine and for pasteurizing calf milk in a 300-gallon tank.

The dried manure becomes ultrahygienic bedding for the cows. The liquid portion of the Brubakers' digested manure is a replacement for commercial fertilizer, saving money on purchases of all fertilizer. Today, the farm's neighbors enjoy the benefits of the nearly odorless digester.

To learn more about Brubaker Farms' sustainability initiatives, visit USDairy.com/Sustainability/Awards.

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DF-AP, LLC: *Center for Advanced Energy Studies/Idaho National Laboratory* Award for Outstanding Achievement in Energy

During a recent visit, DF-AP, LLC, shared how its innovative business model is delivering a win-win outcome near Gooding, Idaho.

Collaboration delivers results

DF-AP is the collaboration between Dean Foods Company and AgPower Partners that has tested, successfully, the economic and ecological viability of a dairy digester system that is built, owned and operated by a third-party developer.

The project, on Big Sky Dairy West near Gooding, Idaho, began in 2009. "Dean Foods joined us on this project to help us prove that the third-party owner-operator model was feasible and would be good for the dairy industry. We all believe the model is a success," Bob Joblin, DF-AP project manager says.

Good neighbors and stewards of the land

Russel Visser, owner of Big Sky Dairy West, agrees. "We are very proud to be part of this successful project," says Visser. "It is important to us to be good neighbors and stewards of the land, and through this project, we feel we've achieved both."

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Producers able to focus on dairy

The model is designed to take the burden off the dairy producer to secure financing, operate the digester and sell the energy to utility companies. In this case, AgPower brings in investors who like the project for its long-term guaranteed and stable contracts, from manure to power. Bob Joblin focuses on negotiating favorable renewable energy and other revenue contracts as well as the financing. Andgar Corporation manages the system and ensures a smooth-running operation.

With these experts on the project, the dairy producers are free to focus on what they do best: caring for the animals and producing high-quality milk. For Marty Tolle, the Big Sky Dairy farm manager, the manure from their 4,700 cows is now a nonissue. Through the digester, the manure is converted to 1.2 megawatts of electricity, which is sold to Idaho Power. This provides enough energy for 900 homes, 24 hours a day, 365 days a year.

In addition to the electricity generation and sale, Big Sky West produces 34,000 cubic yards of ammonia-free fiber that is sold at retail as a landscape fertilizer. It can be used as an alternative to peat moss or compost material. According to Joblin, the going rate for compost is about $3 a cubic yard; the digested fiber DF-AP produces sells for two to three times that price. On top of that, this new product can help prevent peat moss bogs from being overharvested, an environmental bonus.

Meanwhile, 40 percent of the solids from the digester provide for all of Big Sky Dairy's bedding needs. This reduces costs and benefits the cows. The fluid product that comes out of the digester is returned to Big Sky West as an organic fertilizer to apply directly to the crops, making it a sustainable cycle.

To learn more about DF-AP, LLC and this unique business model, visit USDairy.com/Sustainability/Awards.

The 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. The award program recognizes dairy farms, businesses and collaborative partnerships for their contributions to healthy people, healthy products and a healthy planet and showcases that sustainability makes good business sense. An independent panel of judges evaluate all nominations based on the program's or project's results as measured by triple-bottom-line success – economic, environmental and social. For more information, please visit USDairy.com/Sustainability/Awards.

Email: InnovationCenter@USDairy.com
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