

The Barstow farm raises 475 dairy cows.



TK caption TK identifications teekay.



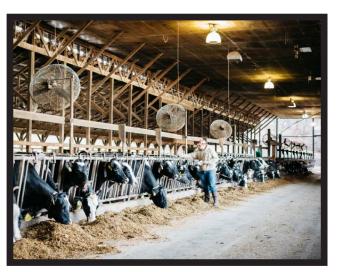


"Farms like Barstow maintain the social and economic backbone of rural communities."

- ROBERTA MACDONALD



Tires keep grain under cover.



The Barstows are always looking for the next new thing.

The drive on Route 47 into Hadley, Massachusetts, takes you through Hockanum, a picturesque hamlet along the Connecticut River designated as a National Historic District. Along the way, you pass by idyllic New England farms that look like postcards from another time. But a stop at one of them, Barstow's Longview Farm, reveals that the smartest current practices are helping both people and the dairy herd thrive there.

Steve and David Barstow are the sixth generation of their family to work this land. Today, their farm comprises 400 acres, where they raise 475 dairy cows. They belong to the Cabot Creamery Cooperative, so the milk they produce is made into butter and exceptional cheeses, like the cloth-bound cheddar available only at Whole Foods Market. To sustain their 200-year-old family farm, the Barstows are employing new technologies and other innovations to help their bottom line, while reducing their environmental footprint and maintaining high animal welfare standards.

milk on tap

"We're always looking for the next thing," says Steve Barstow, who runs the farm with his brother David and seventh-generation Steven II. In an effort to cut labor costs and improve production, the farm recently invested in four Lely Astronaut A4 milking robots. "In the past, we got up at 3:30 a.m. and milked the cows until 10 a.m.," Steve says. Now the robots sense when the cows are nearby, clean their udders, attach milking nozzles to the teats, and extract the milk.

"The robots milk the cows at the cows' own leisure. They just walk up and the robots do the rest," says the youngest Barstow. "The robots even test the milk and track health indicators and production levels for each cow so we can manage the herd's health even more effectively."

These cows are never fed growth hormones or antibiotics to force them to produce more, a common practice at many large dairies. A sign posted in Milking Room Number 2 makes clear what matters most at this farm. "Treat the cows with patience and respect because they pay for everything."

power plant

Even the cows' waste is put to valuable use. Steve points to a large, round tank in the main yard, explaining how it receives 14,000 tons of discarded food and by-products from 15 local businesses each year. The nutrient-rich slurry is blended with cow manure and left in the tank, an anaerobic digester, for a month. The methane gas the waste emits is converted to renewable power, transferred in the form of energy credits to Cabot's butter creamery in West Springfield, Massachusetts. Through this process, known as "Real Farm Power," the Barstow farm generates more than 7,000 megawatt hours of clean, renewable energy annually, enough to offset the power needed to make Cabot butter. It's also reduced the farm's carbon footprint by 5,680 tons per year.

After the energy is harvested, the leftover material is used as an organic fertilizer that's spread on crop fields several times a year. About 30,000 tons of digested nutrients are used to fertilize Longview's farmland—and 46 tons of waste a day are diverted from community landfills.

"When I first heard that we could turn cow manure and food scraps into electricity, I was skeptical," says Steve. "But when I learned that we could offset our energy costs and earn a profit by processing food waste for other local businesses. I was sold. Cabot then connected us with local partners to make this a win for everyone—our farm, our partners in the local community, and the environment."

"Our farmers are reducing our environmental footprint and keep resources, like food by-products, in a continuous cycle of reuse for as long as possible toward a goal of zero waste to landfill," says Jed Davis, sustainability director at Cabot. The Real Farm Power effort earned Cabot the 2016 U.S. Dairy Council's Sustainability Award.

working model

Membership in the Cabot Creamery Cooperative has been instrumental to Barstow's own sustainability. The co-op was founded in 1919 by farmers around Cabot, Vermont, who joined forces to turn their excess milk into butter. At the time, the cost to join the co-op was \$5 per cow, plus a cord of wood to fuel the boiler at Cabot's original cream-

Market's rigorous quality standards ensure that every product has been researched and its ingredients evaluated before it reaches the stores shelves. You can support producers that are also socially and environmentally responsible by looking for the **B** Corps logo on the packaging of many **Whole Foods Market** suppliers, such as **Cabot Creamery** Cooperative, Seventh Generation, King Arthur Flour, and more. The logo tells you the brand has been certified by the nonprofit B Lab, which reviews business practices and treatment of workers, suppliers, customers, and communities. "B Corp is to **business what Fair Trade certification** is to coffee," says B Lab cofounder Jay Coen Gilbert. Nearly 2,000 companies have earned the **B** Corp designation signifying their commitment to social change. Learn more at bcorporation.net

THE B SIDE

Whole Foods



ery, built in 1893. The butter was brought to Boston markets by horse and buggy, and to New York City by barge.

Today, the cooperative is owned by 1,100 family farms in New England and New York. It produces cheddars, butter, yogurt, sour cream, and cottage cheese to Whole Foods Market customers. All of the co-op's profits are distributed among farmer-owners, such as the Barstows.

"Farms like Barstow maintain the social and economic backbone of rural communities," says Roberta MacDonald, Cabot's senior vice president of marketing. "Multigeneration farms have a deeply rooted sense of environmental stewardship. They have to think long-term and consider the needs and concerns of their neighbors."

community connection

Barstow's Longview Farm has survived amid the decline of local dairy farms—in Massachusetts the number fell from 5,000 in 1950 to 180 in 2007—by evolving. In 2008, Barstow's Dairy Store and Bakery opened by the roadside to provide a new income source and to raise the public's awareness about family farming. The store, managed by seventh-generation sisters Kelly and Shannon and their cousin Denise, serves breakfast and lunch and offers catering services.

The store has deepened the farm's connection to the community, serving as a meeting place for locals and a hub for educational farm events. Daily farm tours and school field trips give visitors an up-close look at the cows and robotic milkers.

"Farmers are natural stewards of the land," Kelly says. "Our events such as Pasture Day in May and Burger Fest in the summer bring people to the farm and show them how we operate with the sustainability of the land, farm, and the earth in mind."

She plans to remain on the farm because she feels a lasting connection to it. "We have a big, close family committed to making sure we stay farming here," says Kelly. "It's a lot of hours and extra work, but in the end we protect our heritage and keep our family on this piece of land."

visit at barstowslongviewfarm.com.



"Treat the cows with patience and respect," reads a sign in the Barstow barn.

"When I learned that we could offset our energy costs by processing waste, I was sold."

- STEVE BARSTOW



The younger Barstows help out.



Waste reuse has reduced the Barstow farm's carbon footprint.

Learn more about the farm and how you can