



The green cheesemaker

Ontario dairy takes its environmentalism to a whole new level

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SPECIAL TO THE STAR

Some like it blue. But Fifth Town Artisan Cheese Co.'s president, Petra Cooper, prefers her cheese with a distinctly greenish hue.



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To limit her facility's impact on the environment, Fifth Town founder Petra Cooper turned to the experts.

"I call it eco-cheese," she says of the creamy creations her company, based in Prince Edward County, makes with goat and sheep milk – each one inspired by a mix of environmentalism and handcrafted traditions.

You could say that Cooper came to her calling organically. The former publishing executive was a long-time fan when she took an apprenticeship course in the art of making cheese. It was a turning point seven years ago that led to her founding the Ontario Artisan Cheese Society and finally opening her own dairy last summer.

Agriculture's watery waste

Cheese-making is, by nature, a polluting process. One of the major issues is the disposal of whey, a cheese by-product that separates from the milk.

"With every 7,000

When Cooper set out to design and build the 4,200-square-foot cheese-making facility, she made it a top priority to limit negative impacts on the environment. She needed expert guidance, a lesson she and husband Shawn Cooper had learned years earlier when they built the family home from the ground up.

"We wanted our house to be environmentally sound, but there were problems. I realized that with the dairy, I needed a rigorous barometer to tell me: `How green is green?'"

So she turned to LEED (Leadership in Energy and Environmental Design). It's a top international certifier of green buildings, from condos to police headquarters, schools to supermarkets.

"Buildings are responsible for something like one-third to one-half of all greenhouse gas emissions, so this is a key area," says Mark Lutes, a policy analyst on climate change and energy with the David Suzuki Foundation. "I would encourage anyone who is building or buying a home or a building to look at these standards."

For guidance, Cooper visited Niagara winery Stratus, which has been LEED-certified since 2005.

She then hired Enermodal Engineering, a mechanical engineering firm that has worked on one-third of the LEED buildings in Canada, and architect Francis Lapointe. The crew spent four years on the project, starting by analyzing everything from the milk suppliers, which are local farms, to the subterranean cheese-aging rooms, which remain cool through a system fuelled by geothermal heat. The LEED specifications covered such details as the cleanliness of the construction site, renewable energy systems used in processing the cheese and waste output. Even the use of local labour, to avoid flying in experts, came into the equation.

The payoff came this spring, when Fifth Town became the first dairy in the world and the only industrial project in Canada to qualify for LEED's top platinum standard.

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litres of milk for making into cheese, I'll have 5,500 litres of whey to dispose of, and it takes a lot of time for it to break down," says Fifth Town owner Petra Cooper.

Dairies used to spread whey on the ground but now because of problems caused by nutrient runoff, that practice is restricted. At Fifth Town, a multi-pond configuration doubles as a "digestion system" for the whey and feeds clean water into the property's wetlands. "The birds are happy," Cooper says.

Pamela Cuthbert

Although LEED has its critics – accreditation is expensive and bureaucratic, and some say it is a powerful marketing tool that can be bought with money instead of results – Lutes says achieving platinum status "reflects some of the best practices in the world."

The cheeses are also winning raves. With veteran cheesemaker Stephanie Diamant, formerly of Milky Way Farm, leading the team, Fifth Town snagged the Grand Champion for Goat Cheese at the Royal Winter Fair and top honours at the British Empire Cheese Show, a competition between central Ontario cheesemakers.

Anthony Rose, executive chef at the Drake Hotel in Toronto, was won over from the start. "Her cheese was good right away, and that's unusual," he says. "And it keeps getting better. Her ricotta is to die for." Can he taste Cooper's eco-bent in the end product? "Absolutely not," he says, but "You can taste the passion."

Fifth Town reports that it has cut its building energy cost by 55 per cent and its process energy cost by 15 per cent. Cooper says there will be more savings over time: "Dairies use a ton of energy. Our costs for a standard dairy would be around \$18,000 a year, but instead we're looking at about \$5,700."

"I hope this brings more attention to this dairy and improves their performance on the business front," says Lutes. "If we can buy our dairy products with these (green) goals in mind, that is a step in the right direction."

Pamela Cuthbert is a freelance writer and founder of Slow Food Toronto.