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LATHROP FOREST PRODUCTS, BRISTOL, VERMONT, UNITED STATES

Former Sawmill Business Now Grows with the Chip Market

Woodchip Supply Operation

From the yard of Lathrop Forest Products in Bristol, Vermont, Jim Lathrop can see a notch in the steeply forested wall of the Green Mountains. That's where his ancestor, Noah Lathrop, bought into a sawmill business in 1878.

Six generations later, just a few years ago, Jim was running one of the best-respected lumber-processing operations in Vermont. His focus was on high-quality sawlogs. Then in 2006 he auctioned off all his sawmill equipment, keeping only trucks, live-bottom trailers, and chipping equipment. He needed those for his new business, supplying woodchips—to a wood-fired power plant, a paper mill, and a growing number of Vermont schools and other institutions that are heating with wood biomass.

"Every business goes through a metamorphosis," he said one recent afternoon, having just climbed out from welding a strut beneath one of his trailers. "I'm just rolling with the times."

Just how dramatically Lathrop Forest Products has adapted is a story that could offer a national example for the struggling wood products industry. In Vermont, where the harvesting of sawlogs is as old a tradition as town meeting, Jim Lathrop can now tick off on his fingers the number of sawmills that have gone out of business in the last few years. The housing market and lumber prices have sagged, and top-quality hardwood is growing harder to find.

His business, in contrast, is growing.

"Biomass," Jim said. "I could see it blossoming."

Lathrop Products delivers about 50,000 tons of chips per year. Its primary customer is Burlington Electric, which runs the chip-fired McNeil Generating Station. The 50 megawatt plant primarily uses whole-tree chips that come from low-quality trees and from the tops and branches left after logging. But Lathrop also supplies half a dozen wood-heated public schools with a higher grade of biomass fuel, bole chips, which come mainly from the stems of fast-growing trees like poplar and pine.

That's the fast-growing niche business into which Jim is expanding.

"I'm working very hard to push the niche thing," Jim said. Because bole chips are higher quality than whole-tree chips, they fetch a higher price.

Lathrop will be the fuel supplier when nearby Middlebury College fires up its new, $11 million biomass gasification plant, in late 2008, as its primary heating system. Sheds on the Lathrop yard will stockpile up to 1,500 tons of chips, to assure the college of a steady supply. Jim's business is also now delivering chips to the main state office complex in Waterbury, Vermont, which has long heated with biomass and uses about 30 tons each day in winter.

"We're like a fuel supply dealer," Jim said. "If you call up and want a load of chips, we'll deliver—even on short notice. Because we have it in inventory."

In summer 2008, the per-ton price of bole chips was equivalent to heating oil at about $1.60 per gallon. In 2007-08, one of Lathrop's customers, Bristol's Mount Abraham High School, saved $75,434, compared to fuel-oil costs, by heating with chip biomass.

"We went into chipping not knowing that oil was going up," Jim said. "We just knew it was a good market. We walked into it at the right time."

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Pictured on front: Jim Lathrop and his son, Justin, at Lathrop Forest Products. Right: In 2006, Jim Lathrop auctioned off all his sawmill equipment, keeping only trucks, live-bottom trailers, and chipping equipment. He needed those for his new business, supplying woodchips—to a wood-fired power plant, a paper mill, and a growing number of Vermont schools and other institutions that are heating with wood biomass.

'I Call that Sustainable'

Just a few years ago, good-quality woodchips were available only as a byproduct of hardwood milling. That supply was limited, and the sawmills—including Lathrop's—viewed this piece of their business as an afterthought. Then in the early 1990s, a growing number of Vermont schools were investing in woodchip heat (39 public schools now have systems). State officials approached Lathrop about becoming a supplier.

Jim bought a used live-bottom trailer, for delivering chips to a couple of area schools. Three years later, he was supplying three times as many schools and had bought three new trailers.

He was still delivering his own mill chips. "It was a byproduct, and there was a market for it." He began getting more requests for chips than he could meet.

Then in 2002, he lost his primary mill to a fire. "The morning after, I had to lay off 40 men," he said. His wife and two sons were in the business with him.

"We had a think-tank session, after the fire," he said. "We came to the conclusion that the good-quality, mature sawlogs were not available for the number of mills. So we decided to go to the chipper."

The business bought a grapple skidder and a feller buncher, a mechanical tree harvester. Lathrop kept a smaller sawmill going until 2006, then got out of that business entirely.

To get chips, Jim now bids on logging contracts—anything upward in size from a two-acre project. Over the past quarter century, dozens of Vermont dairy farms have gone out of business—so onetime farmland has been growing up to brush and fast-growing trees. Lathrop has been clearing land for new farms, for pastures and orchards and vineyards, and for development.

The hardwood sawlogs that he harvests, Jim sells to sawmills. The remaining species, and the logging leftovers, he chips.

"I try to utilize everything—100 percent," he said. "Wood is growing 30 percent faster than it's being cut in this state. I call that sustainable."

When people and organizations interested in chip heating ask his advice, Jim said, he first assures them that the supply is there, if the system is designed to handle it.

"I tell them to spec a boiler that'll handle bole chips—not just mill chips. Then you will have a chip supply. As you drive around the roads of Vermont today, you'll see all the old farms that are growing up to woods—poplar, pine, hardwood. A lot of that wood is going to be harvested. Why else am I six months or a year behind in my logging jobs?

"I've always worked around the woods," he added. "I helped my grandfather log, I helped my father log. This was a natural progression as the sawmill business faded."

For more information on this and other biomass energy projects, contact:

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