

Mechanization Suits Firewood Business

By Diane M. Calabrese

Date Posted: 11/1/2005

EAST GREEWICH, New York — Fans of the History Channel may have seen the star of Bob Riley's logging and firewood operation more than once. In 2004, Bob's TimberPro 820, a combination harvester and forwarder, was filmed for a program titled, "History of the Chain Saw." It appears in two separate clips.

The video makers documenting the use of the chain saw found a good source in Bob, who owns Locust Hill, LLC. Bob has been logging and processing firewood for 30 years. He moved into logging and firewood processing from dairy farming, but not directly.

Bob was studying engineering in college when the things began to change in the energy marketplace. "In the early 1970s, everybody started putting in wood stoves," he recalled. The search for an alternative to oil and gas — and to some extent, electricity — is not unlike what is taking place today. In late summer of this year Bob already had orders for firewood two to four weeks ahead of what he could supply at the most brisk rate of production.

In fact, it was the strong demand for firewood some three decades ago that helped Bob realize he wanted to pursue a wood products business. He had experience to bring to fore. While working with his father on a dairy farm, he had a good introduction to felling trees and splitting wood. He also had intimate knowledge of machinery and how to select the best and keep it running well.

With a three-person logging operation — two employees and himself — efficiency is important to Bob. "I'm running the TimberPro," he said. "I've a guy running the log skidder and a truck driver." Another employee, 65 and semi-retired, operates the firewood processor.

The TimberPro 820, which Bob purchased in December 2001, was a crucial addition to his logging business. He needed a machine for felling that would allow him to keep up with orders for firewood, one as fast as the firewood processor.

Choosing the TimberPro was easy, said Bob, because it had all the features he wanted. It has "eight wheels and tracks on the front," he explained. It moves easily, even through the deepest snow he has encountered in four years.

"I haven't put tracks on the back yet," said Bob. "But I've had it on some pretty steep hills. I was going through three feet of snow with no trouble, just tracks on the front. I do have a set of tracks (for the back wheels), but I haven't used them yet," said Bob. The tracks he has at the ready, if needed, are from Pedno.

In many ways, the reliability of the wheeled TimberPro 820 is a signature of the company that makes the machine, TimberPro Inc. in Shawano, Wis. When Pat Crawford exercised an option to the wheeled line of equipment from the company he sold to Partek in 2000, he started TimberPro. Today, TimberPro is growing. This fall it is opening a 16,000-square-foot addition to its factory.

TimberPro offers machines to meet the wide variety of conditions that loggers confront. The TimberPro carriage can be fitted with a number of different felling or

processing heads, including the LogMax 7000, the Quadco Disc Saw, and the Rolly II from Risely Equipment.

For Bob, the Valmet 380 processor head, which has much in common with the newer Valmet 850, is just the right fit. The Valmet 380 is designed to handle large diameter stems and tough limbs in mixed species stands. It is made to feed fast and cut fast.

Thinking back on the purchase he made four years ago, he recalled that cut-to-length methods were just beginning to move into the region where he works. He depended then, as he still does, on advice from Mark Bourgeois at C.J. Logging Equipment in Boonville, N.Y. C.J. Logging has been a leading dealer in bringing mechanized equipment to the Northeast.

Locust Hill, which is named for the farmland Bob bought to anchor his operation, is located in the town of East Greenwich in east-central New York. East Greenwich in Washington County is close to Vermont. The town is approximately 35 miles northeast of the Empire State capital of Albany.

"I'm right on the Vermont line," explained Bob. "I sell wood in Vermont, but I do most of my cutting in New York." Locust Hill sells firewood only by the full cord, which is a stack 8 feet long by 4 feet high and 4 feet deep.

To process firewood, Locust Hill uses a Multitek 2040 machine. "It's my second" Multitek, said Bob. It was purchased in 1995. He bought his first Multitek in 1988. "It's pretty much the top of the line," he explained. "It's probably the safest for what we're doing. The bar saw is safer."

Only a small amount of the firewood sold by Locust Hill is seasoned. None of the company's firewood is packaged. Bob had an opportunity to get into packaging firewood, but he turned it down. "I already had all the work I could handle," he said.

Configuring Locust Hill for maximum production has always been part of Bob's approach to the business. Consequently, it's not just the TimberPro that goes to a tract.

"Everything goes to the job site," said Bob. That includes a John Deere 540E cable skidder and a Barko 160B loader with a 30-foot boom. "We sort right there" on the job site, he explained.

"The firewood is all my hardwood that doesn't go into logs," said Bob. "Sometimes it's half or better" of the timber that is harvested on a job.

"Firewood (logs) goes right on the processor," said Bob. The Multitek has a conveyor that carries the cut, split firewood directly into a truck for delivery.

Bob has a Marmon tri-axle with a seven full-cord box on it that he uses to haul firewood and pulpwood. He also has a Mack tandem rig with a door in the middle that enables him to dump two cords and retain two cords. Often, Bob's day ends with a firewood delivery, just as it begins with a stint in the TimberPro.

"Right now I'm on a tract that was killed by hail — 30 to 40 acres," said Bob. The tract was being clear-cut to encourage stump sprout. Much of the standing timber on the job consisted of dying trees, many of them as small as 4-10-inches in diameter. In that situation, he explained, as many as two-thirds of the trees will become firewood.

Bob got the job to cut the hail-damaged stand because a forester knew his ability to handle smaller wood and contacted him. It is typical of the type of custom cutting he does for farmers and other landowners. He also cuts for municipal water departments.

“The reason I chose the TimberPro is because it is a TimberPro forwarder with a harvesting head,” said Bob. “It’s one machine to do everything.” In pine, he takes a load of wood to the landing and off-loads directly onto a logging truck. He can use the machine for thinning in hardwood stands, too. In those stands, the TimberPro maneuvers easily and enables him to cut small wood and leave residual trees intact.

The Valmet processor can handle a 24-28-inch diameter tree. It is designed for big tree directional felling. “I cut some big wood, nice wood,” said Bob. “I’m still cutting and skidding with a skidder” on certain jobs, he explained.

“When I’m cutting high-quality maples, I use a chain saw,” said Bob. He uses a chain saw — a Stihl — and manual felling for those trees to ensure the wood does not stain. “You’ve got to learn what works best” in which setting, he explained.

Getting the right price for quality wood is something that matters to the owner of Locust Hill. Bob has harvested high grade curly maple that was exquisite, but he couldn’t get what he thought was a good price, so he had the logs sawn into lumber and used it in his own house.

In all, Locust Hill merchandises six grades of logs: slicer veneer, two grades of rotary veneer, saw logs, pulpwood and firewood. Some of the dominant species in the region include hard maple, oak, cherry, poplar, hemlock and white pine.

There’s a learning curve to using any harvester, Bob noted. “I had a guy from the factory come out,” he explained, adding that he learned rapidly.

Mark at C.J. Logging has been so impressed with the way Bob handles the TimberPro that he has filmed Bob at the controls. The video helps to demonstrate to other loggers the potential of a mechanized operation, even in old growth forest in New York and New England.

“Bob, being an excellent operator, allows this type of equipment to work at its maximum potential,” said Mark. “This makes it economically feasible and profitable.”

A chance encounter at a forest products trade show in 2001 — the Northeastern Forest Products Equipment Exposition in Bangor, Maine — ignited Bob’s interest in TimberPro. Until then, he said, he had not been persuaded of the benefits of mechanization. He didn’t think of mechanized felling as much more than a “chain saw with wheels.”

At the trade show, Bob talked to another logger who had mechanized. “One guy started talking about an eight-wheel machine with a harvesting head with bunks on it,” Bob said. It was the TimberPro.

Bob liked what he heard. He met Mark at the show, who told him more. Soon he was buying a combo TimberPro machine from C.J. Logging.

Versatility is just one of the things that Bob likes about the TimberPro. “It’s put me in the cab — comfort,” said Bob of the machine. If it starts raining, he said, it’s nice to be able to keep working and stay dry.

Mechanization involves much more than a capital investment in a machine and then running and maintaining it. “You have to buy the right wood for the machine,” said Bob.

The TimberPro machine can be converted from felling or harvesting to forwarding quickly and easily. The Valmet 380 processor can be removed and a grapple installed in its place. The entire changeover requires no more than 15 minutes, said Bob.

In his application, however, Bob is using the TimberPro 820 solely for felling, processing and loading. "I've never used the grapple," he said. "I cut down and load with the processor."

When contracting for work, Bob tries to stay within an hour's drive of East Greenwich. Most of the trucking of veneer logs is done by a contract hauler. Sometimes the log buyer does the hauling. Bob owns a WesternStar tri-axle with a Prentice 120E loader and pup trailer and has a log trailer for some of his own hauling. He hauls saw logs and pulpwood for some other loggers, too.

Locust Hill sells veneer logs to mills as far away as Indiana, Wisconsin and Michigan, as well as some in Vermont. As for firewood, there is a well-circumscribed region of buyers. "My main market (for firewood) is the Albany bedroom communities," said Bob.

One person operating the Multitek 2040 — usually Gordon Fish — at a leisurely but steady pace can easily produce 11 cords per day, said Bob. In fact, the machine can produce 16 to 18 cords per day. Bob's wife, Patricia, runs the firewood processor in Gordon's absence.

Working in and around the Adirondack Mountains, the crew at Locust Hill encounters some low ambient temperatures in winter. "Ten below, easy" is common, said Bob. Twenty below is not rare, and they will work in weather as cold as 30 degrees below zero. The only thing that stops the crew is when machines will not run because fuel gels at sub-freezing temperatures.

As for the TimberPro, said Bob, it meets all his expectations. "What they're calling for it to do, I've done it and more," he said. "It's pretty rugged. You've got to learn how to run it until that head works like your hand."

There is a mud season in the spring and the fall for Locust Hill. Bob tries to have some work lined up on sandy substrate so he can keep cutting. He also uses the intervals for equipment maintenance. Since he processes firewood year around, he also tries to consolidate logs ahead that can be run through the firewood processor at his home base.

When there is time away from the business, Bob likes to "take it easy," but he has been extremely busy given the sustained demand for firewood. His wife, Patricia, plays an integral part in the business, handling everything from answering the phone and taking orders to ordering parts.

Bob is a member of the New York Timber Producers and the Northeast Loggers Association. His commitment to his profession does not stop there. "I'm on the board of directors of the Washington County Farm Bureau," he said. The professional service allows him to interact with farmers and to hear about their needs.

Bob is also a member of the New York State Lumbermen's Insurance Trust Fund, a self-insuring workmen's compensation program that provides safety training, and he is a certified New York state logger.

There are several things Bob enjoys in running his own company. "I like being my own boss," he said. Moreover, there is also the opportunity to increase income. "If you need more money, you just go out and work another day," he said.

When Bob was studying engineering, he was at Hudson Valley College in Troy, N.Y. and cross-registered at Rochester Polytechnic Institute. He came to a crossroads. The firewood business he had started became so time-consuming that he had to make a choice between the business and pursuing an education. He chose logging and firewood.

Many customers of Locust Hill have been buying firewood from the company for decades, and Bob appreciates their repeat business. Hordes of newer customers are also calling Locust Hill, especially because of rising fuel oil prices.

For customers new to burning wood for fuel, Bob is able to offer some advice on how much wood they will need. A cord of wood is equivalent to about 200 gallons of heating oil, according to Bob.

In the winter of 2005-2006, it looks as though more energy consumers will become familiar with the conversion.