



## Combining cutting & Cattle

**The Leussink family in Alberta are doing selective harvesting on their woodlot, and keeping their sawmill plenty busy just through word-of-mouth—and to top it off, managing 80 head of cattle.**

*By Tony Kryzanowski*

Mike and Lil Leussink are not just sawmill owners, but producers of sustainable woodlot products. They believe that it is possible to both preserve a natural forest environment and gain financial benefit from it. And they wish that more land-owners would think twice before calling in the bulldozers or letting their cattle loose without considering the environmental consequences.

The Sundre, Alberta-area farm family lives just east of town, where they manage a small herd of about 80 head of cattle on one broken quarter section of land, while harvesting the bounty from two quarter sections that have barely been disturbed since settlement of the west. This includes select harvesting of genetically inferior trees and using them to produce lumber with their Finnish-made Kara YS sawmill.

“We know that a woodlot is valuable,” says Lil, “not just to us, but to everybody in the area for protection from wind, for wildlife, water, and so on. This particular woodlot has different species that you won’t see anywhere, because it hasn’t been bulldozed or demolished.” In fact, she says many unusual birds have made it their home and it contains several endangered plant species.

In addition to select logging to manufacture lumber, the couple also manages a successful firewood business.

“We are just selective harvesting areas as we need to when we get orders for the wood,” says Mike. “It is really a mixed stand of all ages. We are managing it for the wildlife and for recreation. We’ve developed trails, and there are actually three natural springs on the woodlot.” One is delivering about 25 gallons of water per minute.

What’s beneficial from this log harvesting method, he adds, is that he never has to replant trees because natural regeneration looks after reforestation. The woodlot fibre basket consists of pine, white spruce, black spruce, tamarack, dogwood, aspen, and balsam poplar.

In the past, they have also produced honey and the purchaser of their honey-making equipment is interested in setting up his hives in their woodlot. Depending on the year, the woodlot also produces a variety of mushroom species that could potentially be harvested as cash crops.

What’s somewhat unusual about their woodlot is how they discourage cattle grazing except at specific times of the year. This is contrary to how the Alberta government typically allows cattle owners to utilize forested Crown land leases for pasture. Usually, there is no restriction on when cattle are released into the lease. Mike says they discourage cattle grazing on their woodlot because of his experience growing up on the farm and witnessing the damage that cattle can do to the land base.



“We keep the grazing to a minimum,” he says. “There are certain times of the year when grazing is not as damaging, such as the late fall, after the trees have completed their growth stage and the ground is starting to freeze. The grazing does have a role in fire control to reduce the fire hazard, but we try to keep grazing to a minimum.”

Mike also grew up in an environment where operating a sawmill was part of everyday life. His father was a carpenter by trade, and logged and manufactured his own lumber. Mike inherited that sawmill but it was very inefficient in terms of wood recovery. So he went shopping for a newer, more efficient sawmill. That’s when he discovered the Kara sawmill product.

Mike says he settled on the Kara YS model essentially because the price was right. It had been demo’ed at a number of forestry shows, and although he would have liked a little bigger model with a few more features, the offer was just too good to refuse. One of the main claims to fame of the Kara sawmill is that it uses a thin kerf circular saw. Essentially, Mike went from making a lot of sawdust with a 3/8th inch kerf sawblade on his old sawmill—in addition to burning a lot of diesel—to a 3/16th inch kerf saw blade on the Kara mill, producing a lot less sawdust and a lot more lumber, while burning a lot less diesel fuel.

Many Kara sawmill owners find that the thin kerf circular sawblade is a good alternative to bandsaws because it is capable of more production with a lot less waste.

“That was nine years ago now and we have been using the mill ever since,” says Mike. “It’s very efficient and only takes 85 horsepower to run. We could even run it with 60 horsepower, but you’d have to run it a little slower.”

He uses the power take off (PTO) on his farm tractor to provide the diesel engine power.

The size adjuster, which determines the board width, is hydraulic and mechanical on this sawmill model as opposed to electronic. This was a positive feature since the sawmill is located outdoors. A mechanical and hydraulic system makes it easier to operate in cold weather.

Another selling point on the Kara sawmill is that in some cases it can be operated by one person.

“I would say that you need a minimum of three people if you want to get some production,” says Mike. “If you’ve got more mechanization, yes, one man could run all day, but he’s going to spend the next day stacking lumber.” The older Leussink children lend a hand stacking lumber, making the business truly a family operation.

The sawmill only operates when there are orders to fill, as the business is focussed on the specialty and local lumber market.

“We cut all dimensions up to 12 X 12 and 22 feet long,” says Mike, “and we’ve done pretty well all dimensions and different lengths from six feet all the way to 22 feet.”

One of their best customers is the local Home Hardware store as well as the Co-op for rough 2 X 6’s and 2 X 4’s. Another good market is production of large planks for truck decking. Oil companies are also in need of heavy 4 X 12 and 3 X 12



aspens to set under their tanks and equipment. Farmers are good customers for 2 X 6 fencing. The Leussinks have even cut teepee poles for guides and outfitters.

“I’ve supplied furniture makers with aspen for furniture,” says Mike. “The market is changing—there seems to be quite a demand for clear aspen for lighter furniture now, instead of the old oak and mahogany. Customers are changing their tastes.”

Once an order has been placed or their firewood supply is getting low, the Leussinks will investigate their woodlot and handfell trees as needed. Typically, they will try to harvest trees that are exhibiting bad genetics, but every once in a while, they will have to retrieve a tree within a tough location.

“We fell the tree in such a manner that it does very little damage,” says Mike. “I use wedges to fell a tree so that it doesn’t destroy younger trees that have good genetics and that have potential in the next 50 years to be merchantable.”

Once felled, the tree is bucked. Then the log will be attached to a mechanical skidding arch, which is attached to a Honda 450 Quad. The arch is a device they purchased from Quebec company, Novajack. Novajack was created in 1999 to identify a line of tools and equipment designed for low impact forestry operations, which had been pioneered by Nova-Sylva since 1990. The company is dedicated to the design, manufacturing and marketing of small-scale logging equipment.

The skidding arch lifts the butt end of the log anywhere from two to six inches off the ground for easier transport and with less environmental damage.

Typically the tree branches are scattered on the forest floor, and in the case of conifers, the cones are scattered in sunny areas for potential natural regeneration. The tops of trees and slabs from the sawmill are used in the firewood side of the business.

The logs are loaded onto a truck or a wagon capable of transporting 20-foot long logs, and it can transport about 60 logs at a time. Once in the yard, Mike has designed his own log bunk to roll the logs into place for processing through the sawmill.

Waiting in the wings is a Logosol planer/moulder that is capable of producing tongue and groove paneling. The Leussinks used it to produce paneling for their own home, but realize they will need a building and some kiln drying capability before they can put that piece of equipment into commercial production.

For now, the Leussinks are pleased with how much business they have attracted through word of mouth and the enjoyment they get from managing their woodlot. It’s a satisfying combination.

“I’m actually afraid to advertise because I won’t have the time to cut what people come to me for, because it does take a lot of time,” Mike says. “Time is the limiting factor.”