



Lobster trap lumber

Nova Scotia's AFT Sawmill was born out of necessity to provide lumber for the A. F. Theriault & Son Ltd. boatyard, but it now produces a broad range of products—with a significant “value add” lumber product being lobster trap components.

By George Fullerton

The AFT Sawmill mill in St. Joseph, Nova Scotia holds a unique place in the forest industry in the western end of the province. The AFT mill is an important market for hardwood sawlogs for both industrial and private woodlot forestry operations in the region.

Augustine Francois Theriault (the AFT in AFT Sawmill) began operating the A.F. Theriault & Son Ltd. Boatyard in nearby Meteghan in 1938, and sourced lumber from a number of small mills in the region.

Initially the boatyard built wooden fishing boats to serve the Bay of Fundy and the Atlantic coastal fisheries. In 1978, Augustine's sons Ernest, Arthur, Russell and Larry took over management responsibilities and purchased the mill, in order to ensure lumber availability for the shipyard.

Brian Lombard had been working in the shipyard for a number of years as a draftsman when one Friday afternoon his boss, Ernest Theriault, approached him and invited him to go for a drive. Lombard said they arrived at the sawmill, and were having a look around, when Theriault stopped. With a sweep of his arms, he said to Lombard: “This could all be yours.”

Somewhat surprised by the random announcement, Lombard requested a bit of clarification. It turned out the announcement was an offer to become manager of the sawmill. “Give me your decision Monday morning,” was the next point of discussion.

Lombard became manager in 2000, not having any real sawmill experience. He explained he was 27-years-old at the time—and the next youngest employee was in his mid-fifties.

“All those older guys taught me all about sawmilling,” said Lombard. “I had never even seen a sawmill up close before. There was a lot to learn.”

In addition to overseeing the day-to-day sawmill supervision, Lombard also has log buyer responsibilities, handles log scaling, manages the value add manufacturing including the kiln operation—and if all this is not enough, he also handles marketing and shipping.



The third generation of the Theriault Family—John, David and Gilles—currently own and operate the boatyard with about 175 employees and the AFT sawmill, with its 10 to 12 employees.

As time and technologies advanced, wooden boats and ships have been supplanted by steel, aluminum and fiberglass. The Theriault boatyard currently operates two slips rated for 300 and 600 tons.

The demand for lumber in boat construction has been reduced, essentially to a small amount of wood used in their shop to build interior cabinets and trim for boats.

But as a brief tour of the boatyard's wood shop illustrated, finished wood and craftsmanship continues to be an important element in the boat building. The woodworking is unique, attractive and durable. And as Lombard pointed out, there is very seldom a straight piece of structure in a boat, so each piece of wood trim or component is unique to the vessel and application.

As a result of the reduced use of hardwood lumber in the boat yard, the AFT sawmill markets the bulk of its production to markets throughout eastern Canada.

AFT saws about three million board feet annually. Logs are delivered from operations all over the western end of Nova Scotia. Delivered logs are spread on the ground and individually stick-scaled and then the logs are piled by species.

“We saw logs by species because each species has unique grade specifications and graded lumber is marketed by species,” explained Lombard.

Log delivery is year round, and because of the recent downturn in the forest industry, the mill has witnessed temporary shutdowns due to a shortage of logs. Lombard offered that last winter's excessive snow accumulation was no help for forestry operations and log deliveries, either.

“We are very fortunate that our owners also operate the boatyard,” he said. “So when we shut down because of a shortage of sawlogs, our sawmill workers can usually be transferred to the boatyard. There is always something to do there. Some of our crew have technical skills that can be put to work in the yard, and there is always work like painting or maintenance.

“When we have rebuilt our log supply, we bring them back to the mill and we don't have to go looking for a new crew,” says Lombard.

Because the sawmill is about 15 kilometres from the nearest electric power line providing triple phase power, the AFT mill relies on a Caterpillar 3412 generating unit to supply power to the sawmill site.

The sawmill is basic: it starts with the infeed to a Morbark rosser head debarker. Breakdown begins with a



Morbark 48-inch main saw with thirty-six inch top saw. The sawyer turns the logs to get the best quality clear face lumber and the heartwood, typically, exits the mill as a 7" x 9" or a 6" x 8" railroad tie timber.

Quality boards are edged by an Anderson edger. Boards and small squared timbers (for guardrail posts, pallet stock and lobster trap stock) continue to a Canadian style trimmer, where the boards are graded by NHLA qualified grader Eric Stark. Product then continues to a covered green chain, where lumber is stacked and stickered for kiln drying.

Throughout the mill there is working evidence of modified and fabricated gear, which no doubt borrows on the technical and fabrication skills of trades people in the boatyard. The custom made pieces include gear reduction drives, log and lumber feed tables, a semi-automatic crane system for stacking railroad ties and much more.

Green lumber is stored in an open walled, but covered, storage structure until it gets added to a kiln charge.

AFT constructed a new kiln building in 2011 to handle a 10,000 board feet charge. The new kiln features Nyle electric dehumidifying technologies.

Lombard laments the recent closing of Riverbend Flooring and Finewood Flooring in eastern Nova Scotia, which has resulted in AFT having to go out of province to find markets for their # 2 and # 3 common lumber.

Kiln dried lumber goes into dry lumber storage, while it waits for trucking to customers.

While a good amount of lumber is shipped out of province, AFT also supplies local manufacturing businesses in Nova Scotia and New Brunswick, in addition to in-house value add manufacturing.

Heat-treated pallets are one of their major products. Pallet stock is broken down with a Baker re-saw, and a gang saw. Planer, and chop saws round out the value add tooling. AFT also buys heat treated softwood lumber and manufactures it into pallets for local industries.

Another significant "value add" lumber product is lobster trap components. It takes a lot of relatively small pieces of lumber to assemble a wooden lobster trap, and AFT breaks down low grade lumber to produce high quality, small dimension lobster trap components. AFT produces standardized pieces that are strapped by size, packaged and palletized for delivery to customers.

While plastic wire mesh lobster traps have made inroads into the lobster industry, Lombard said that wooden traps are still preferred by many in the industry.

Suggesting that a mixture of wood species could go into the small components for the lobster trap lumber, Lombard raised his hand to correct that assumption.



“The lobster fishermen who use wood traps are usually very particular about the species of wood they use to construct their traps, and that preference most likely goes back generations,” he explained. “And add to that, species preference is also associated with the region where the traps are set. You will hear fishermen say they would never use ash for a trap—and then a guy will come along and he might say he will use nothing but ash. Then someone will come along and explain he fishes off a certain shore and in a certain depth, and he has learned that nothing fishes better than a maple framed trap. So we also keep trap material separated by species.”

Much of the sawdust is marketed to pellet operations in the Annapolis Valley that use a 50-50 blend of straw and sawdust to manufacture domestic heating pellets. Chipped waste fibre goes to the export terminal at Sheet Harbour and is shipped to manufacturing plants overseas or to biomass markets. Bark and some sawmill waste is marketed as biomass in western Nova Scotia.

AFT buys oak, maple, birch, beech and some poplar logs. Lombard explained that his regular suppliers understand that hardwood logs need to be sawed and dried in a relatively short window after they are harvested. Sawing fresh harvested logs means they will produce stain free quality lumber and allows AFT to pay a good price for those logs.

“Occasionally a load of logs that has been lying in the woods for quite a while will land in the yard,” he said. “Since the wood has become stained over that period, the lumber will not make high grade, and no matter what clear face the logs will provide, it is essentially pallet quality lumber.” Lombard said that because of the stain degrade, the producer is disappointed by what they are paid. Lombard tells all his log producers to keep their hardwood saw logs moving to the mill, as fresh as they can, to avoid degrading stain.

Producing quality hardwood lumber starts with a high quality hardwood saw log. Loggers cut a lot of trees and are rewarded with only a few high quality saw logs. Locally, low grade hardwood is in great demand, from home owners, for wood heating. While separate from the AFT sawmill operation, the Theriault family utilizes a good deal of low grade hardwood in a fuel wood business, and sets up wood storage and processing on the AFT mill site, as well as the boatyard property, using Timberwolf and Hakki firewood processors.

Throughout its history, the AFT mill has seen a lot of challenges and changes in the forest industry. While change is sometimes challenging, Lombard remains confident that the Theriault family is committed to seeing the mill continue to operate and maintain its position as a quality lumber producer, an employer for workers and wood producers—and its key position for quality hardwood utilization in western Nova Scotia.