

LANDOWNER UPOCATE 4th Quarter 2019

Industry News

 A disruptor: GO Lab's wood-fiber products could jolt the insulation market

(September 30th)

GO Lab was founded in 2017 to develop and manufacture wood fiber insulation as a renewable alternative to polystyrene and fiberglass insulation. Made from softwood chips, the product will be recyclable and nontoxic, and is expected to perform as well or better than products currently on the market.

— MaineBiz

 Let's fill our cities with taller, wooden buildings (October 3rd)

Using sustainably harvested wood to build tall buildings will allow us to store carbon from the atmosphere both in forests and in cities. It will also support rural economies, improve wildlife habitat and create more affordable housing. A new opportunity to do this arises from

— NY Times

 China trade war triggers closings, layoffs at US hardwood lumber mills (October 8th)

cross-laminated timber, or CLT.

It is hard times for the U.S. hardwood lumber industry. The trade war with China has caused a steep drop in U.S. exports of the product, and now the industry is cutting jobs. China used to account for about half of all U.S. hardwood lumber exports, about \$2 billion annually. When the full tariff rate went into effect, trade volume to China plummeted to half what it was a year ago.

— CNBC

Industry Overview

Forestland Operations

Fall is always a wet time of year in the Northeast, and a time when foresters and loggers often shift into planning mode as they gear up for winter. Early in November, it looked as though things in the forest were freezing up early, which increased anticipation of an early start and a repeat of the fantastic operating conditions of the prior year that led to consistently good harvesting conditions. While it was cold for a week or two, the eagerness quickly waned as the cold weather departed for wetter and warmer conditions. More recently, we've had some colder days and nights, but it has not been consistent across the region. Many in the Northeast are still waiting for the starting gun.



Maine's Allagash River struggles to freeze over during an early temperate start to winter.

It will come eventually, but for now our schedule of operations in the woods is slightly behind where we'd like it to be for this time of year. Instead, foresters are seeking areas where there is reasonably well-drained soil conditions where harvesting can occur, or where the cold is more consistent and marginal roads can be tracked down without disturbance. Being a few weeks behind may not seem like much, but this part of the year sets the tone for the industry's most productive season. For landowners, the productivity in the 10-12 weeks of winter can make or break a year, and we'd much rather be ahead of the curve than behind it. The sooner the cold arrives for good, the better.

After a year-long steady retreat, the cost of diesel fuel is rising again, with most analysts blaming increasing tensions in the oil-producing Middle East region. Diesel is an important

NUMBER 2 DIESEL FUEL PRICES - NEW ENGLAND

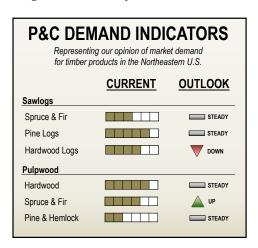
3 YEAR HISTORICAL MONTHLY AVERAGES



fuel for anyone working in the woods, and the impact of rising costs does not take long to trickle it's way into the forests of New England. A 10% change in diesel prices will have a small but noticeable effect on timber returns - a burden some parts of the supply chain just don't need right now.

Forest Products Markets

In general, this is a time of year when wood consumers follow the weather as much as anyone. Winter is the time to feed a hungry facility, and high consumption mills need to purchase aggressively so that the coffers don't run dry in the spring mud season lull. In the few weeks of winter, many mills need to purchase up to six months of furnish, so the clock starts ticking early and the pressure rises the longer the forest stays wet.



With landowners pulling back production because of the fiscal year end and logging contractors focused on preparing roads and equipment for winter, production has been limited late in the fall. Therefore, most of the roundwood consumers in the region have lost inventory in the last 3-4 weeks as consumption has remained constant but deliveries have fallen.

Overall demand for forest products in the Northeast is currently about as a mixed of a bag as you can get, with significant differences regionally among the same product. Much of the regional differences are due to the local effects of competition, unique supply constraints, and -- of course -- weather.

Pulpwood Products

Pulpwood is an incredibly dynamic regional market that has undergone a significant amount of structural change in the last 5 years. The ripple effects of the resurgence of pulpwood demand in the past 3 years are abound, and the market continues to evolve as the recovery plays out. Most notably, softwood pulpwood demand has strengthened considerably, putting pressure on other products and on producers in general. Because of different pulp mills' supply needs, particularly as it relates to spruce & fir (a more desirable softwood species set), and pine



ND Paper will make 'substantial' investment in its Rumford paper mill (October 9th)

ND Paper announced Tuesday that it will invest in significant upgrades to its Rumford mill in the coming year. The company will shut down its No. 9 machine in early 2020 for a rebuild to increase its pulp capacity, while its three paper machines will undergo significant upgrades as well to increase capacity and quality.

- Bangor Daily News

UMaine gets \$1.1 million for forest economy plan

(October 16th)

A plan to diversify and grow the state's forest economy has been given a boost with a \$1.1M federal grant. The money, matched by state and local funds, will be used to expand a coalition of businesses, communities, academia and government launched last year called Forest Opportunity Roadmap/Maine. For Maine, that aims to grow the state's wood products economy by 40 percent over the next five years.

- Press Herald

■ A Montana firm pledged \$22M to build a factory in Maine - It still hasn't come through (October 17th)

In February 2018, SmartLam North America, announced that it was committed to building a factory in Maine within 18 months and had narrowed down its search for a site to two unspecified locations. The plan was to build a \$22 million factory in Maine that would produce a composite wood building material and create 100 jobs. In June, the company announced that it could not go forward with the project as planned.

— Bangor Daily News

& hemlock (a less desirable but cheaper alternative), there have become significant demand and price differentials in the two species groups, heavily influenced by the competitive environment of the closest proximate consumer.

In the past year, the most dramatic effects on the regional pulpwood market have been largely influenced by its newest entrant. It was a little over a year ago when we first discussed in this publication the future restart of the pulp mill Old Town, ME by the Chinese firm Nine Dragons. At the time, the startup of new softwood pulpwood capacity was planned for the second quarter of 2019. We've now just completed the fourth quarter, and while the owners appear to have a 100% commitment to restarting successfully and to solving their startup issues, the mill has been dogged with problems and struggled with producing pulp on a sustained basis. We believe they will get it right soon.

In anticipation of its second quarter scheduled start, however, the mill began purchasing raw material in May - a decision which would have aligned well with a normal startup curve. The fact that the mill has consumed very little material since then has left their yards and facilities with extremely high inventory of hemlock & pine pulpwood - two species which have been technically troublesome to consume. The excess inventory has led to a series of significant ripple effects in the softwood pulpwood market, include widening differentiation between the prices of different softwood species.

It's also had ripple effects for landowners. After the Old Town mill started purchasing fiber, foresters in proximity to the mill were making plans to harvest areas concentrated

with hemlock & pine pulpwood. It was an opportunity to clean up areas, and get some good old forest weeding done. Now, with the market saturated, many are scrambling to rethink their operating plans. Indeed our plans are now being adjusted to reflect this -- we're not avoiding hemlock, but we are certainly not as aggressive as plans initially called for. For the time being, we expect some downward pressure on hemlock & pine demand, but once the mill gets going and the excess inventory is worked through, prices should normalize. In contrast, spruce & fir pulpwood products will be steadily produced & consumed during winter, and pricing seems to allow harvests in most areas of Maine.

Hardwood pulp consumption in the region remains strong -- mills are hungry to stay wellfed and are extending their reach to ensure supply. Throughout most of our operating region, we are able to economically harvest and deliver hardwood pulpwood. As long as the commodity market pulp rate keeps pace with the regional price for pulpwood (which is a big "if" considering the two are often uncorrelated), this should continue.

Sawn Products

Softwood Sawstock

While dimension lumber prices remain near lows of recent memory, prices continue to become more stable and predictable. The lack of volatility in prices spells relief for sawmills - while traditional swings of \$5-10 per MBF were common, in the last few years the market frequently saw weekly changes as high as \$20-25. This kind of volatility breeds nervousness and makes buyers hesitant to commit. With a more stable market, sawmills are less likely to be burned, and wood buyers can regain some degree of confidence. We are calling that progress.



Maine Voices: Forest products industry has much to celebrate (October 21st)

After some of the toughest years in the long history of Maine's forest products industry, a new, stronger forest economy is emerging. From 2014 to 2016, five pulp-paper mills closed, thousands of jobs were lost affecting families and communities across the state. However, the remaining mills have modernized, retooled and diversified their product lines. Maine's lumber and wood panel mills also have invested in their facilities to keep up with advances in technology. As the mills rebound, so does the demand for wood.

— Press Herald

■ Loggers cooperative, formed after new law, partners with Quebec company

(November 1st)

The New England Loggers Cooperative, formed after a law went into effect Sept. 19 that allows Maine loggers and haulers to form cooperatives and collectively bargain, has entered into an agreement with Matériaux Blanchet Inc., a Quebec lumber mill that handles much of Maine's harvested softwood. Under the agreement, any lumber harvested from Maine forests will be cut and shipped by Maine loggers and haulers to the Quebec sawmill.

— Mainebiz

■ The families who control the future of America's forests (November 12th)

Some 10.4 million families own 36% of America's forested land, and share a lot of responsibility for the country's ability to tackle climate change. Whereas publicly owned forests will have experienced forestry professionals making large-scale management plans, it is harder to create a comprehensive and coordinated approach when the forestland is divided between private individuals.

— The Hill

PRICE TRENDS IN SOFTWOOD LUMBER

\$900

Spruce/Pine/Fir 2x4 - Northeast

Eastern White Pine 1x6 - Standard

\$600

\$400

\$300

Spruce/Pine/Fir 2x4 - Northeast

Eastern White Pine 1x6 - Standard

\$453

Spruce/Pine/Fir 2x4 - Northeast

The tariff dispute between Canada and the United States regarding softwood lumber continues with little to no change in the stalemate. While most Quebec border mills (critical to the timber flow in the Northeast) are paying over 20% tariffs to import lumber to the U.S. as a result of the trade argument, some Quebec border mills have applied for and received adjustments to their individual countervailing duty (CVD) tariff rate. To do this, they must prove to U.S. regulators that their level of subsidy is well below that assumed by the blanket tariff. As a result, some Quebec border sawmills have seen their tariff rate drop closer to 6%, while others are paying the full freight.

Inventory levels at spruce and fir sawmills are highly regional and situational, with no consistent theme. Some mills need wood while others are brimming. Several are at the tail end of significant capital investments, having built inventory with the expectation of coming out of the gate at full speed once upgrades are completed.

Demand for residual chips from spruce & fir sawmills has increased with the revival in production of softwood pulp. This is a welcome change as sawmills attempt to clean every penny from every ton of wood they

buy. In fact, it is likely that the anticipation of increased consumption of chips at pulp mills helped justify sawmills' decisions to invest and improve their facilities. While these chips aren't a large component of the material, every little bit counts.

While playing in a much smaller market size, hemlock and pine sawmills are a little nervous for the opposite reason. Hemlock & pine stands always contain much heavier proportion of pulpwood, and the regional supply of hemlock & pine pulpwood is experiencing a glut. If loggers decide to avoid hemlock & pine stands because of pulpwood pricing, then fewer logs will be produced, which could undersupply these mills.

Hardwood Logs

Prices for the regional staple hardwood lumber products, yellow birch and hard maple, have been in a slow decline for some time. While the retreat in demand for red oak lumber led the way in a much more dramatic fashion, lingering effects from the US-China trade dispute have cast a shadow on demand for other hardwood species on the periphery. Our major concern has been that profit margins at our regional sawmills would turn negative, and they would face



 Verso announces sale of Androscoggin and Stevens Point mills to Pixelle Specialty Solutions for \$400 million

(November 12th)

Verso Corporation has entered into an agreement to sell its Androscoggin mill, located in Jay, Maine, and its Stevens Point mill, located in Stevens Point, Wisconsin, to Pixelle Specialty Solutions LLC for \$400 million, subject to post-closing adjustments. The transaction is anticipated to be completed in the first quarter of 2020.

— Paper Age

The trees and the forest of new towers

(November 20th)

As engineered wood evolves as a construction material, the sky is becoming the limit for timber office and institutional buildings. Increasing numbers of architects, developers, governments, educational institutions and corporations are embracing wood. Those who favor timber say far taller wood buildings are possible. Prominent architecture firms have done studies for wood-framed skyscrapers between 40 and 80 stories.

— The New York Times

 Loggers seek relief from \$646 million drop in China log exports
 (December 10th)

Just as farmers across the U.S. have come together to address the impacts of tariffs, loggers are facing similar issues as wood markets soften globally due to the imposed tariffs on imports. Sales of U.S. softwood and hardwood logs to China, the world's largest log buyer, have fallen \$646 million so far this year. This trend is expected to continue as China works to source other suppliers.

— Woodworking Network

RECENT PRICES IN HARDWOOD LUMBER - NORTHEAST



the tough choice of curtailing or pausing production until profitability turned a corner. However, the reality has been that hardwood sawmills have been able to successfully negotiate new log prices that have stayed somewhat in step with the lumber markets. Both log inventories and margins are thinner, but the sawmills appear to be able to operate and move products.

Interestingly, soft maple lumber prices have been holding strong in the face of this downward pressure. The higher grades of soft maple lumber now exceed that of hard maple, and are currently trending upward instead of downward. While hard maple is generally a finish product, soft maple is more of a "filler" and tends to be produced more in the winter months. This won't offset the drop for all the other hardwood species, but it is a positive movement.

Benjamin D. Carlisle
PRESIDENT



 Forget the log cabin. Wood buildings are climbing skyward — with pluses for the planet.

(December 12th)

- "Mass timber" construction is gaining ground and exciting builders, city planners, architects and environmentalists around the world. Builders see it as a way to construct midrise structures faster and cheaper. City planners see a fast track that could help reduce housing shortages. Architects love its light weight and look. And some environmentalists tout its ability to lock up carbon to combat climate change.
- The Washington Post
- Maine's forest product industry aims for 30% growth over five years (December 27th)

A business coalition for Maine's forestproducts industry is looking to add 30% growth to the \$8 billion industry by 2025. In the past, Maine's forest resource went primarily to papermaking and saw logs. Those products will remain the backbone, but the industry is looking to diversify.

— Maine Biz

Our View: Wage climate fight with wood-based products

(December 29th)

Steel beams and concrete can be replaced with climate-friendly wood products manufactured in Maine. And shifting to wood products would save money, lowering the cost of responding to climate change. Conversion to construction materials made from sustainably harvested timber would help the state make an even bigger contribution.

— Maine Sunday Telegram

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Please note: This report is intended to be an unbiased and accurate source of information on timber markets and timberland investments. However, timber market conditions and the forest products industry vary greatly within and across regions and depend on a substantial number of factors that this publication does not cover. Therefore, anyone using information published in this report for any specific purpose, sale or contract does so at his or her own risk. Information included in this report and provided by other sources is believed to be reliable and accurate. Prentiss & Carlisle assumes no responsibility for errors or omissions.