



Industry News

■ **Trump issues executive order on forest management** (Dec. 31st)

An executive order on forest management issued by President Trump on December 21, 2018 addresses how rural economies can benefit through the utilization of byproducts created by forest restoration efforts. The executive order states that it is the policy of the United States to protect people, communities, and to promote healthy resilient forests, rangelands and other federal lands by actively managing them through partnerships with states, tribes, communities, non-profit organizations and the private sector.

— *Biomass Magazine*

■ **Log Cabins? No, These Wooden Buildings Are High-Rises** (Jan. 1st)

Seeking greener projects, builders are choosing timber for offices, apartments and campus buildings, rather than concrete and steel. The International Code Council concluded last month that some wooden buildings could climb as high as 18 stories, more than twice the current permissible height, without compromising safety. Unlike the production of concrete and steel, which generates huge amounts of carbon dioxide, the creation of lumber is a relatively low-pollution process.

— *NY Times*

Industry Overview

Forestland Operations

As the forest in the northeast begins to enter the springtime “mud season”, forestry activities quickly grind to a halt, and we find ourselves with some time to look back, collect our breath, and review what was, unquestionably, a good old fashioned winter. Productivity of timber from the woods surged as the prevailing cold kept the ground frozen both in the woods, and on our important network of roads. Because of the cold weather, our winter forest operations season was effectively extended about three weeks beyond its traditional end. As I write this, we are winding down the quarter still expecting early morning temperatures in the single digits in our northern regions.



Large snow banks surround a loaded truck headed to the market on a freshly plowed road.

At the end of the frenetic winter season, cold nights are crucial to putting a cap on our forest operations. Because things can shift suddenly, it is important to have a predictable and tight supply chain -- we aim for the trucking of timber to happen within one week of the product being produced in the forest. If that spread increases, and the weather warms to the point where trucks can't get in and out reliably, there is a risk of having timber left on the ground with no way to get it out until summer. With certain species of wood, that can result in high-value sawlog material degrading into pulpwood as it sits. Therefore, we always prioritize the most perishable products first, and keep a close eye on our supply chain. Thankfully, this year we have had ample opportunity to clean up the forest, get timber to places we can easily access, and limit the amount left in the woods.

As you would expect, logging conditions have been exceptional this winter. If a region experienced a thaw, it was so brief it was barely noticed by our forest operations teams. The only hurdle the industry had to deal with this winter was the persistent snowfall and significant

NUMBER 2 DIESEL FUEL PRICES - NEW ENGLAND

3 YEAR HISTORICAL MONTHLY AVERAGES



amount of snow accumulation. In some areas, the accumulation was so great, only the largest of harvesting equipment could navigate in the woods. Smaller equipment struggled to deal with the snow depths and operators occasionally had to park the equipment. Hand crews, who operate on foot with chainsaws and cable skidders, were all but out of business.

Operating costs for logging operations continue to creep upward as the tight labor market creates workforce capacity shortages and the price of diesel fuel and ancillary petroleum products climbs. As a landowner, we work hard to stay ahead of increasing costs for our contractors, and we accordingly increased our standard logging rates in the past quarter to ensure we retain and fairly compensate the loggers and truckers who we rely on. Transportation of logs to the market remains an issue due to the shortfall of available trucks, however the extended winter this year provided a bigger window in which to deliver all the products we had planned.

Forest Products Markets

As the industry approached winter last quarter, many wood consumers in the northeast were nervous about whether or not they would be able to acquire all the raw material they needed. Not only was the region as a whole consuming more wood than in recent years at pulp mills, by January it was confirmed that a whole

new entrant in the pulpwood market was quite serious about their plans to restart a idled mill in Old Town, Maine. This spread concern among pulp mills that there wouldn't be enough pulpwood for everyone to get what they needed. Nervousness was also prevalent in the dimensional lumber markets, which were reeling after a swift decline in lumber prices during autumn and were concerned about the normally slow sales during the pending holiday season.

P&C DEMAND INDICATORS

Representing our opinion of market demand for timber products in the Northeastern U.S.

	CURRENT	OUTLOOK
Sawlogs		
Spruce & Fir	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▲ UP
Pine Logs	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▲ UP
Hardwood Logs	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▲ UP
Pulpwood		
Hardwood	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▬ STEADY
Spruce & Fir	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▲ UP
Pine & Hemlock	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▲ UP
Biomass		
	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	▬ STEADY

As an industry, it can take a good four or five weeks from startup of winter harvesting to the steady delivery of timber to the markets. This delay only amplified the anxiety in the marketplace this year. During the height of the winter, we spoke with several wood buyers who saw slacking



LANDOWNER

update

1st Quarter 2019

■ Trump's executive order will aggressively cut more forest trees (Jan. 14th)

Trump issued an executive order that expands logging on public land on the grounds that it will curb deadly wildfires. While experts have urged federal officials to adopt a suite of policies to tackle the problem, including cuts in greenhouse gases linked to climate change, the president has focused on expanding timber sales. The order would translate into a 31 percent increase in forest service logging since 2017.

— The Washington Post

■ Softwood lumber prices rise as Canadian transportation issues hamper deliveries (Feb. 20th)

The spectacular rebound of North American construction framing dimension softwood lumber prices in early February continued as prices rose in response to transportation problems, mostly on Canadian railways. Severe weather hit many parts of Canada and the US, causing delays of shipments from softwood lumber suppliers.

— Forest2Market

■ Aroostook County's last biomass plant will shut down in April (Feb. 27th)

The operator of Aroostook County's last running biomass electricity plant, which currently employs 20 people, plans to shut it down in April. New York-based ReEnergy officials said that the Ashland biomass plant will stop accepting deliveries during the last week of February in anticipation of ceasing operations in early April.

— Bangor Daily News

deliveries and concluded that all the other markets were getting the bulk of the wood. However, with the addition of new capacity across the board, it seems more likely to us that the usual volume of timber was just spread over a wider range of markets. It was only once we hit our stride, and particularly as pulp mills in the region began to fill up, that the nervousness started to wane.

Pulpwood Products

Consistent with what we have observed in the past few quarters, consumption of hardwood pulpwood at our regional mills continued at a healthy pace. Before winter began, the level of raw material inventories at the pulp mills was alarmingly low, despite a season of steady production from the woods. Consequently, we have seen tentative price increases as mills compete for volume and begin to draw from sources further away from their home regions.

With a stretch of capital upgrades at several pulp facilities now bearing fruit, production has been steady and demand for the material feels higher now than it has in several years. Our regional capacity additions mirror what is happening in the pulp & paper sector across North America. Growth in production, particularly for tissue products and containerboard, has some analysts concerned about producers overshooting demand. However, for the time being, there appear to be no signs of this robust consumption abating.

Where there are strong markets, hardwood pulpwood, by volume, is still the most significant product to be drawn from the forest of the northeast. One would think with the cold winter that these facilities would be bursting at the seams with raw material, but it was really only in the last few weeks that pulp mills started to rebuild inventories to a comfortable level. The inventories at most mills now are in a much better shape than they were even just two weeks ago, and some are still trying to play catch up while deliveries taper off for mud season.

Not insignificantly, the regional markets for softwood pulpwood have roared back to life in the last year after a long period of dormancy. This winter, we delivered approximately two and a half times the amount of softwood pulpwood that we did last year. This new demand comes from two sources - one is existing hardwood pulpwood capacity that is blending in increasing amounts of softwood material, and the other is brand new manufacturing capacity that has developed organically as mills develop new products and retool their existing lines. The Verso mill in Jay, Maine, for example, appears to be fully ramped up to their anticipated consumption levels. Further east, new softwood pulp capacity in Old Town, Maine is scheduled to start up in late June. To put a fine point on it, we are now delivering softwood pulpwood -- unrestricted by quotas or limitations -- to over three times the number of locations that we were delivering to just one year ago. Ultimately, this means that we have had no problems moving our softwood pulpwood, and pricing is at a point where we can cover reasonable trucking distances in most regions.

Sawn Products

Softwood Sawstock

Despite the extreme whiplash in softwood lumber prices during last summer and fall, which rose quickly and then fell even more dramatically, things appear to have stabilized in the last quarter. Demand for spruce & fir sawstock has been steady throughout the winter, and mills have had an opportunity to adjust their raw material prices to reflect the current market for lumber. Since that time, things have been fairly stable.

The pricing drama from the summer, however, continues to have lingering effects. Not only did sawmills get caught off-guard with the swift decline in price and demand for lumber, but the memory of that turmoil has led to little confidence that the markets have stabilized. While nearly all dimension lumber sawmills remain optimistic in the



LANDOWNER

update

1st Quarter 2019

■ ***ND Paper fires up #5 boiler at Old Town Pulp Mill*** (Feb. 26th)

ND Paper LLC announced that it has fired up the #5 package boiler at the Old Town kraft pulp mill. ND Paper expects the mill to restart in the first quarter of 2019 and ultimately produce 275,000 tons annually of unbleached kraft pulp. The #5 boiler is the first piece of major operating equipment to run in the Old Town mill since its idling in October 2015.

— *PaperAge*

■ ***Report: Shortage of loggers and truckers hinders growth of \$8.5B forest products industry*** (Mar. 15th)

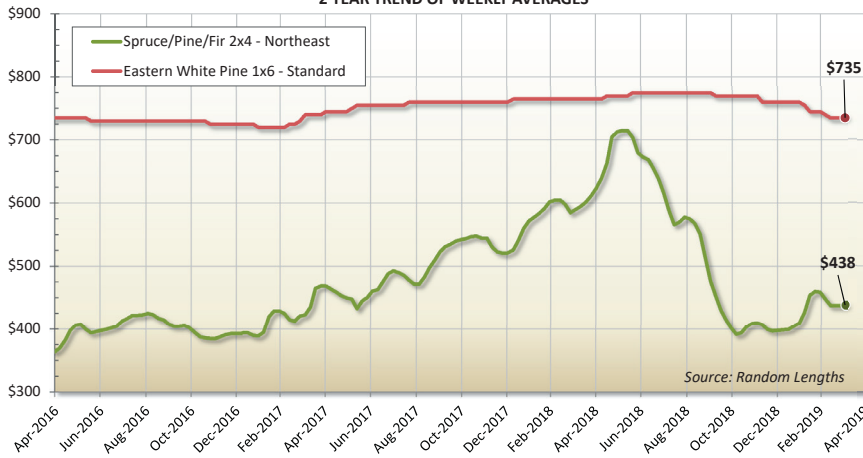
Maine faces a shortage of loggers and log truckers that will get worse — if wage growth does not occur — and could hinder the growth of the \$8.5 billion forest products industry in the state. Profit margins for logging contractors have dwindled as costs of doing business have risen, limiting the ability of contractors to raise pay for workers. The industry is already unable to fill an estimated 750 to 1,000 jobs today and those numbers are projected to rise upwards of 200 workers per year over the next 10 years.

— *MaineBiz*



PRICE TRENDS IN SOFTWOOD LUMBER

2 YEAR TREND OF WEEKLY AVERAGES



long-term, they have become very cautious about committing to longer-term prices. Nearly everyone in this industry appreciates predictability; when prices are volatile, the wood pile represents a big risk for sawmills, but when the prices are stable its not as much of a gamble. Understandably, this affects how they think about sourcing their timber.

The counterweight to hedging on pricing is the constant need for wood, particularly for the high-volume spruce & fir dimension sawmills. Because of the high degree of consumption, these mills have to secure their supply often months in advance, and the winter season is the time of year when they receive a high percentage of that supply. Despite the market shocks of last summer, winter is just as important to sawmills as it is to landowners.

Our regional pine sawmills are a similar story, except for the pricing volatility. Inventories were very low coming into winter, and it took all of the winter for mills to fill up to the point where they became comfortable with their inventory levels. Consumption at these mills is also high, and we expect some urgency again in early summer. While regional price indexes are indicating that pine lumber has

retreated slightly, we have seen no effect on local demand.

At our hemlock sawmills, we have also seen strong demand, and some upticks on pricing to reflect this. We were initially concerned that increased regional demand for hemlock pulpwood would result in a glut of hemlock logs, but the market appears to have fully absorbed all the material produced. Consumption is high and we expect these mills will be ready for deliveries again once mud season abates. One of our long standing customers for hemlock logs, N.C. Hunt, very recently had a substantial fire destroy their mill. Fire is a constant fear for any sawmill, but

thankfully no one was hurt, and they have plans to rebuild.

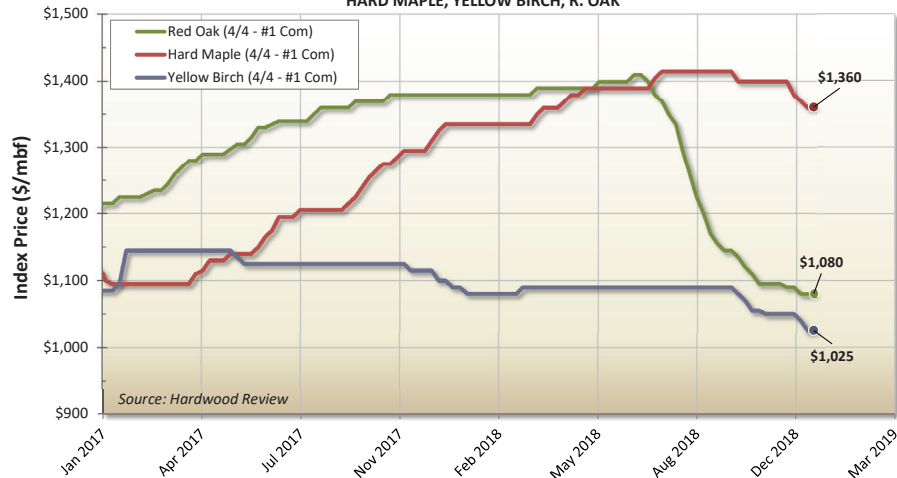
Hardwood Logs

One would expect with the strong winter production of hardwood pulpwood that sawmills would be receiving more than enough logs. However, inventories appear remarkably low for the season. Just one month ago, several hardwood sawmills were concerned about getting enough supply to stay running during springtime, and it was only within the past few weeks that they began to relax. This seems to always happen -- a delivery spike at the end of winter is common because logging contractors tend to use the time to accumulate and fully merchandize logs. Despite the fresh slug of wood, demand remains higher than normal.

Hard maple is the bread & butter for logs in the region. The price on finished hard maple lumber has fallen slightly but that has had only marginal effect locally. Several other staple species, such as yellow birch and red oak have fared less well with the erosion of foreign export markets and international trade turmoil. That said, hardwood mills have to be a little careful about being selective

RECENT PRICES IN HARDWOOD LUMBER - NORTHEAST

HARD MAPLE, YELLOW BIRCH, R. OAK



on which species they purchase; logs are commonly delivered in a mixed load, and when a mill rejects certain species often times they will start to see deliveries begin to fall off entirely. Instead, they play the price game, frequently adjusting their pricing to reflect the current desirability of each species.

The quarantine for ash (to constrain the spread of the dreaded emerald ash borer) throughout the region didn't appear to have much immediate effect on the flow of wood this winter, however transportation restrictions will likely limit where we can direct ash this summer. Demand for ash is strong but

some facilities outside the quarantine areas will struggle for supply.

Biomass

There are, and for the foreseeable future will be, limited opportunities for the landowner to capture any economic benefit from biomass. Our regional biomass-to-electricity facilities continue to struggle with the highly competitive energy markets, the low price of renewable energy credits, low energy recovery, and inconsistency of supply. Several have permanently shut down, and those unable to secure their future with a co-located energy consumer will likely follow that lead.

That said, there is a huge need in northern Maine to get rid of sawmill residuals, and that need is only amplified by the recent closure of the Ashland Re-Energy facility. This was an important relief valve for all of the region's sawmills. Necessity is always the mother of invention, and several sawmills in that region are actively seeking new ways to replace that consumption or otherwise add value to their residuals. With the low value placed on the material, we believe it is much more important for our sawmills to be able to extract that value than it is for the landowner. 🌲

Benjamin D. Carlisle
PRESIDENT

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