

LANDOWNER UPOCATE Upocate 2nd Quarter 2022

Industry News

Parent company of Jay mill sold to Florida-based firm (April 4th)

Pennsylvania-based Pixelle Specialty Solutions, the parent company of the Androscoggin mill, was bought by an affiliate of Miami-based H.I.G. Capital, a global alternative investment firm, for an undisclosed amount. Pixelle acquired the Jay mill in 2020, along with a mill in Stevens Point, WI, as part of a \$400 million deal from Verso. Pixelle's sale is expected to close in the second quarter of 2022.

- Bangor Daily News
- New use for Maine's pulpwood would lock carbon in building walls, bring green jobs to defunct mill (April 13th)

GO Lab is retrofitting the former paper mill in Madison to process low-quality byproducts of the state's lumber industry — softwood sawmill chips and timber-harvest detritus that right now are hard to sell. They'll turn it into wood-fiber insulation, called Timber HP. Some 230 million tons worth a year. The project could make a measurable contribution to the state's carbon budget, while the 120 jobs created would mark progress toward Mills' goal of adding 30,000 "green jobs" to Maine's economy by 2030.

- Maine Public
- U.S. Public Forests Are Cashing In on Dubious Carbon Offsets (April 28th)

A flurry of state and local governments in the U.S. are enrolling public-owned forests in carbon projects that could earn them tens of millions of dollars but provide little new help in the fight against climate change. It's another episode that illustrates how the carbon market — intended as a method for corporations to cut their carbon footprints — is delivering far fewer benefits than advertised.

— Bloomberg

Industry Overview

Forestland Operations

The second quarter of 2022 will be remembered by those in our business for two opposing forces: exceptionally high market prices for forest products, and exceptionally high operating costs to get that timber to the market.



A forwarder tries to keep up with market demand for hardwood logs in June of 2022.

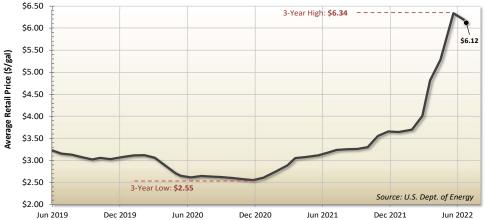
After a sudden end to winter and a drier than usual May, it would be reasonable to expect that harvest operations were quickly ramped up during the second quarter. However, forests of the northeast saw many days of steady rain in June, which hampered operations and kept equipment idle longer than we would have liked. By late June, however, relief came, the rain ended, and momentum picked up.

Once things in the woods get going, the first few weeks of activity are often spent cleaning up timber that was left undelivered when winter ended and roads became too soft to haul. This year, because winter ended so suddenly, there was a large amount of cleanup to be done. In some places, it took almost until July to clean up wood that was originally harvested & placed roadside in March.

The other contributing factor to the slow startup this year was the prevailing sense of unease in the logging sector and the fact that several logging crews have either scaled back or were quite tentative about starting up again at all. The sharp sting of inflation, combined with the difficulty in getting parts and people, has the sector bearing up under exceedingly high operating costs. Some of this can be fixed with increased service rates, and we have been proactive in raising our service rates to keep our active logging crews healthy. However, that only goes so far when contractors are forced to leave equipment idle while waiting for repair

NUMBER 2 DIESEL FUEL PRICES - NEW ENGLAND

3 YEAR HISTORICAL MONTHLY AVERAGES



parts, or trying to hire a qualified operator to run it. Even those that want to run have a hard time keeping momentum.

Longer term solutions are elusive. There has been some consolidation in the regional logging force, which can offer scale advantages to help weather the storm. However, the labor problem is one that has been building for generations and the fact of the matter is we simply need more people. It takes time and expense to develop someone into a professional logger, and the job is not for everyone. Formal training programs will help, but aren't yet at the capacity needed to make a meaningful difference. In the meantime, both landowners and mills will need to be willing to do their part to keep loggers viable & prosperous.

Forest Products Markets

The current supply chain problems and labor challenges are particularly frustrating because the demand for almost every forest product is extremely high right now. A portion of this may be causal - the lack of deliveries and low spring inventories makes

P&C DEMAND INDICATORS Representing our opinion of market demand for timber products in the Northeastern U.S.		
	CURRENT	<u>OUTLOOK</u>
Sawlogs		
Spruce & Fir		STEADY
Pine Logs		▲ UP
Hardwood Logs		STEADY
Pulpwood		
Hardwood		STEADY
Spruce & Fir		STEADY
Pine & Hemlock		STEADY

mills hungrier - but the reality is that forest product manufacturers are seeing strong "natural demand", signified by orders and a healthy pipeline. Prices for finished forest products remain incredibly strong with very few exceptions.

Demand for timber coming out of the forest has followed suit; even mills with significant inventories have been concerned about keeping volume flowing throughout the summer. This has not hurt pricing; log prices remained high during the quarter, and, for now, despite these uncertain times landowners have been enjoying good returns for their products.

Pulpwood Products

Hardwood pulpwood demand is extremely high, and mills are almost desperate to keep their facilities supplied. When this happens, mills reach out greater distances to broaden their purchasing area which means they have to pay higher transportation costs for their feedstock. Moreover, mills begin to develop overlapping purchase areas and must become competitive with other facilities outside of their traditional zones. Combine both of these things with fuel bonuses paid for higher operating costs for loggers and truckers, and the result is the mills must pay more for the same supply. We aren't really doing anything different on a day to day basis, delivering roughly the same loads with the same volume, but the demand has only become stronger. Nobody in the hardwood pulpwood business is happy with the amount of deliveries they are seeing.

Exacerbating the situation is the growing demand from firewood producers, who compete for the same material. The price



 A wave of companies say they'll use Maine wood to make ecofriendly fuel and fertilizer (April 30th)

A handful of companies are proposing to repurpose former Maine paper mills into refineries that create environmentally friendly fuels and fertilizer from wood, raising hopes that they could generate economic activity in areas tied to the state's traditional forest economy. The proposals offer some hope for communities that lost hundreds of jobs when their mills closed and for loggers who lost customers for their waste wood.

- Bangor Daily News
- Building material company finishes its own \$150M build-out in Aroostook County (May 5th)

LP Building Solutions has finished a \$150 million expansion of the company's Houlton plant, converting the facility to manufacture LP's flagship home siding product, LP SmartSide. To meet growing demand from home builders and renovators, LP in early 2021 announced a phased, multiyear plan to expand siding production capacity.

- Maine Biz
- How the pandemic drove up the cost of wood products (May 13th)

During the first year of the COVID-19 pandemic, prices of processed wood products, such as softwood lumber and plywood, nearly quadrupled. The pandemic triggered a worker shortage in many sectors, including the forest products industry, which led to limited around products, such as softwood lumber and structural panels. The domino effect continued with supply chains further disrupted by a lack of truckers to move materials.

- USDA Forestry Service
- Is a mass timber construction boom coming to America? (June 2nd)

A \$125 million high-rise in Milwaukee is set to become the world's tallest mass timber building. There are some 1,300 mass-timber buildings either constructed or in the works in the United States. That figure is expected to rise as more cities

Cont'd...

of energy and oil has everyone concerned for the coming winter season, and firewood processors are buying wood early so that it can be dried in time for the eventual cold. Particularly in central and northern Maine, the primary heat source of many homes is firewood, so even in "normal" years there is some demand present. This year it has been at a fever pitch. So in addition to the desperation from pulp mills, there is also a level of desperation for those buying treelength firewood.

Pulpwood consumed for engineered building products - primarily poplar - is showing small signs of backing up. Demand had been significantly elevated starting with the COVID-19 pandemic, but regional panel producers seem to be intentionally slowing down their deliveries for the first time in almost two years.

Because hardwood pulp mills have had so much trouble sourcing their fiber, there has been increased interest in acquiring spruce & fir (both softwood) species of pulpwood in order to supplement their raw material and keep production going. Several regional mills regularly use it as a blend, however there are occasional pure runs of softwood pulp that are regularly planned. Therefore, for the first time in a long while there is sustained demand for spruce & fir pulpwood at our regional consumers.

Hemlock & pine pulpwood demand is solid, however there are only a few regional consumers. In general, current demand is in balance with what is being produced out of the northeastern forest.

Sawn Products

Softwood Sawstock

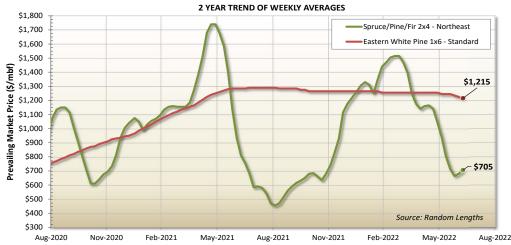
Despite the recent sudden plunge in lumber prices (see chart below), demand for the sawlogs in the region is sustaining, primarily due to prevailing low inventories. As a result of high lumber prices, mills have been pushing their output, but it now appears they are closing in on the end of the inventory that was built up during winter.

For example, normally in mid-July there is a two-week long full holiday shutdown at each of the dimension sawmills located just north of the US-Canada border. This year, as a sign of the times, most Canadian mills intend instead to welcome deliveries throughout this period in order to keep the flow as high as possible.

Normally, by this time of year, the flow of sawlogs into spruce & fir sawmills is fairly well established. However, this year it has proven slow to rebuild after mud season. If the mills could get the supply they need, or if they had a reason to slow consumption, regional log prices would abate. Until inventories get more comfortable, we don't see any reason why regional sawlog prices would fall in the short term.

Spruce has generally been king with dimension lumber producers in the region, with fir being a distant second preference due to its higher drying time (and therefore higher finished cost). While they prefer spruce, sawmills operating in the current environment are allowing unrestricted fir deliveries to augment their supply.

PRICE TRENDS IN SOFTWOOD LUMBER





adapt their building codes in an effort to reduce building-related emissions. Cities in Northern Europe have been building with mass timber for two decades.

— Fast Company

Maine's browntail moth outbreak could be fueled by climate change, UMaine scientist says (June 3rd)

A UMaine scientist says the state's browntail moth outbreak may be due to a changing climate, and its effects on a fungal pathogen that keeps browntail moths in check. Like most fungi out there, they require cool wet springs to have the right climate to proliferate. And because of climate change we haven't had those cool wet spring temps that really allow the pathogen to knock back browntail moth.

— PBS

Inflation is squeezing Maine loggers (June 8th)

The Professional Logging Contractors of Maine surveyed its members earlier this winter. They estimate operating costs have gone up an average of 24 percent over the past two years on everything from tires and hydraulic filters to brake parts and labor. And that's before the price of diesel fuel doubled to more than \$6 a gallon in Maine in just the last year. Most mills in Maine are now paying loggers a bonus to offset the cost of fuel.

— Bangor Daily News

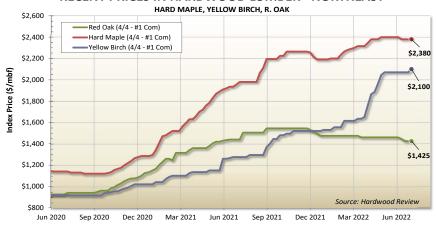
Maine's forestry community protects water quality during timber harvesting

(June 30th)

MFS and the forestry community have increased their emphasis on BMP training for land managers and woods workers. BMPs are voluntary measures used to protect water quality. BMP use and effectiveness at timber harvesting operations are monitored regularly by the Maine Forest Service's ten District Foresters and Water Resources Specialists.

— Morning AG Clips

RECENT PRICES IN HARDWOOD LUMBER - NORTHEAST



Pine lumber is a similar story to spruce & fir, but in a much smaller market. Inventories are generally low and mills cannot afford a shutdown as margins are high. Therefore, demand for pine logs is high throughout the region.

Cedar log demand is exceptionally high. Cedar is a product that is produced seasonally, mostly during times when it is cold enough to get into the wet pockets that cedar grows. Cedar logs generally carry lower value than other species of similar quality logs, so most forest operations during the winter concentrated on other higher demand and higher priced species. This left most regional cedar mills undersupplied.

Recent strong hemlock pulp markets have loggers and landowners entering into areas of hemlock that have historically been avoided. This has created a windfall of hemlock logs that have not had many mills interested. Several newer niche manufacturers have emerged, but not enough to absorb the regional uptick in log supply. Therefore the hemlock sawlog market is one that is likely to be oversupplied through the summer.

Hardwood Logs

Inventories at hardwood grade log mills are extremely low, and mills have measured their supplies in days rather than in weeks. Log pricing -- even the run-of-the-mill standard grade log -- is as high as it has been in recent memory. Hard maple is the regional dominant species for hardwood grade logs, and given the shortage, soft maple is not far behind.

This time of year, hardwood grade logs are also one of the most perishable products that come out of the forest and the logs lose their value very quickly if exposed to the humid heat. Both landowners and mills have to remain diligent about moving these products very quickly. Therefore a tight supply chain is critical to retaining the maximum value of hardwood logs.

Industrial timber mat log demand is very high, supporting a number of nation-wide infrastructural improvements along pipelines and power lines. Whereas placing mats along transmission right-of-ways used to be the exception, it seems these days it is generally the rule in order to minimize the ground impact of construction and maintenance of these critical pieces of the nation's infrastructure. As such, demand for the lower-quality timber product has remained elevated.

Another market experiencing very high demand is shipping pallets, and there are several manufacturers of these in the northeast. These pallets, which also use low-grade hardwood logs in their construction, are a critical supply chain component in an evergrowing materials shipping industry.

On the opposite end of the quality spectrum, hardwood veneer logs - used as showpieces on top of lower-grade substrates - are also in demand. Pricing for veneer logs keeps bumping up in order to stay ahead of the lower grade logs which are also rising. Pricing for even the lower grade veneer logs are up approximately 8-10% year over year.

Summary

Mixed signals are plentiful in both the global economic picture and the regional forest products markets of the northeast. On one hand, forest products remain a critical component of areas experiencing tremendous demand, and don't show much sign of slowdown. On the other hand, costs are rising in nearly every link of the supply chain, and workers are getting very difficult to recruit. While this may currently feel like it is in tenuous balance, one can't help but feel a sense of unease as we look ahead to the coming quarters. Thankfully, the northeast forest products market is diverse and operating in a sustainable way -- and we've been through these cycles many times before.

> Benjamin D. Carlisle PRESIDENT

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