

rentiss Carlisle

Industry News

Verso-NewPage deal wins federal approval, with conditions (Dec 31st) Verso reached an agreement with the justice department that requires it to follow through on a plan to sell its paper mills in Rumford, Maine and Biron, Wisconsin. The settlement mitigates the antitrust concerns and paves the way for Verso to acquire NewPage this month.

— Portland Press Herald

The bloom is on for maple syrup (Jan 5th)

Scientists are predicting that the sugary sap will flow more freely than usual this year because of, what's know in botany as - a mast year - a time every few years when perennial trees, like sugary maples, synchronize their seed cycles and flower as one. Lowseed years usually lead to mass blooms.

— The New York Times

Deer Hurting Long-Term Forest Regeneration (Jan 5th) A recent study of deer impact on forests in Wisconsin blames 40% of forest changes on the animal's eating habits. Regeneration rates of native trees, shrubs and flowering plants were found to

be greatly reduced thanks to

increased deer population.

– Phys.org

Verso completes \$1.4 billion acquisition of NewPage (Jan 7th) With the completion of the NewPage acquisition, Verso will have approximately \$3.5 billion in annual sales and approximately 5,800 employees in eight mills across six states.

- PaperAge

Industry Overview

Forestland Operations

The old saying goes "be careful what you wish for." Coming into winter, the forest products industry is always hoping for sustained cold weather that lasts as long as possible – much of our operations depend on frozen roads and trails in the woods to minimize damage in the forest. Well, as it turns out, we got our cold weather and it never relented. Unfortunately, while we did not have any trouble freezing things down this winter, the bitter cold mornings and deep snow hampered production.

update

1st Quarter 2015

This winter started out with a slow freeze, followed by a sudden cold snap in mid-January. In other winters, we have typically seen a mid-season thaw sometime later, which will serve to settle the snow and can be good to help deepen the freeze and create a crust. This winter, however, the unrelenting cold never allowed the snow to settle and the snowpack remained mealy & soft, which decreased yarding capacity and increased equipment problems - deep snow tends to be very hard on the drivetrain of woods equipment. This has also proven to be a hard

winter for many of our chainsaw crews because of the snow depths. Deep snow makes it difficult to move around on foot and can create a dangerous environment for felling and limbing trees. We spoke to one crew who found themselves producing 8-9 loads/week this winter, as compared to 16 loads/week under normal winter conditions. In some places, we had hand crews who simply parked their equipment to wait out the winter.

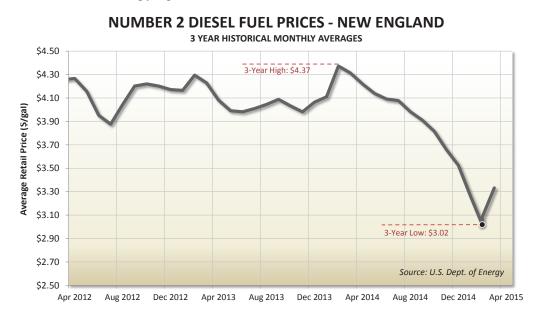
The outcome of all of this is that our winter has been extended for the second year in a row, and operations have been able to



Road postings, such as the one seen above, can limit the flow of timber and make mills and foresters nervous.

continue for longer periods. If you gain a week in the first part of the winter, you get more time to ramp up production. Whereas, if you get a week at the end of the winter, it's much more likely to be purely productive time – equipment and personnel are in place, tuned up, and running full bore. At this point, many of the public road systems are posted to prevent excessive damage, which slows down wood deliveries and keeps our foresters and truckers on their toes. If we are still operating now, we are doing so on good quality hard gravel roads, or trying to take advantage of the deep snowpack on good roads with marginal soils. This will all change once we stop getting cold nights that prolong the freeze, when, with the introduction of spring mud season, in the span of three weeks' time we will have gone from the absolute best operating conditions to the absolute worst.

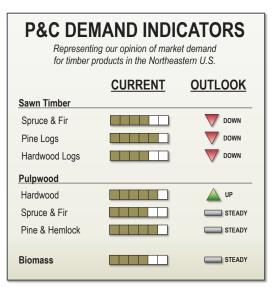
As we have mentioned before, we do remain concerned about the availability of trucking capacity throughout all our operating regions. This seems to be a universal problem in the forest products industry. Just as we are having a difficult time sourcing log trucks, mills are having an equally difficult time finding freight trucks. Having local contractors purchase their own trucks seems like a quick fix on the surface – if a truck could drive itself. However, without available labor and truck drivers, the machine is only part of the issue. We expect the industry to feel wage pressure and, ultimately, higher hauling costs to attract the skills needed to drive trucks in an increasingly regulated environment.



In the short term, although diesel fuel prices have begun a sharp upward bounce, it remains relatively inexpensive to supply the trucks and other equipment with necessary fuel. This time last year, diesel prices were a full 30-35% higher than they are today. Our contractor fuel bonus indexes are still below the benchmark where we pay a premium, but we are watching closely and many expect continued upward movement.

Forest Product Markets

Because of the slow start to this winter, February left most markets concerned about lowerthan-normal raw material inventories they were seeing in their wood yards. Winter is crucial



so that mills build up enough inventory to last through the springtime mud season. Accordingly, demand through that period was elevated, because markets know that when the frost goes away, so does the wood flow.

The good news was that Mother Nature wasn't going to let go of winter for at least another four weeks. Most wood buyers saw last year's extended winter as an anomaly and weren't taking any chances of being caught short. As a result, it appears to us that nearly all regional mills have full log decks, and will be well-positioned for the springtime lull.



Catalyst adds two mills, begins a new chapter (Jan 13th) On January 7th Catalyst Paper Corp purchased two mills from NewPage, the Biron paper mill, located in Wisconsin and the Rumford pulp and paper mill in Maine, adding significant paper capacity and extending it operations across North America.

— Pulp & Paper Canada

 Madison Paper's temporary production halt to idle workers (Jan 13th) Increased costs and governmentsubsidized competition from

Canada are to blame for the short term halt in paper production at Madison Paper Industries, which will lay off an undetermined number of employees for at least 2 weeks, starting in late January.

— Kennebec Journal

Irving unveils plan for 51K acres of Maine forest land (Jan 19th) J.D. Irving has submitted a concept plan to state regulators with ideas about how the company wants to use 51,000 acres of forest land and lakes it owns in northern Aroostook County. The goal of the plan is to look ahead at future development, recreational use and management of a working forest.

- MPBN News

Plan to tax nonprofits could be costly to Maine's landconservation trusts (Jan 20th) Many of Maine's nearly 90 nonprofit land trust organizations are reviewing the governor's proposal, which would eliminate the full property tax exemption for nonprofit organizations that own property in a locality with an assessed value of \$500,000 or more.

— Portland Press Herald

Sawn Products

Softwood

Much of the optimism that had been presiding in the spruce/fir dimensional lumber market has started to fade. Over the last 4-6 months, these mills have seen a steady slide in their finished product markets, both in terms of the pricing they are expecting and the demand for the materials. When the slide began, some buyers were aggressive, anticipating a rebound that usually shows up in the early springtime – but here we are and we have not seen the rebound. This has led to some log buyers being tentative about committing to buy some of the higher priced timber.



The general consensus is that the bitter cold weather has held back the annual construction cycle, causing demand for lumber to be weak. The feeling is that once the weather warms and the grass turns green there may eventually be a rebound. Although there is frequently a noticeable "summer uptick" that happens in the dimensional lumber market, we find it difficult to attribute all of the demand decline to purely a seasonal issue. The market demand has come quite a long way since the doldrums of 2010, but there are still a fair amount of mixed signals we are seeing in the housing/construction metrics.

Thanks to the extended winter, inventories at most dimensional lumber mills are comfortably full. The only exceptions are the very large, high volume producers who consume a large slug of wood very quickly. The mills that are low are in a quandary – they need the material but need to be careful about being too aggressive.

Interestingly, pricing for pine sawn products continue in an upward climb. Although pine markets are similarly tied to construction, they tend to be subject to a lot less volatility. Both in terms of finished goods pricing and in terms of demand, pine mills are far ahead of where they were two years ago. Much like with the spruce/fir markets, current raw material inventories at pine mills appear to be in good shape. The challenge will be in regulating the intake vs. production at these mills. As discussed in prior newsletters, pine mills prefer winter-cut wood and won't get a lot of inventory build-up during summer.

Hemlock & cedar mills are also generally flush with raw material, with a few exceptions. Both species tend to grow in wetter soils, so production is favored when the surrounding forest floor is frozen. The extended winter has helped make these mills fat & happy.



NCREIF Timberland Index Posts Gains (Jan 27th) The NCREIF Timberland Index posted a 10.48% return in 2014. The value, its highest since 2007, is due in part to a large bump in annual appraisals in the fourth quarter.

- Pensions & Investments Magazine

- Stores running out of wood pellets, some rationing, as low temps continue (Feb 14th) A frigid winter, increased demand for wood pellets and customers who underestimated how much they would need contributed to a strain on manufacturers and suppliers. Producers are struggling to make the pellets as fast as retailers want them.
 - Bangor Daily News
- Russia Looking to Double Lease Terms of Harvest Areas (Mar 1st) The head of Russia's Federal Forestry Agency has requested an increase in forest leases from 49 to 98 years in order to encourage leasing companies to make investments in timber harvesting. Since forests are state-owned and interest rates remain high in Russia, lease-holders have historically invested very little in roadwork or production upgrades.

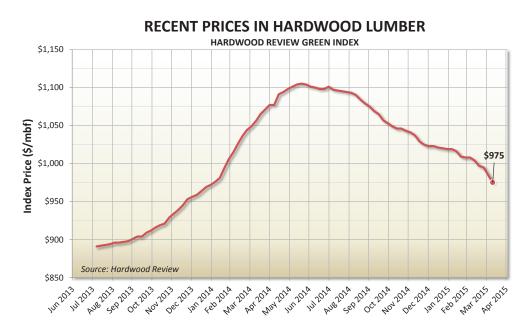
- Wood Business Magazine

Feds to probe what Maine mill owners call unfair Canadian paper subsidies (Mar 23rd) Federal Trade officials have launched an investigation of Canadian government subsidies to the Port Hawkesbury Paper Mill, which two mills in Maine, Verso Paper Corp. and Madison Paper Industries, argue unfairly undercut and damaged their business. The companies are seeking to have a duty imposed on Canadian imports of supercalendared paper.

– Bangor Daily News

Hardwood

The slow price erosion in hardwood grade logs we noted last quarter has continued, and most acknowledge that we probably have not yet hit bottom. Log decks are full almost everywhere throughout the region, and supply is strong. Hard maple is a large component of the forest in the Northeast and can make up 50-60% of the hardwood grade logs that we sell. As a result, other grade log species tend to mirror what goes on in hard maple – when that goes sour it has a big effect on regional lumber markets. Pricing on ash has remained somewhat strong, but considering the current quarantines in place restrict the flow of ash, some of the pricing could be artificial rather than strictly demand-related.



While we are still able to move hardwood grade logs into most markets with no problem, we expect to see additional price reductions going into summer. Once again we are seeing mills trapped between needing enough wood to keep throughput consistent, but not wanting to commit to buy timber they can't saw and sell at a reasonable margin. The hardwood log markets are not only being pressured by finished goods pricing – in addition, demand for finished hardwood lumber has become tepid. This change has happened very quickly – as a result mills are having difficulty moving a swollen lumber inventory. We heard of one case where a mill's customer attempted to call back and renegotiate after having already received the order. We take this as a sign that everyone in the demand chain is feeling the current woes.

That said, hardwood veneer-grade logs appear to be holding up – they are priced well and in demand. We had sensed some weakness and an oversupply in veneer sheets last quarter, but this appeared to have corrected itself. Shipments are moving at a healthy pace, while regional veneer mills continue to buy logs and have been able to clear out finished sheet inventory.

Wood flow into industrial producers remains at a healthy pace – log pricing has come up over the last year and consequently in some species categories these are out-competing the lowerand mid-value grade logs. Over the last six months we've even seen ashes, birches, and some lower-grade hard maple going into this type of timber product.



Shrinking Timber Supply Sends BC Companies to the U.S. (Mar 24th) Despite recently strong share prices, British Columbia's timber industries face significant challenges thanks to the mountain pine beetle. Industry gains can be partially attributed to substantial mill purchases in the U.S., where markets are improving. A surge in Chinese demand during the beetle die-off created a temporary market for beetle-kill lumber, but as that supply and demand diminishes, B.C. companies continue to look to the U.S. to lessen production costs.

— Business Vancouver

 200 Maine businesses endorse proposed Katahdin-area national park (Mar 26th)

The endorsement included a letter signed by 200 businesses from around the state to Maine's congressional delegation urging the creation of the 150,000 acre national park and recreation area in the Katahdin region.

— Bangor Daily News

Northern Long-Eared Bat Listed as Threatened (Apr 1st)

The northern long-eared bat has been given "threatened" status by the U.S. federal government, leading to restrictions in tree harvesting in the months of June and July, when newborn bats live in nests. Populations of this and other similar bats have been decimated in recent years by a disease known as white-nose syndrome, increasing concerns of impact on insect control across the U.S. The department had been considering an "endangered" listing.

— Associated Press

Pulpwood Products Softwood

If you were to have taken the blood pressure of the softwood pulpwood buyers in early March, you would have sent most to the doctor. Inventories were low, and all expected the looming mud season to arrive soon and cut short any ability to fill the coffers. Most, if not all, pulpwood buyers – both hardwood and softwood – seemed to have kept one hand on the panic button for a period of about three weeks, and appeared to be doing all they could to supply their facilities with any available excess pulpwood on the market.

What they did not know at the time was the good news: because of the long winter, their opportunity to purchase wood would be extended into early April. How quickly things can change. By the third week in March, the pulp mills had steady deliveries, inventories had recovered, and the mood was much more relaxed.

Notably, we are seeing a slight increase in demand for hemlock & pine pulp – products that have resided at the very bottom of the value spectrum for as long as memory can serve. Instead of landowners pushing pulp mills to take these species, we now find ourselves receiving inquiries from mills seeking to (slowly) add it into their wood flow. It's not a massive shift, but the trend is positive.

This last quarter is also significant in the regional softwood pulpwood market partially because it is the first time in 85 years without consumption in the Bucksport, Maine mill. This mill, now shuttered and being disassembled, was a groundwood pulpwood market that drew in pulpwood from a wide area. We had expected to see very little impact to the overall demand for pulpwood timber products, and this has proven to be true. Most of the regional consumers have not changed their needs, and any excess was quickly scooped up at other facilities. This is yet another sign of the current demand for softwood pulpwood, and the degree to which the other mills in the region are consuming it. Absent another market shock, we don't see this changing any time soon.

Hardwood

Demand for hardwood pulpwood is currently exceptionally high, and mills have been consuming it at a frenzied pace. Accordingly, throughout the Northeast, hardwood pulpwood prices have been elevated through the last quarter and deliveries have been robust. Hardwood pulp mills simply have not been able to source enough wood in their traditional local areas, which has caused continued expansion of their buying radius in the hunt for available supply. This is partly because overall consumption has increased over time, but is mostly due to the fact that there is not enough hardwood pulpwood resource locally. As this expansion has occurred, it has intensified competition – a growing radius introduces new competition, which makes buying wood more competitive. In addition, because low-value forest products like pulpwood are so transportation-sensitive, it is also naturally more expensive for mills to purchase wood further afield. We've seen this expansion occur over several hundred miles, and it is clearly affecting the total resource costs at every hardwood pulp mill we deal with.

We also continue to see a blurring of the line between hardwood & softwood pulpwood consumers. One response some traditional hardwood mills have had to the high price and low availability of hardwood is to transition to producing NBSK (softwood kraft) pulp for some production cycles. Not all mills can do this easily, but those that can have the advantage of being able to purchase and produce an alternative product. In addition, some paper mills blend in NBSK in the manufacturing process, so by producing it themselves they can avoid having to buy it on the open market.

All in all, the market conditions for pulpwood are good, but mills are grappling with supply. History would suggest a decline in delivered prices to the pulp mills was right around the corner. However, although there remains some uncertainty, over the next quarter we are expecting marginal price increases as mills enter mud season and are pressured to keep pricing competitive.

Biomass

There have been a few new stand-alone biomass energy plants come on line recently which will affect the overall market. In a heated market, like we have currently, biomass can be competition for some of the lower-grade pulpwood products. The definition between biomass/fuelwood and pulpwood is often just a matter of price & location. With consumption of biomass on the rise in several key areas, this may make the tough supply problem worse. Notably, the newly started Re-Energy

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facilities in Ashland, ME and at Fort Drum, NY are within the wood baskets of some large pulpwood consumers.

Consumer firewood can also provide competition for biomass markets. It used to be that demand for firewood logs followed seasonal demand patterns – firewood producers used to ramp up production in anticipation of winter. However, these days it seems the demand is significant enough so that it never really goes away. Processing plants are generally single-stream and have a limited throughput, which means they have to process & buy wood year round in order to keep up with consumer demand.

Benjamin D. Carlisle PRESIDENT

Stewardship Fund: a third choice

by Sam Radcliffe, Vice President

The Wisconsin Legislature created the Knowles-Nelson Stewardship Program in 1989 to fund State acquisition of land to protect important natural areas and expand opportunities for outdoor recreation. Commonly known as the Stewardship Fund, it is supported by long-term bonding authority.

Governor Scott Walker, who is widely expected to seek the Republication nomination for President, has proposed a 2015-17 budget that would halt any additional borrowing for Stewardship purchases. Walker's plan would block the purchase of new land until the program had \$1 or less of debt for every \$8 of property it owned. The program is not projected to hit that ratio until fiscal year 2028.

The following opinion piece, related to the Walker proposal, was published by the Milwaukee Journal Sentinel on March 9.

Governor Walker's proposal to freeze the Knowles-Nelson Stewardship Fund has been cast as a choice between paying down the State debt or protecting the environment. This is a false choice. With some outside-the-box thinking and a little political courage, the State could implement an approach that would tackle both the fiscal and conservation problems.

The State's biggest successes in deployment of the Stewardship Fund have involved the purchase of conservation easements on large tracts owned by timberland investment companies in the northern half of the state. The easements prohibit subdivision or development and grant public access for recreation while allowing the landowner to practice third-party certified sustainable forestry. In essence, a private forest under a conservation easement looks, feels, and functions like most of the multiple-use land in public forests.

This has been a strikingly economical approach that has been practiced not only by the State but also by progressive environmental organizations. Since 2005, Stewardship Fund easements have been acquired on 213,000 acres at a total cost of \$77 million, or \$360 per acre. By contrast, during that period private transactions of large unencumbered properties in the state have totaled 450,000 acres at an average price of \$735 per acre. The cost of acquiring an easement is roughly one-half of the cost of buying land outright, yet provides all of the protection of full ownership.

It makes sense to continue forest land protection through conservation easements. These help create a permanent unbroken forest landscape that has ecological, recreational, and economic benefits. But how can this proceed if the Stewardship Fund is frozen? It sounds like a radical and counterintuitive proposal, but the answer is to generate funds by selling State Forest land. Not outright sale, but sale of land subject to a deed restriction that would prohibit subdivision or development and require public access for recreation and the practice sustainable forestry. Sound familiar? The deed restriction effectively reserves for the seller all of the rights that are reserved by the buyer of a conservation easement. In both cases the State retains the rights for which public ownership makes sense while assuring that the "working forest" is managed sustainably by private interests.

There is a very strong demand for large tracts of forestland, driven by institutional investors who believe timberland can be a stabilizing element in a large investment portfolio. Currently it is a seller's market -- there is more money chasing timberland than there are acres to buy. Ideologues who object to the privatization of public assets may be surprised to learn that the

timberland-buying institutions are predominately public employee pension funds. No "greedy corporations" card to play here.

This proposal is not aimed at completely turning over the State Forests. The four largest northern State Forests together comprise some 421,000 acres. A limited carve-out of say 100,000 acres offered in three or four transactions over several years would be easily absorbed by the institutional demand and should not be an overwhelming task for the State.

The valuation metrics suggest that the funds gained through deed-restricted sales would allow the State to acquire conservation easements on an equivalent acreage, meaning sale of 100,000 acres has the potential to increase the State's total protected acreage by nearly 25 percent. As a bonus, future operational costs would be reduced since the cost of managing lands is higher than the cost of monitoring deed-restricted or eased lands.

This innovative approach would temporarily enable the State to continue its admirable program of forest land protection without drawing on the Stewardship Program, a win-win for conservation and fiscal responsibility!

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