



Industry News

■ **New program looks to train loggers** (Oct 2nd)

Next year, Maine's logging industry could see an influx of new and qualified workers. The Professional Logging Contractors of Maine is partnering up with three different community colleges to create a Mechanized Logging Operations Program. Each 3 month session will train 12 workers, focusing on how to maintain and operate logging equipment safely. The goal is to train 36 operators per year.

— WCSH 6 Portland TV

■ **Wood Products Exports Will Benefit from Trans Pacific Trade Deal: COFI** (Oct 11th)

The Vancouver-based Council of Forest Industries says the Canadian government agreement to the Trans-Pacific Partnership (TPP) will create new opportunities for the British Columbia forest industry, especially in emerging Asian markets.

— Woodworking Network

■ **Research points to bright future for biomass** (Oct 12th)

A potential revolution is unfolding on out-of-the-way logging roads. Foresters and researchers are innovating unique ways to make use of forest residues - low quality trees, tree tops, limbs, and chunks that formerly would have been left in slash piles and burned, or worse, left to rot.

— Forest Business Network

Industry Overview

Forestland Operations

During the first part of the fourth quarter, weather conditions in the Northeast were generally favorable for our forest activities. However, as the quarter progressed it became apparent that the cold weather that is so critical to our operations was not anxious to arrive. We had a seasonally warm, late fall with a good amount of rainfall, which limited our contractors' ability to haul timber and started everyone out a little behind on their plans. Only in late December did the region get its first dose of cold winter temperatures, and as the weather begins to turn, the forest roads should begin to solidify and help alleviate the soft soil condition.



After a prolonged autumn, winter finally starts to settle in northern Maine.

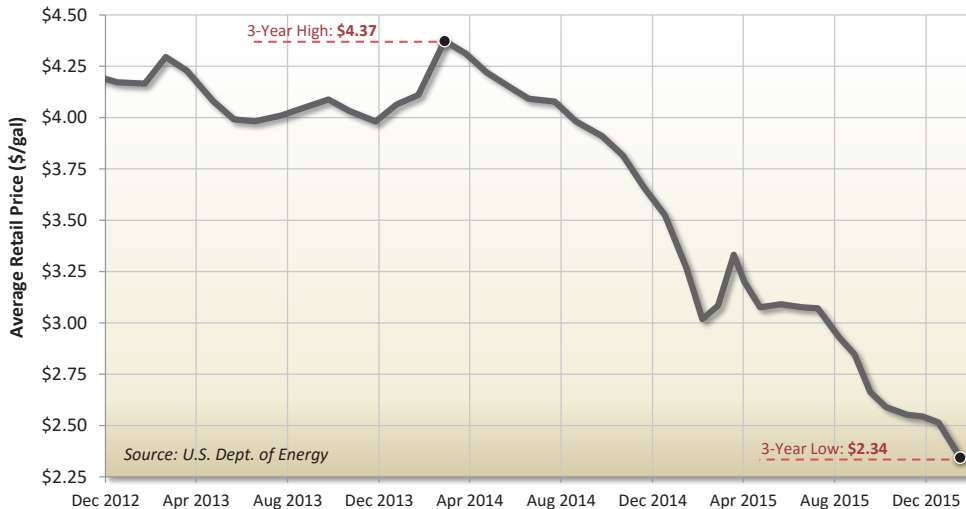
This cold weather is long-awaited. Many of our planned forestry operations are dependent on frozen soils. Our foresters classify different soil types by the season in which they can be safely entered for harvest – i.e. “summer ground”, “winter ground”, and “spring/fall ground”. So-called winter ground can only be harvested during a three-month window of winter because the naturally wetter soil needs to be frozen to safely harvest. Unfortunately here in the Northeast, we have a good amount of winter ground – and with the recent cold, this window is finally just beginning to open.

In recent years, we've been fortunate that the seasonal closing of this window has pushed itself into mid-April -- later than usual. Veterans of the industry will tell you that they have noticed the

window getting smaller, as compared to when their careers were first starting. Chalk it up to climate change, or maybe even a little bit of anecdotal nostalgia; either way, an extended winter is critical to our operations.

This is a period of a cash flow crunch for our regional logging force, particularly for those that purchase market stumpage or for those that have a lot of debt to service. Poor timber markets, the extended fall weather, and landowner curtailments have kept loggers on the sidelines until very recently, and many are anxious to cut wood right now. Although lower diesel fuel prices (see chart) have helped keep variable costs down, as markets get more selective contractors will be expected to perform more services – like hauling timber further, doing in-woods handling & slashing, etc. which will serve to offset much of the gains.

NUMBER 2 DIESEL FUEL PRICES - NEW ENGLAND
3 YEAR HISTORICAL MONTHLY AVERAGES



Forest Product Markets

The timber markets throughout the Northeast have remained challenging for nearly everyone. Following the closure or idling of much of the regional low-grade capacity, landowners in the state have been dealing with slackened demand and volatile pricing conditions. This has resulted in an odd situation where both timber producers (landowners) and consumers (mills) have exhibited some hesitance to commit to pricing, even though we are now entering a critical, high-production season.

Reflecting back one year ago, it is striking to me how suddenly the change has occurred. Just a

few months ago landowners in the Northeast were able to profitably sell virtually every product the forest produces - that is not the case today. For the first time in recent memory, in some locations, the costs of harvesting and transportation outweigh what the market is paying. Of course, falling timber prices are good for mills and bad for landowners, but I'm not sure if there was anyone on either side of the coin that would have predicted that demand would shift so dramatically in 12 months' time. There are some slivers of optimism, but by most accounts it was a rough finish to the year.

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



update

4th Quarter 2015

■ Expiration of Canadian Lumber Agreement Could Bring Falling Timber Prices (Oct 12th)

A 2006 U.S.-Canada Lumber trade Agreement designed to end what American timber producers felt were unfair practices created by Canadian subsidies, expired today. Montana's timber industry is now watching to see if Canadian lumber will soon flood the market. U.S. timber companies are barred from raising any trade disputes with Canada for one year.

— Montana Public Radio

■ Feds OK higher tariffs on paper made by Maine mill competitor in Canada (Oct 15th)

The decision places a tariff of 20.18% on imports of supercalendered paper from Port Hawkesbury, Nova Scotia; 17.87% for Resolute Paper Industries; and 18.85% on other producers. Those tariff amounts are higher than preliminary rates recommended in July and could amount to around \$150 million a year.

— Bangor Daily News

■ Verso Paper Company to consider selling Androscoggin Mill (Nov 6th)

Verso Corp, which is slashing 300 jobs at its Androscoggin mill in Jay, Maine, said it's considering selling the mill and several others, as well as its related hydro electric facilities to meet its financial obligations. About 500 workers will remain on duty in Jay in the New Year.

— The Associated Press

Sawn Products

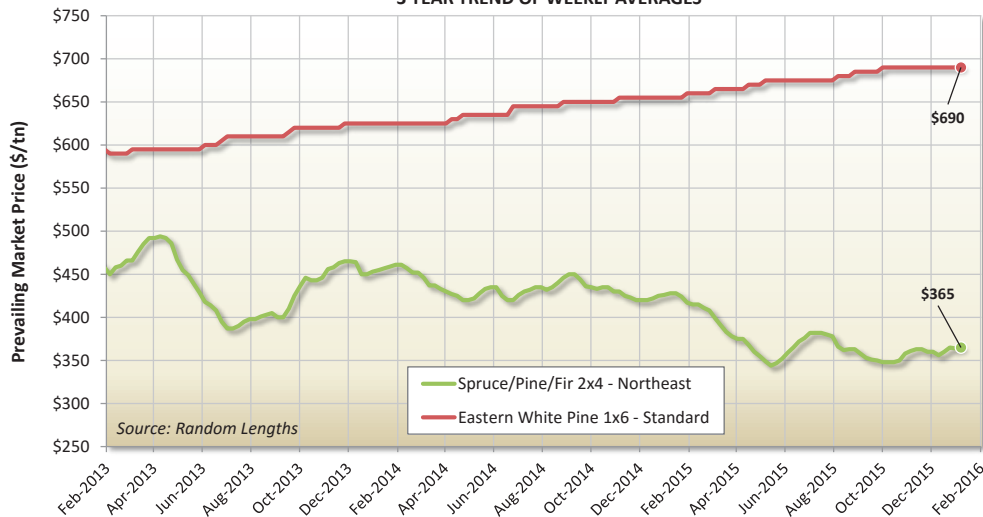
Softwood

In recent years, landowners in the Northeast have enjoyed what we would classify as a “seller’s market” for spruce & fir sawtimber. Sawmills were taking whatever supply they could get and were paying good prices for the material. However, in the last few months, the dimensional sawmills in the region have become oversupplied as loggers have shifted away from cutting less marketable products, like hardwood pulpwood, into ones that do have a market, like softwood sawtimber. As a result, regional sawmills have become flooded. Demand for the material is still present because the mills are high-production and need the wood, but the price they are willing to pay for it has fallen.

It’s not just raw material producers that are feeling dizzy from the large price swings either. Finished lumber price indexes remain volatile as well. For example, the Framing Lumber Composite Price Index, published by Random Lengths is up nearly 9% for the quarter, but still 15% below where it was this time last year.

PRICE TRENDS IN SOFTWOOD LUMBER

3 YEAR TREND OF WEEKLY AVERAGES



We still sense that the regional spruce & fir sawmills have been operating under measured optimism. There remains concern about how to manage and sell their residual products (primarily wood chips), and we understand that some mills are looking at alternative ways – including capital investments -- to supplement their current market for chips.

The expiration of the US-Canada Softwood Lumber Agreement appears to have had little immediate downside effect on the supply of spruce & fir in the Northeast. We had been concerned that the termination of the agreement would result in a flooded market, but that did not appear to happen. However, considering the long border with Canada and the flow of timber back and forth, we remain concerned about the long-term implications of unmanaged trade. Many US-based sawmills are Canadian-owned now, which is a relatively new development and could help reduce the risk of prolonged trade disputes, but without an agreement in place there’s still a real risk to smaller producers becoming victims of a larger battle.

Hardwood

Demand for hardwood logs has been relatively consistent despite the instability in other markets. Buyers seem hungry for the material and we are sensing confidence in our regional mills. Pricing is not setting the world on fire, but there is certainly more optimism prevailing



update

4th Quarter 2015

■ **Weyerhaeuser, Plum Creek to combine into one timber giant** (Nov 8th)

Weyerhaeuser is buying Plum Creek for \$8.4 billion to form the nation’s largest private owner of timberland. The combined company will own more than 13 million acres of U.S. timberland and have a market capitalization of \$23 billion based on current prices, ranking it sixth among publicly traded companies based in Washington State.

— *The Seattle Times*

■ **Maine skips applying for federal funds to conserve forestland** (Nov 9th)

For the first time in 15 years, Maine will not compete for a share of funding from a federal program that has been used to conserve more acreage of forestland in Maine than in any state across the country. The LePage administration’s decision not to apply for federal Forest Legacy funds follows actions by Gov. Paul LePage that have all but shut down the state-run Land for Maine’s Future preservation program.

— *Portland Press Herald*

■ **With paper sales declining, Verso could sell its Stevens Point mill or declare bankruptcy** (Nov 16th)

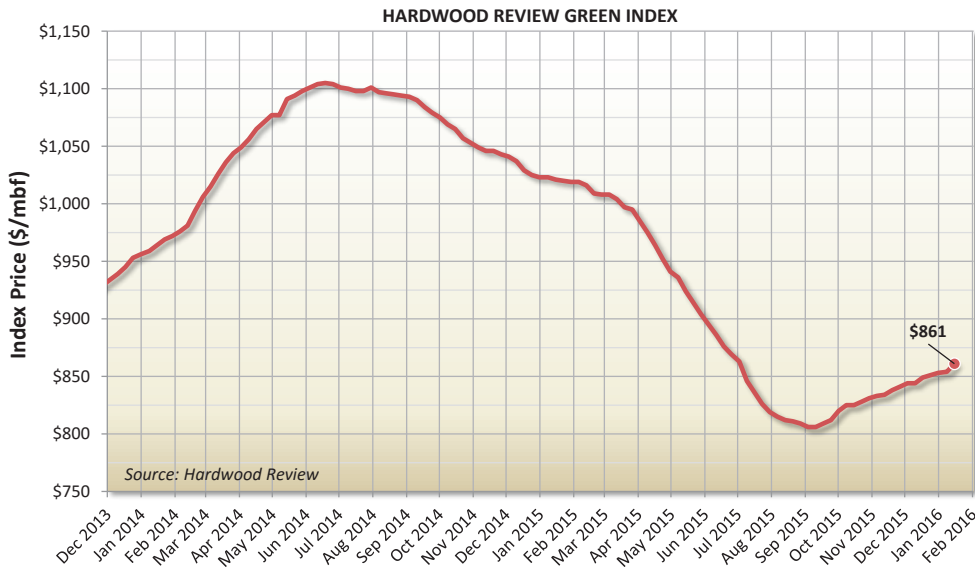
Verso Corp., which owns paper mills in Stevens Point and Wisconsin Rapids, disclosed that it is grappling with dwindling sales amid an increase in paper imports and a decline in domestic demand for coated papers. Verso Corp. is considering selling the Stevens Point paper mill along with facilities in Jay, Maine, Duluth, Minnesota and Wickliffe, Kentucky.

— *Stevenspointjournal.com*

in the marketplace than pessimism. Hard maple forms the bedrock of this market in the Northeast, and we've seen slow steady growth with some scattered moderate price increases on hard maple sawlogs. On average, we've seen quarter-over-quarter growth in both demand and price. Birch boltwood is currently also seeing high demand as the wet fall has created a limited supply. Consequently, we are seeing markets extending their reach trying to source the volume they need.



RECENT PRICES IN HARDWOOD LUMBER



Weather affects demand for finished hardwood products too, by the way. One sawmill in our region is, among other things, a manufacturer for snow shovel handles. Of course, you don't think to go buy a shovel until it starts snowing, and with the warm weather we've had, sales of shovels – and subsequently sales of the timber used to make them – are lackluster. Fortunately, there are other products and markets for the materials.

Demand for timber mat logs and other industrial products remain strong. The standard length for these logs is 16 feet, and we are seeing more pressure to produce longer length logs driven by end-user demand for larger timber mats. Longer lengths are difficult to find and produce consistently, and the market has yet to realize a premium for landowners & loggers to expend the effort.

Pulpwood Products

As pulp mills saw their inventories growing over the last half of the year, we noted that several dropped their price expecting some flow of the wood to be redirected to other markets – but the wood kept coming in. Some appear to be still testing the market. With no notable exceptions, pulpwood inventories across the Northeast are substantially higher than they normally are at this time of year. The good logging conditions that persisted through fall, the capacity reductions and closures of pulp mills, and series of market shocks we've reported on in our last few newsletters, are all contributing to an overload of market supply. This is an unusual position for pulp mills to be in this time of year -- one pulpwood buyer we talked to said, that for the first time in 15-20 years, he was able to sleep soundly on Christmas evening knowing that the mill had plenty of wood in the coffers.

Our feeling is it will be some time before we see price recovery in pulpwood, and some have suggested landowners should get comfortable with the idea that we have entered a "new normal" in terms of price setting for low-grade material such as pulpwood. The available

■ Verso contemplating bankruptcy, sale of Jay mill (Nov 16th)

Verso Paper Corp said in an earnings statement Monday that based on financials as of Sept. 30, there is substantial doubt about its ability to continue as a going concern for the next 12 months and has started discussions with creditors over its restructuring options and is separately considering how it might raise money by selling off certain assets, like its Androscoggin Mill in Jay.

— Bangor Daily News

■ Sappi's reinvestment helps keep mills afloat despite falling demand for paper (Nov 16th)

Since 1994, Sappi has poured more than \$400 million into their facilities. Many of the improvements are driven by the company's team of 50 research and development scientists who are working on both innovating products, as well as making the products that they already have, more efficient and making them lower cost.

— MPBN

■ Paper industry charts plan for navigating "challenging times" (Nov 17th)

More than 200 people, from woodlot owners and loggers to paper mill managers, economic development officials, lawmakers and lobbyists gathered in Bangor for a summit regarding Maine's paper industry challenges ranging from energy to workforce development to transportation. Energy costs and high property tax valuations emerged from a survey as the top priorities for saving the industry in Maine.

— Bangor Daily News

supply has exceeded the consumption, and it will take some time before we are at an equilibrium again.

Some of these moves are also driven by a different motive. Throughout the later parts of the quarter, we did see active inventory management on the part of all major regional pulp mills. That is, making a little bit of room in the wood pile either by accelerating production schedules or by limiting wood purchases. As tough a pill as this is to swallow for landowners right now, this move will likely help smooth out the deliveries through the winter and spring and keep everyone in the woods working. I'm sure that maintaining the health of the loggers, truckers, and landowners all played a role in that decision. Most participants in the industry agree that the volatility is not good for anyone, and at this point the whole region – including our pulp mills – is eager for stability.

Benjamin D. Carlisle
PRESIDENT

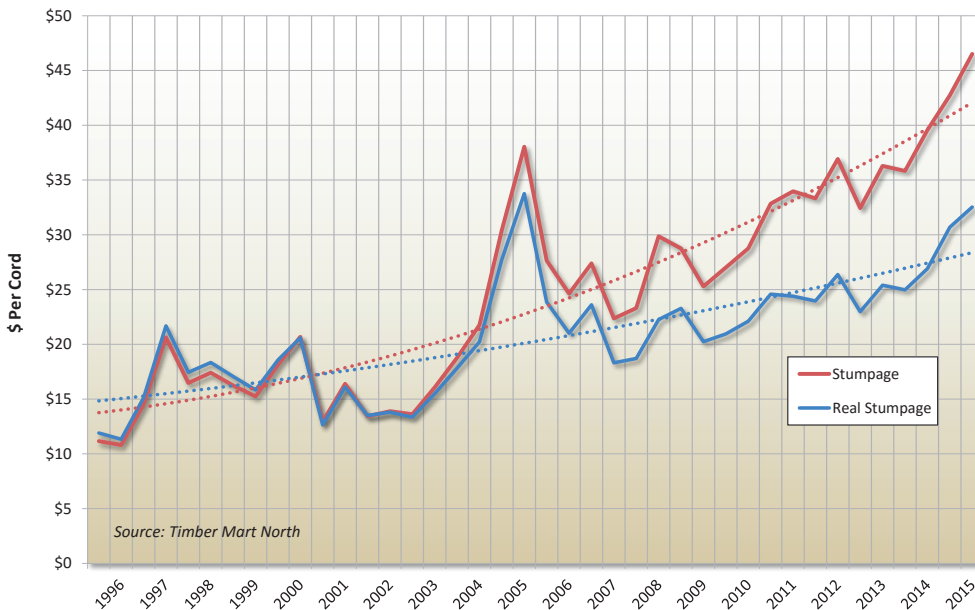
Update on Lake States Timber Prices

by Sam Radcliffe, Vice President

Every year in the fourth quarter we like to report on what happened to Lake States timber prices during the year¹. The Lake States are dominated by hardwoods, and as usual we will focus on Wisconsin hardwood prices for pulpwood and sawtimber, with an emphasis on hard maple. Hard maple is the most valuable sawtimber species in the region and accounts for about one-third of the sawtimber harvest among the higher quality species.

In 2015 hardwood pulpwood remarkably extended the nearly 20-year trend of increasing real prices (Figure 1). The low inventories at most mills led to a seller's market for fiber early in the year. Most producers were able to sell freely as much volume as they wanted and often at higher than open market pricing.

Figure 1: Wisconsin Hardwood Pulpwood



The long-term performance of a hardwood pulpwood "index" is still quite favorable relative to the S&P 500 (Figure 2).



update
4th Quarter 2015

■ **Katahdin-area residents understand national park idea well. That's why it fails.** (Nov 17th) People from the Katahdin area want more than seasonal jobs funneling and steering tourists through a national park; they want full time jobs with a future. Residents are working hard on local and state efforts to attract businesses, including forest related businesses.

— Bangor Daily News

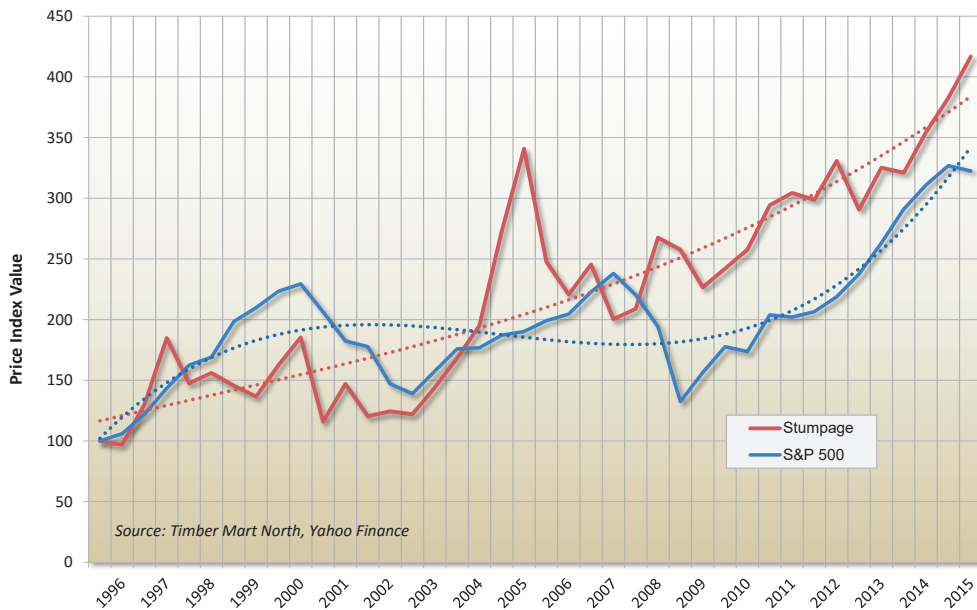
■ **Maine Senators and Representative Denounce Katahdin National Monument** (Nov 23rd) U.S. Senators Susan Collins, Senator Angus King and Representative Bruce Poliquin have sent a letter to President Barack Obama expressing serious reservations and significant concerns regarding the possible designation of land in the Katahdin region as a national monument.

— WAGM TV

■ **After FSC Reinstates a Forest in Ontario, CEO Says It's His Last Time for FSC** (Nov 27th) After an audit in January 2014, Resolute Forest Products' FSC certification was suspended. Resolute has since undergone two audits, which confirmed that the company is in compliance with the FSC standard. Resolute CEO, Richard Garneau, is concerned with the number of challenging issues currently facing FSC and its membership going forward.

— Bangor Daily News

Figure 2: Wisconsin Hardwood Pulpwood vs S&P 500

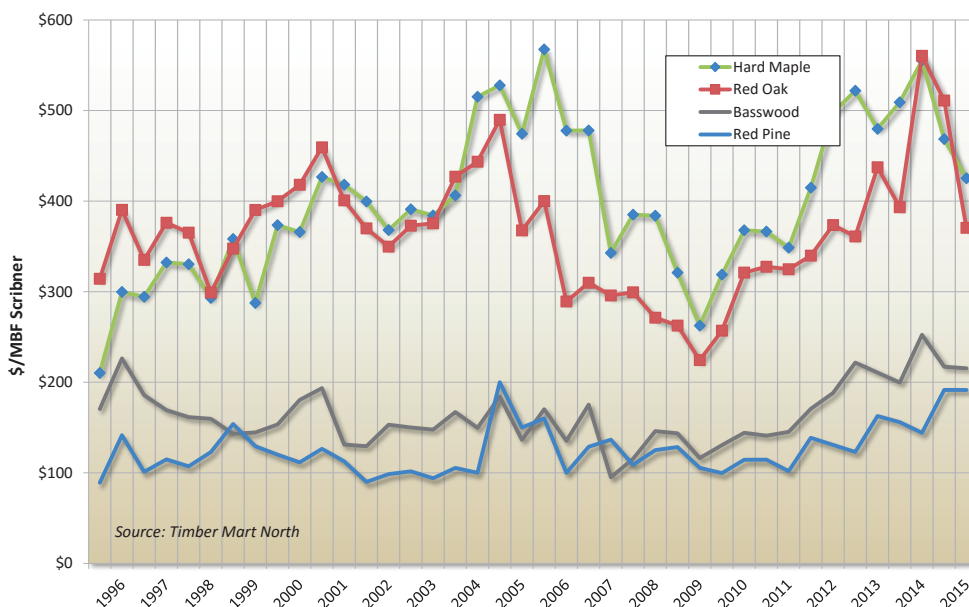


However, note that the two indices are highly correlated ($r=.72$, with 1.00 a perfect correlation). At least in this case, the oft-made assertion that timber diversifies a portfolio of equities simply does not hold.

The region continues to have some of the priciest hardwood pulpwood stumpage in the US. The average hardwood pulpwood stumpage price across the South in the third quarter remained for the third straight year at about \$30 per cord² while during that same period the price in Wisconsin has gone from about \$35 to over \$45. This is a two-edged sword for timber sellers, who may enjoy high prices in the short term but find pulpwood markets disappear in the longer term as production shifts to lower cost regions. It is no coincidence that Verso Corporation, which operates five paper mills in the Lake States, recently announced the possibility of a bankruptcy filing in the coming year³.

For the premium species, hardwood sawtimber stumpage prices experienced a significant correction in 2015, while the lesser species such as basswood fell back less sharply (Figure 3).

Figure 3: Wisconsin Sawtimber Stumpage



update
4th Quarter 2015

■ **A national park or a national monument? North Woods groups shift focus** (Nov 29th)
Unable to convince members of Maine's congressional delegation to introduce legislation for a North Woods national park, supporters are now hoping President Obama will use his authority to designate a national monument as a step toward eventual park status.

— Portland Press Herald

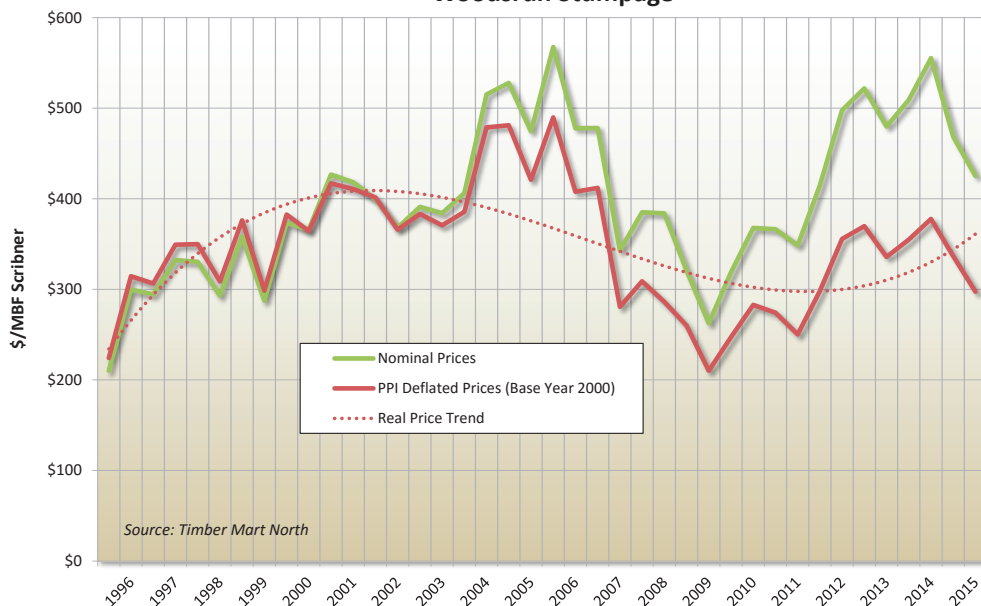
■ **Money talks: Currency impact on Canadian mills** (Dec 7th)
The recent changes in global currencies has been quite dramatic, and they are now showing up as a real eye opener in terms of the changing cost structures of the various North American producing regions, as well as the competitiveness of many countries exporting to China or the U.S. The devaluation of global currencies has been a game changer for countries like Canada, whose currency had plunged against the U.S. dollar.

— Money Talks

Woodsrun (mixed grades) stumpage prices need to be interpreted carefully, as a small sample may be subject to significant swings due to atypical timber quality, operating conditions or bidder behavior. However, given the sample size, the depths of the corrections suggest that these are not aberrations.

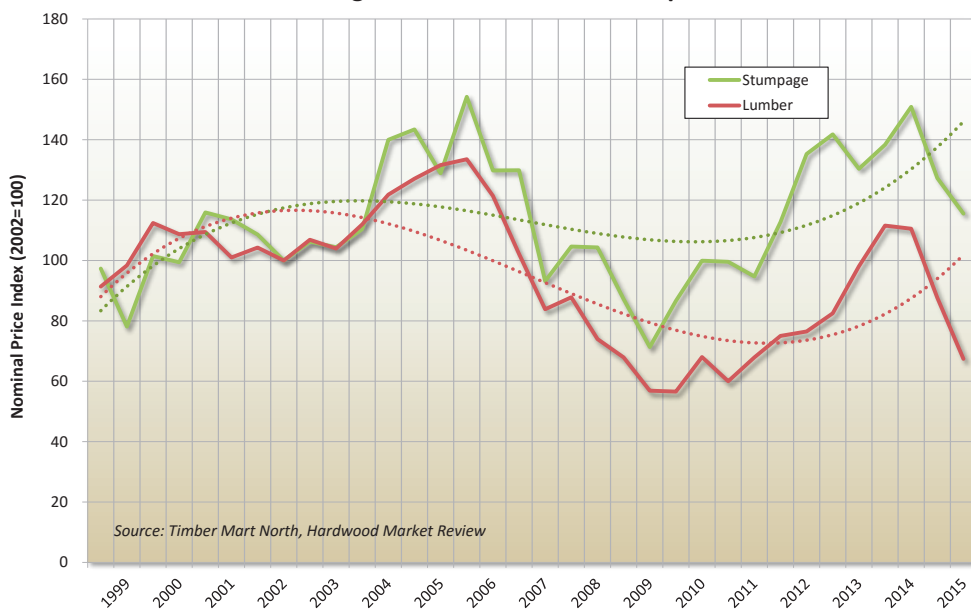
In nominal terms, the corrections moved hard maple and red oak prices off of the peaks reached in 2014. In inflation-adjusted terms maple prices dropped back to a 1996 level (Figure 4). Should housing ever recover to the levels economists expect (comparable to 2004-2006), prices have significant room for growth.

Figure 4: Wisconsin Hard Maple Sawtimber Woodsrun Stumpage



Along with excellent logging conditions coming out of Spring breakup and through most of summer, the relationship between hard maple stumpage prices and lumber prices goes a long way toward explaining the 2015 correction (Figure 5). The slump in lumber prices translated directly to stumpage. The risk for timber producers is clear; those who bought stumpage in 2014 for harvest in 2015 are susceptible to significant losses as mills adjust gate prices to maintain profitability in the face of declining lumber prices.

Figure 5: Wisconsin Hard Maple





Looking forward, this winter's weather may maintain the upward pressure on pulpwood prices, as many areas experienced one of the warmest Decembers on record. The lack of consistent low temperatures prevents many woods roads from freezing up to support heavy equipment. A shortened logging season could again set back mill inventories, which is the factor that kicked off the current run-up in prices at the start of 2013. However, numerous producers are working their "summer chance" ground to keep operating during the warm weather, although that ultimately could create supply problems during the actual summer months. There also appears to be a glut of spruce and balsam pulpwood in the marketplace regionally, due to heightened awareness of the spruce budworm outbreak that is picking up speed in the central Upper Peninsula of Michigan and northeast Wisconsin. The TIMO/REIT ownerships seem to be ahead of the curve in dealing with year three or four of the outbreak, crowding out some of the nonindustrial private landowners. This again demonstrates for woodlot owners the importance of engaging a manager who has enough scale to lever volume and price agreements with the mills.

On the sawtimber side, while unemployment has improved across the country, there is still no consistent momentum in single-family housing starts, the biggest source of lumber demand. With the strong dollar, export markets too are a diminished outlet for the high quality logs, lumber and veneer produced in the Lake States. For pine, the recent ending of the Canadian Softwood Lumber Agreement has already impacted regional sawmills. With exchange rates already very favorable to Canadian mills, after the SLA ended local mills had a surplus of finished lumber inventory, which not only requires a work-out period but also forebodes lower production until softwood lumber supply/demand conditions improve.

The source of these price trends is our timber price survey, Timber Mart North. Please see our website for a sample issue and subscription form: <http://www.timbermartnorth.com/>

Matt Carothers of our Rhinelander office contributed to this article.

¹ Prices and trends reported here are through the end of the third quarter 2015.

² Timber Mart South, <http://www.tmart-south.com/>

³ See <http://www.scoop.it/t/timber-invest?q=verso>

©2015 by **Prentiss & Carlisle**. Reproduction of this report by any means in whole or in part without express permission of the authors is a violation of federal law.

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.