



Industry News

■ **Russia is Running out of Forest** (Sep 30th)

The Russian logging industry will face lack of harvestable timber in 10 to 20 years. To keep the logging industry on the rails, Russia needs to go from extensive to intensive forest management - from clearing forests, to replanting them.

— *The Moscow Times*

■ **Another blow to Maine's paper industry: Verso Paper to close Bucksport mill Dec. 1, displacing more than 500 workers** (Oct 1st)

The Bucksport mill, which has not been profitable for a number of years, will close on December 1st, displacing more than 500 workers. The mill employs workers from every county in Maine.

— *Portland Press Herald*

■ **What's behind the troubles facing Maine paper mills?** (Oct 2nd)

One of the reasons is at your fingertips: the smart phones, tablets and other devices. Old Town Fuel & Fiber was competing with cheap, fast growing pulp from South America. Great Northern produced paper for books being displaced by digital technologies and Verso produces coated paper used in magazines & brochures, also affected by the digital shift.

— *Bangor Daily News*

■ **Wood Structures Could Reduce Global Carbon by a Third** (Oct 6th)

Using sustainably harvested timber in place of concrete, steel and brick would have a massive positive impact by reducing global greenhouse gas emissions and global fossil-fuel consumption.

— *Environmental Building News*

Industry Overview

Forestland Operations

Well, I can safely say that for forestry operations in the Northeast, it's a different world today than it was even just a week ago. It is not often you can find almost an entire industry sidelined, proverbial fingers drumming on the counter, waiting for the weather to turn – but our fall mud season is one of those times. Plans are in place, harvesting equipment is fine-tuned and ready to roll, and people are anxious to get back to work in the woods. In the first week of January, it was as if Mother Nature just yelled “go!” and provided us with some solidly cold temperatures for the first time.



Early morning frost settles into the Northern forest in December 2014. This stream would normally be frozen over at this time of year

The mud season we just went through in the 4th quarter was particularly brutal. On top of being quite rainy in the Northeast, we experienced two snowfalls before we were really ready. Early snowfall can be a potential sign of an early spring to come – snow acts as a ground insulator, keeping warmth in and not allowing winter's frost to penetrate into the ground solidly and deeply. This requires foresters and loggers to avoid wetter ground, throwing a sizable monkeywrench into everyone's plans. There comes a point where the cold will overcome the “insulation” effect and things will freeze down – and in some places this has already occurred – but if this process happens too slowly it can shorten a very critical harvesting season where every day matters.

There are things we can do, however, to help speed the process along. One of those things is to pack down the snowfall into the ground using logging equipment – it compresses the snow and pulls up the moisture in the ground, which can then freeze. It's expensive, and you can't do it everywhere, but a single pass can drive frost into the ground overnight and can often allow you to work in or cross areas where soils are saturated.

Because different timber species grow in different soil types, whether or not the ground is frozen down can determine the species mix that will eventually be harvested, and therefore the returns that the landowner will realize. Cedar, fir, soft maple – these are all indicator species for wet soils. If the ground freezes well, a lot more of those species will be available for harvesting, and in some cases that is the only time certain areas can be cut.

We recently made a slight increase to the logging rates we pay contractors. Rates have held steady since 2012, and we felt we needed to reflect an increasing cost burden in order to continue to attract & retain quality logging force. It's a balance between staying competitive on our rates and keeping contractors viable and wanting to work with us, and we felt it was time to recalibrate to the market rates. That said, the swiftly declining prices in diesel fuel appears to have more than made up for it. As mentioned in prior newsletters, P&C pays our logging contractors a "fuel premium" that is based on published regional diesel fuel indexes. We pay this premium to help contractors offset big spikes in fuel costs during a 6-month contract period, and the premium rises and falls depending on where the index moves. Considering the dramatic decline in fuel prices, it's been hard to keep up with all the adjustments, but we've made five downward adjustments in the last two quarters.

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



The end result of these falling prices are that landowners are getting more for their dollar and a higher return, and loggers' margins are getting better – really a win-win for both involved.

Forest Product Markets

With all of October, all of November, and most of December consisting mostly of wet weather without any frost or freezing, most of the mills that we sell to could not get the volume of

timber they wanted during the 4th quarter. The roads were muddy and could not support a large, steady flow of wood out of the forest. This is a common problem this time of year, but as mentioned earlier, this "mud season" dragged out quite a bit more than usual.

This has, without a doubt, played into the demand equation for forest products. Raw material inventories were generally thin, and mills will do what they need to do in order to keep their facilities supplied: reach out further. As a result, log demand remains high, pricing has held up, and there is a general sense of optimism.

P&C DEMAND INDICATORS

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

	CURRENT	OUTLOOK
Sawn Timber		
Spruce & Fir	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	STEADY
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>	STEADY
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>	DOWN
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



update
4th Quarter 2014

■ Some Rare Good News for Maine's Beleaguered Paper Industry (Oct 10th)

St. Croix Tissue Inc. of Baileyville is getting \$120 million worth of equipment installed, courtesy of parent company International Grand Investment Corporation. The first machine is expected to be up and running next fall.

— Maine Public Broadcasting

■ Buyers for paper mills don't grow on trees (Oct 12th)

Declining demand for the type of paper Maine specializes in, coupled with increasing competition, does not create an ideal seller's market, especially when the most recent mill owners couldn't make a go of it.

— Portland Press Herald

■ Better Logging Could Slow Global Warming (Oct 15th)

In theory, trees can lock climate-harmful carbon dioxide into centuries-long storage. Simply leveling forests to make way for other developments, is resulting in a level of forest destruction that is causing higher emission levels than all planes, cars, trucks, ships and trains on Earth combined.

— Portland Press Herald

■ Climbing Hardwood Prices Floor Home-Building Industry (Oct 16th)

Hardwood prices began their long climb in early 2013. Since then, they have reached record highs. Hardwood prices are now over 40 percent higher than they were in 2009. As a result, home builders have become more cautious when it comes to green-lighting new projects.

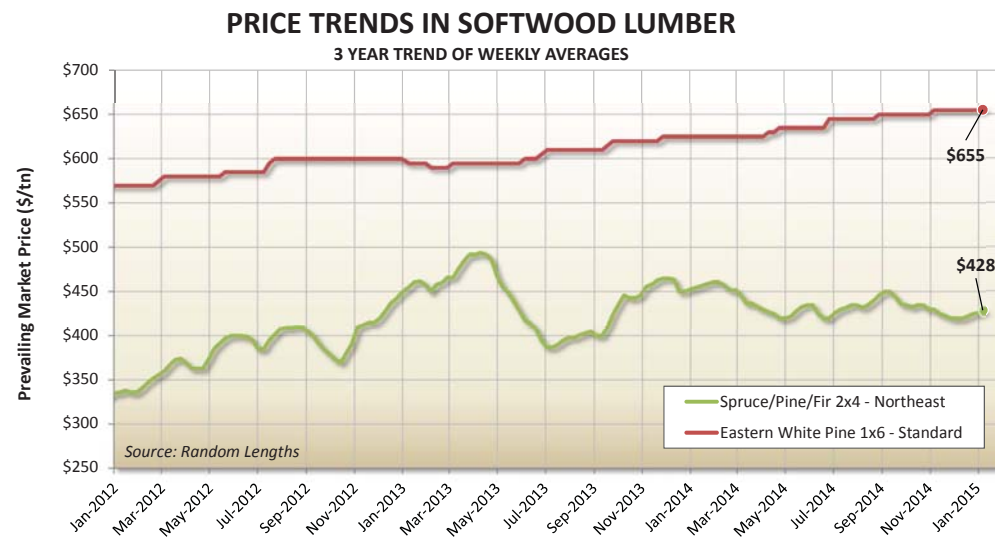
— ThomasNet News

Sawn Products

Softwood

Most regional dimensional lumber mills are dealing with raw material inventory shortages and are working hard to acquire wood to fill their decks. There is a good deal of optimism in the market for their sawn products and, looking back over the last year you could probably say there's been more capital investments put into our regional spruce/fir dimension lumber facilities than in the past 8 years combined. We're seeing new equipment at mills designed to improve recovery and efficiency, expansion of production lines, new brownfield projects, and acquisition activity – all of these things demonstrate a market that firmly believes the woes of the housing market crash are firmly behind it. Generally we hear sawmill owners feeling that investment now will pay off as the economy strengthens and the amount of home construction recalibrates to match.

Finished goods markets for dimensional lumber producers have been relatively steady – with slight upticks in the latter half of the quarter.



Pine finished goods markets continue their upward climb, and now pricing on finished goods is solidly ahead of the prior peak in 2005. As a result, pine mills are running full bore, and would be running even more if they could get the volume of pine logs. Every pine mill we deal with is currently actively seeking more wood than they are getting now. Inventories are thin, and demand is very strong.

Hardwood

We have seen a slow erosion in pricing of hard maple log prices over the last 6 months, and a quick look at hardwood lumber pricing (example in the chart below) would indicate this is the result of finished goods pricing that has come off a peak. That said, maple log prices are still substantially higher than where they were 18 months ago, and we're still able to move maple into all markets without any problems.

Long term trends appear to support the commonly held belief that soft maple pricing seems to track hard maple. The two are not pure substitutes by any stretch, but over the last few months soft maple has been trending downward as well.



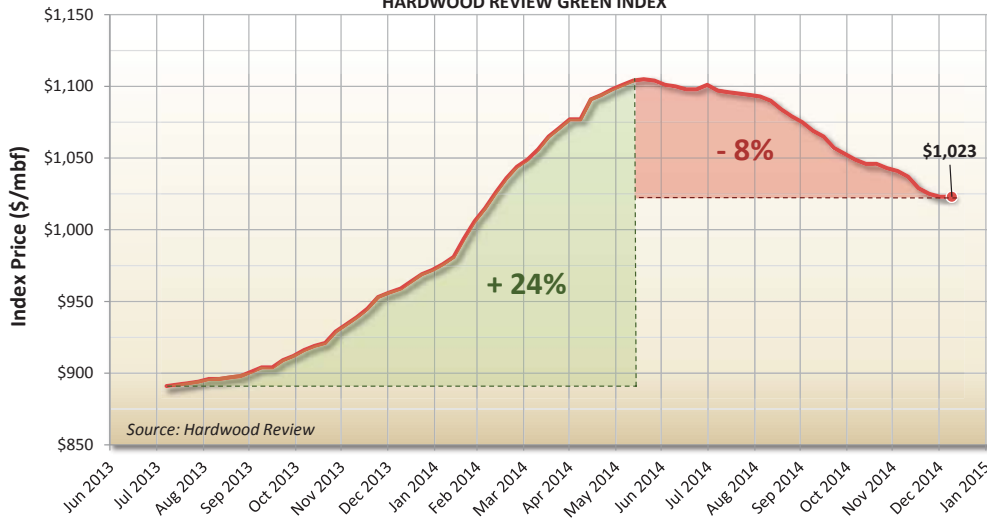
update

4th Quarter 2014

- **NewPage seeks sale of Rumford mill to advance its merger with Verso** (Oct 31st)
The sale would most likely pave the way for approval of the merger and new ownership of the Rumford mill would strengthen job security in the community, and within an industry, that has been hit hard this year.
— *Portland Press Herald*
- **The granddaddy of all Canadian-US trade disputes is about to rear its ugly head again** (Oct 31st)
The nine year "trade truce" signed by Canada and the US is set to expire in October of 2015. Under the agreement, the US agreed to return more than \$5 billion in duties collected from Canadian lumber companies, and a ceasefire in trade litigation.
— *Financial Post*
- **For Cellulosic Ethanol Makers, the Road Ahead Is Still Uphill** (Nov 3rd)
Cellulosic ethanol, which is made from the non-food parts of plants, is touted as a "just-around-the-corner" technology that would provide cleaner, greener transportation fuel. But, producing ethanol from stalks and stems has proved far more difficult than producing it from corn and other crops.
— *Yale Environment 360*
- **New EPA report could be a boon to Maine biomass energy producers** (Nov 25th)
A new EPA analysis suggests how the federal government will count greenhouse gas emissions from wood-fired biomass facilities, and a top ranking EPA official suggests biomass producers will likely get a pass when it comes to strict, new carbon dioxide regulations.
— *Bangor Daily News*

RECENT PRICES IN HARDWOOD LUMBER

HARDWOOD REVIEW GREEN INDEX



Birch grade log pricing appears to have stabilized after having fallen out of favor in the last 12 months. From what we are hearing, it would appear this market has found its “bottom”. Inventories are normal for the season and buyers are still quite active. After some period of volatility, oak log demand seems to be stable at the moment as well. Pricing on oak logs has tempered slightly, but we don’t see this falling off dramatically in the short term.

Beyond grade logs, the market for sawn industrial timbers remains strong and we are seeing growth in demand for the raw materials that produce them. Over the last quarter, we noticed increased consumption and increased log pricing, and these mills continue to expand their traditional sourcing radius in order to keep production going. Raw material inventories are thin at these facilities, and when new wood is delivered they go through it quickly. Furthermore, demand from the end users for these products – mostly utility and construction industries – shows no signs of slacking off.

Pulpwood Products

Hardwood

Demand for hardwood pulpwood has been steady and strong for the last several quarters, and we don’t think this is very likely to change anytime soon. Aside from the volatile weather, the primary issue is lack of available supply. Furthermore, we have noted that firewood has been playing a bigger and bigger role in the Northeast and in particular Maine. The firewood market has of course always been direct competition for hardwood pulpwood consumers, but consumer demand has fueled a maturing of the market. Where before we might have sold firewood from a logging job as an afterthought, it is becoming more and more a primary product. Collectively, the firewood producers in the region are probably consuming as much hardwood as a full pulp mill. This is not an insignificant pressure on the hardwood pulpwood market.

Last quarter we mentioned the overall turmoil in the pulpwood markets, and in particular noted the closure of the Old Town Fuel & Fiber mill, which was a large hardwood pulpwood consumer. How quickly things change! This mill has now been purchased by Expera Specialty Solutions, a company based in Wisconsin and a manufacturer of specialty paper-based products. All the laid off workers have now returned to work, and the mill is once again buying wood. The new owner will be producing pulp destined for their existing production facilities in Wisconsin. More importantly, they are focused on producing specialty papers, not printing



update

4th Quarter 2014

■ **Great Northern Paper mill sold at bankruptcy auction, but future uncertain** (Dec 2nd)

After 30 rounds of very competitive bidding, which began at \$2.9 million, Hackman Capital Acquisition LLC, who specializes in the purchase and sale of industrial properties and equipment, emerged on top with a bid of \$5.4 million in cash. None of the bidders were paper companies or mill operators.

— Portland Press Herald

■ **Experts fear for long-term health of U.S. forests** (Dec 7th)

The age of the forest landowners across the country is increasing while the size of the parcels they own is shrinking - and that has state, federal and private experts fearing for the long-term health of millions of acres of American woodlands.

— The Washington Post

■ **KPS Capital Partners Portfolio Company, Expera Specialty Solutions Acquires Old Town Fuel & Fiber** (Dec 8th)

The Old Town mill has the capacity to produce 200,000 tons of Northern Bleached Kraft pulp annually. The mill closed indefinitely in August 2014. Expera intends to invest significant capital and resources into Old Town to restart the mill and ensure the highest level of production quality and capacity.

— Market Watch

■ **The Energy Boom You Haven’t Heard About: Wood Pellets** (Dec 8th)

Deep in the forests of the U.S. South, tree scraps are fueling a little-known, but controversial energy boom: wood pellets. Long used to heat homes in the country’s northeast, they’re now destined for a new market. Wood pellets are increasingly being produced in the United States for export to European countries.

— National Geographic News



papers – food packaging, medical papers, industrial and technical papers -- products with a higher value added and more resilience to the economic factors that have affected paper consumption globally. The new mill is an important link in their chain – and it's encouraging to see a bad situation for the region turn into something positive.

Softwood Pulpwood

Although we have seen market closures & capacity reductions in the softwood pulpwood consuming market in the last few years, we are still experiencing enough demand in the marketplace to move all the softwood pulpwood we are producing. The market is steady, and any capacity reductions appear to have been fully absorbed by other facilities that want the wood. Longer term, we worry about the paper markets – particularly groundwood-based papers – and how global demand for printing papers might affect markets in the northern latitudes, where the bulk of the spruce & fir resource exists. For the moment, however, we appear to have been weathering the economic storm.

The merger between NewPage and Verso has obtained approval from anti-trust regulators and the transaction is now consummated. Part of the deal involved selling NewPage's only facility in the Northeast, in Rumford, Maine, to Catalyst Paper, a Canadian outfit and long-standing producer of paper products. Once again, we're encouraged to see the new major capital investment in the region, and a new competitor enter the marketplace.

One item that may change the market regionally is that Expera – mentioned above – has indicated an intention to convert from a hardwood pulp facility to a softwood pulp facility, or at least maximize the amount of softwood they use. This could offer good support to the softwood market, including hemlock and pine pulpwood, which landowners have historically had a difficult time telling.

Biomass

Biomass consumers are currently "all systems go", which is partly seasonal effects but partly a market price effect. Furthermore, the accelerator pedal is firmly pressed to the floor coming off a rainy fall. Interestingly, several of the stand-alone biomass power generation facilities are running again and producing electricity after a long period of being in a depressed market. Everyone buying biomass of course keeps their eye on the weather – it's the first product that becomes unavailable if the ground is wet because it goes right back into the forest to help float the equipment and prevent rutting.

Benjamin D. Carlisle
PRESIDENT

Update on Lake States Timber Prices

by Sam Radcliffe, Vice President

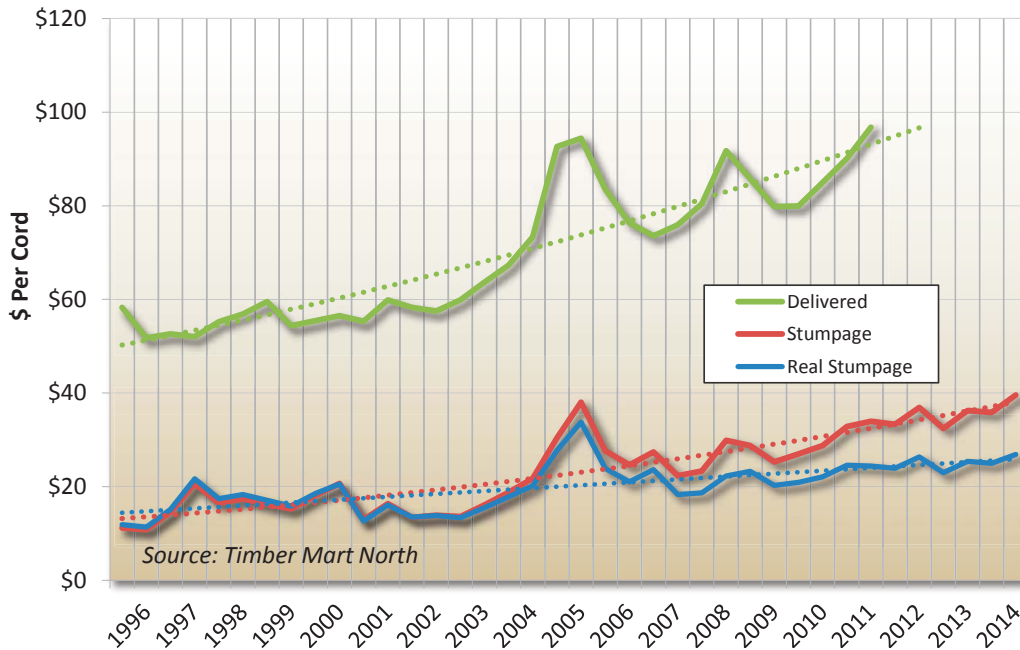
Every year in the fourth quarter we like to check on what happened to Lake States timber prices during the year. The Lake States are dominated by hardwoods, and as usual we will focus on Wisconsin hardwood prices for pulpwood and sawtimber, with an emphasis on hard maple. Hard maple is the most valuable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

In 2014 hardwood pulpwood continued a remarkable 20-year trend of increasing real prices (Figure 1). In fact if one could have invested in a hardwood pulpwood "index" in 1996, it would have out-performed an investment in the S&P 500 over the 1996-2014 period (Figure 2). Interestingly, that out-performance is due primarily to pulpwood's strength during the Great Recession.

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 was about \$31 per cord (Timber Mart South, <http://www.tmart-south.com>), compared to nearly \$40 in Wisconsin. One of the reasons for this disparity is that neither regional price reflects purely the price of wood for pulping - in both regions what is classified and sold as "pulpwood" has alternate markets. In the South a significant volume of wood is increasingly being diverted to the manufacture of fuel pellets for export markets. This is a lower value use than pulping, but in the absence of strong pulp markets it is a welcome alternative.

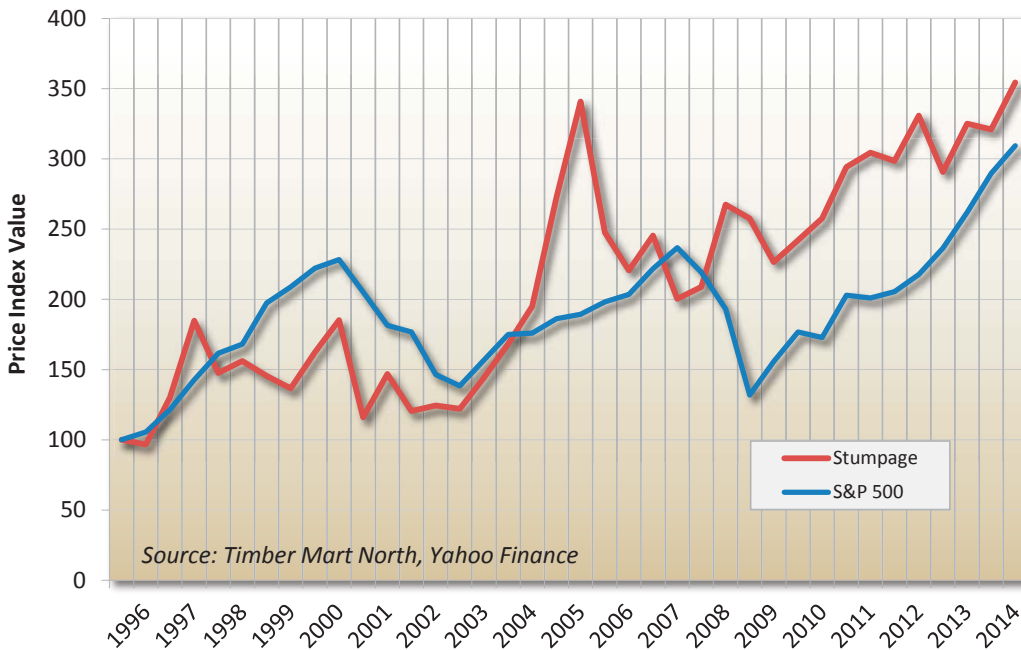


Figure 1: Wisconsin Hardwood Pulpwood



In Wisconsin, hardwood bolts which go toward the manufacture of lumber are not typically segregated and separately bid in stumpage sales. So the advertised pulpwood volume often does contain more valuable bolts for which there are ready and strong markets, thereby pushing up the average “pulpwood” price.

Figure 2: Wisconsin Hardwood Pulpwood vs S&P 500

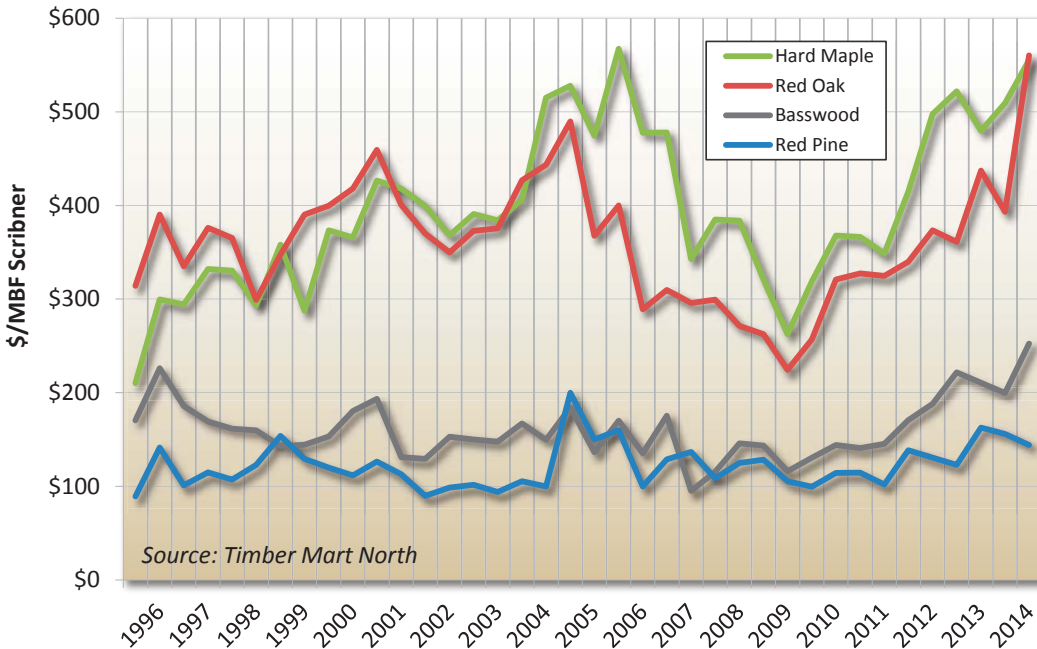


Hardwood sawtimber stumpage prices were generally up in 2014, with the premium species making real price gains and the lesser species such as basswood essentially keeping pace with general inflation (Figure 3). However, woodrun (mixed grades) stumpage prices need to be interpreted carefully, as a small sample may be subject to significant swings due to atypical timber quality, operating conditions or bidder behavior.

In our 4th quarter 2013 review, we noted the “battle” between maple and red oak for dominance in the furniture, fixtures, cabinet and flooring markets. Typically this has been thought of as a 15-year cycle where heavier grained darker species like red oak would hold supreme, only to have consumer tastes switch to whiter fine grained species like hard maple.

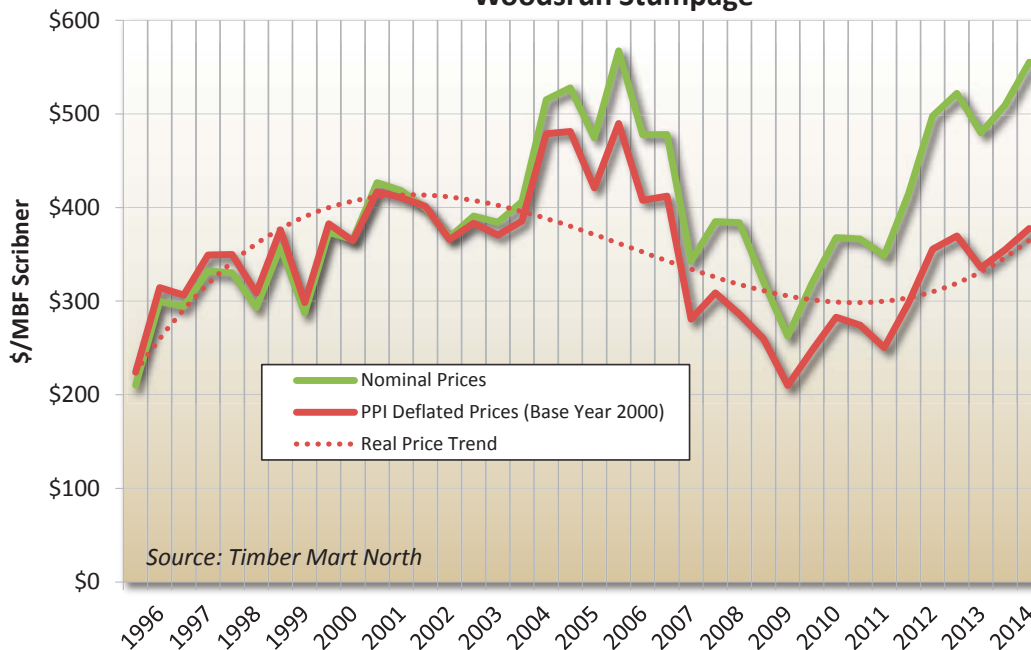


Figure 3: Wisconsin Sawtimber Stumpage



While there is no evidence from the end markets or designer surveys to indicate a movement back towards oak, in 2014 Wisconsin oak prices rose to the level of maple prices for the first time in about 10 years (Figure 3). Keeping in mind the caveat about woodsrun stumpage prices, it should nevertheless be noted that the large red oak price jump is not far above the trend begun in 2009.

Figure 4: Wisconsin Hard Maple Sawtimber Woodsrun Stumpage

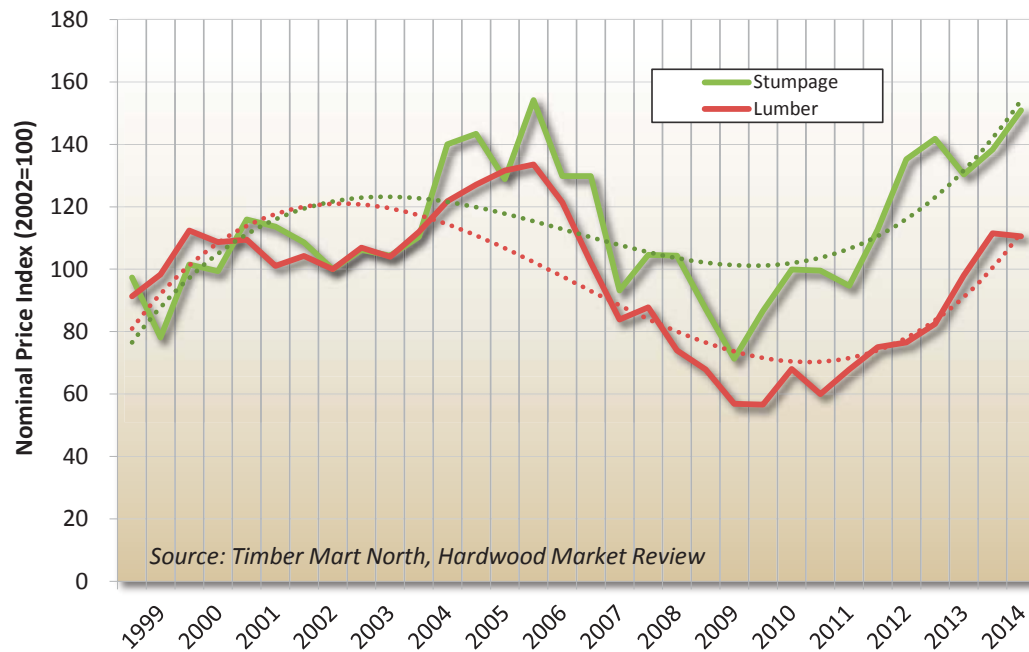


In nominal terms, hard maple prices have matched their 2006 peak while red oak prices are at an all-time high. However, in inflation-adjusted terms maple prices are still at a mid-1999 level (Figure 4). So while 2014 prices seem frothy, there is still historical room for growth when the housing market eventually recovers to full strength.

Although a gap between hard maple stumpage prices and lumber prices opened up after the mid-2000's housing crash, the gap was fairly constant until about 2009, when stumpage prices increased faster than lumber prices for several years.



Figure 5: Wisconsin Hard Maple



By 2013, the two indexes seem to have gotten back on the same trajectory, but in 2014 lumber prices leveled off while stumpage prices continued to push upward. A similar pattern can be seen in the early 2000's before lumber prices peaked (Figure 5).

In general, the perfect storm of market demand and uncooperative weather since the start of 2014 has kept mill inventories low, requiring the mills to buy both stumpage and gate wood aggressively. The leverage gained by purchasing large volumes of stumpage has allowed mills to develop close relationships with the largest logging contractors. From the outside, this seems to have fostered a greater recognition of the cost and price pressures faced by timber producers, and a concern about the long-term health of the logging industry. Higher gate prices therefore may become the new norm, which when combined with lower fuel costs creates a favorable picture for timber producers and landowners as well.

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.

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