



MISSOURI TIMBER PRICE TRENDS

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Missouri Department of Conservation, Forestry Division

Doyle (North) Stumpage Prices

	High	Low	Avg.	Last Qtr.	Last Yr.	Vol.	# of Rpts.
Veneer							
Walnut, Black	\$5,600	\$1,310	\$3,890	\$3,155	\$2,445	70 Doyle -	19
White oak (group)	\$2,400	\$860	\$1,255	\$1,225	-	52 Doyle -	5
Sawlogs							
Ash	\$260	\$30	\$220	\$105	-	4 Doyle -	4
Hard Maple	\$290	\$30	\$120	\$130	-	23 Doyle -	6
Hickory	\$290	\$100	\$140	\$95	\$90	24 Doyle -	8
Mixed Hardwoods	\$210	\$50	\$95	\$155	\$150	449 Doyle -	18
Oak (mixed species)	\$305	\$90	\$270	\$195	\$135	700 Doyle -	6
Post Oak	\$220	\$90	\$120	\$145	\$110	16 Doyle -	6
Red oak (group)	\$560	\$50	\$155	\$110	\$105	987 Doyle -	24
Soft Maple	\$200	\$120	\$185	\$185	\$155	111 Doyle -	3
Walnut, Black	\$2,000	\$450	\$1,540	\$1,375	\$775	196 Doyle -	20
White oak (group)	\$360	\$100	\$215	\$205	\$190	854 Doyle -	21
Stave Logs							
White oak (group)	\$1,440	\$400	\$515	\$340	\$280	217 Doyle -	12

International (South) Stumpage Prices

	High	Low	Avg.	Last Qtr.	Last Yr.	Vol.	# of Rpts.
Sawlogs							
Hickory	\$255	\$10	\$170	\$165	\$160	280 Int. - MBF	27
Mixed Hardwoods	\$235	\$80	\$190	\$195	\$215	3,211 Int. - MBF	13
Oak (mixed species)	\$485	\$75	\$170	\$160	\$170	2,486 Int. - MBF	21
Post Oak	\$250	\$40	\$130	\$125	\$85	140 Int. - MBF	14
Red oak (group)	\$375	\$160	\$260	\$245	\$200	6,127 Int. - MBF	26
Shortleaf Pine	\$250	\$50	\$75	\$130	\$165	964 Int. - MBF	15
White oak (group)	\$375	\$125	\$230	\$230	\$190	898 Int. - MBF	26

International (South) Salvage Prices

	High	Low	Avg.	Vol.	# of Rpts.
Sawlogs					
Mixed Hardwoods	\$102	\$102	\$102	1 Int. - MBF	1

Doyle (North) Stumpage Prices

	High	Low	Avg.	Last Qtr.	Last Yr.	Vol.	# of Rpts.
Veneer							
Walnut, Black	\$5.60	\$1.31	\$3.89	\$3.16	\$2.44	70 Doyle -	19
White oak (group)	\$2.40	86¢	\$1.25	\$1.23	-	52 Doyle -	5
Sawlogs							
Ash	26¢	3¢	22¢	10¢	-	4 Doyle -	4
Hard Maple	29¢	3¢	12¢	13¢	-	23 Doyle -	6
Hickory	29¢	10¢	14¢	10¢	9¢	24 Doyle -	8
Mixed Hardwoods	21¢	5¢	10¢	16¢	15¢	449 Doyle -	18
Oak (mixed species)	31¢	9¢	27¢	19¢	14¢	700 Doyle -	6
Post Oak	22¢	9¢	12¢	14¢	11¢	16 Doyle -	6
Red oak (group)	56¢	5¢	16¢	11¢	10¢	987 Doyle -	24
Soft Maple	20¢	12¢	19¢	19¢	16¢	111 Doyle -	3
Walnut, Black	\$2.00	45¢	\$1.54	\$1.37	78¢	196 Doyle -	20
White oak (group)	36¢	10¢	21¢	21¢	19¢	854 Doyle -	21
Stave Logs							
White oak (group)	\$1.44	40¢	52¢	34¢	28¢	217 Doyle -	12

International (South) Stumpage Prices

	High	Low	Avg.	Last Qtr.	Last Yr.	Vol.	# of Rpts.
Sawlogs							
Hickory	26¢	1¢	17¢	17¢	16¢	280 Int. - MBF	27
Mixed Hardwoods	24¢	8¢	19¢	20¢	22¢	3,211 Int. - MBF	13
Oak (mixed species)	48¢	8¢	17¢	16¢	17¢	2,486 Int. - MBF	21
Post Oak	25¢	4¢	13¢	12¢	8¢	140 Int. - MBF	14
Red oak (group)	37¢	16¢	26¢	25¢	20¢	6,127 Int. - MBF	26
Shortleaf Pine	25¢	5¢	8¢	13¢	16¢	964 Int. - MBF	15
White oak (group)	37¢	12¢	23¢	23¢	19¢	898 Int. - MBF	26

Published timber prices are based on a rolling average of reports received over the last four issues - that is, one year. Refer to the column headed “# of Rpts.” to get a gauge of how accurate the average prices may be. (“# of Rpts.” refers to the number of sales including a particular species and may sum to more than the number of sales.) Changes since last quarter and last year should be read with caution as the number of reports varies each year and quarter. This report can only be used as a general guide for determining market value of timber. General market and economic conditions, as well as local considerations such as accessibility, terrain, sale size, and tree size and quality also affect the price paid.

Please see the map on page 15 for a definition of reporting regions.

All prices and volumes are reported in either International ¼” MBF Scale or Doyle MBF, depending on the region of the state.

To convert volume from Int.-MBF to Doyle MBF, divide by 1.2. To convert prices from Int.-MBF to Doyle MBF, multiply by 1.2.

To convert from MBF to BF (prices or volume), divide by 1,000.

Foresters reported stumpage prices resulting from 100 timber sales containing 18,662 MBF located throughout the state. There were 75 reports from private lands and 25 reports from MDC lands. There were 65 reports from MDC foresters and 35 reports from Consultant foresters. We would particularly like to thank these Consulting Foresters: Fleming, Lohmann, Meyers, Kinerk, Cunningham, Dwyer, Lumb, Schmollinger, Suchland, Yarnell, Deschu, Enyart, Hefner and Stanton.

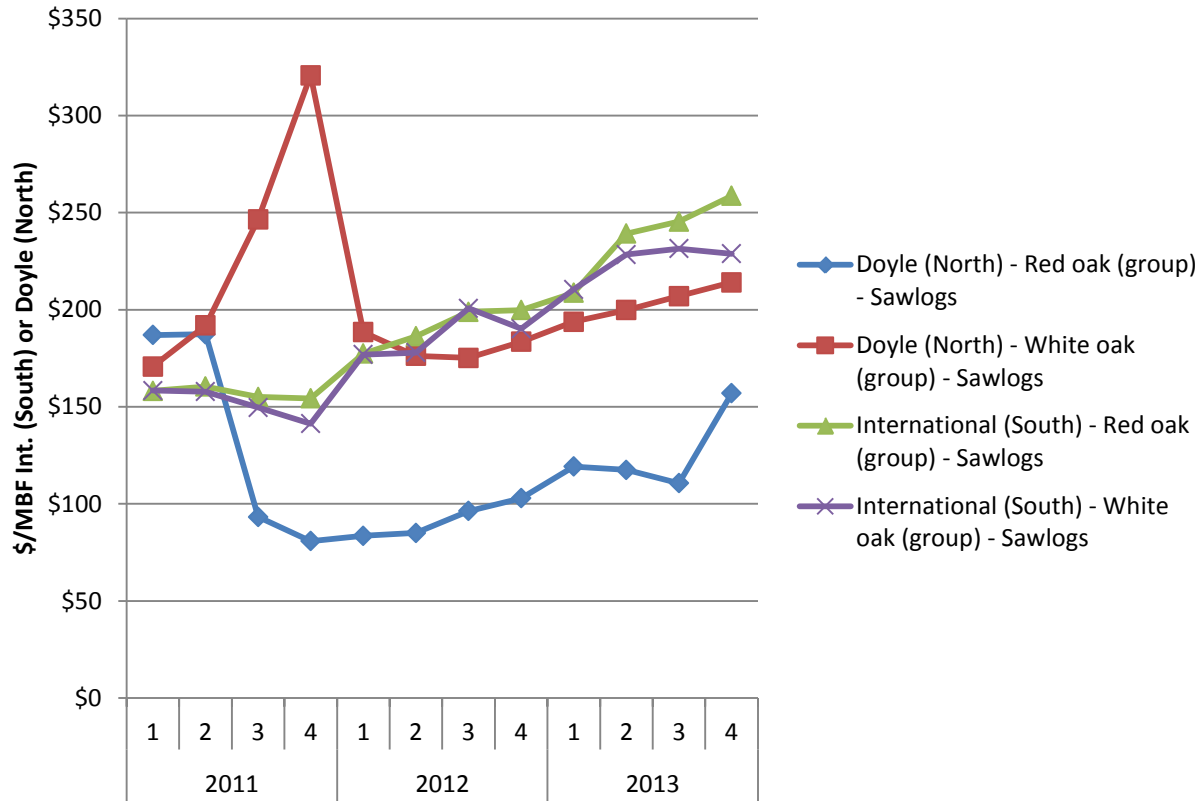
Editor’s Note

We would like to thank the members of MOFRAC who helped with this change in direction, as well as the Missouri Consulting Foresters Association and the Missouri Department of Conservation, both of whom have taken “steps” to encourage more reporting from their members and employees.

Remember that one of the most valuable sources for information on log and timber markets is the local Missouri Department of Conservation Resource Forester or your Consulting Forester. Contact the nearest Forest District office for up-to-date, local advice. The Missouri Department of Conservation's Forestry Division, (573) 751-4115, will be happy to provide you with the name and address of the Resource Forester or MDC Regional Office nearest to you. You can locate a Consulting Forester by visiting the Mo. Consulting Forester's Association web site at: www.missouriforesters.com or by visiting the Private Land Assistance page of the MDC website <http://mdc.mo.gov/landown/> and clicking on the “Conservation Assistance Contractors” link.

Tom Treiman and Jason Jensen, Editors

Timber Price Trends



The United States Forest Service (USFS) reports the following from sales on the Mark Twain National forest:

Product	Species	Price per MBF
Washington County		
Sawtimber	Oak	254.82
Sawtimber	Oak	275.08
Sawtimber	Pine	42.67
Miscellaneous	Pine	25.89
Miscellaneous	Oak	39.08
Miscellaneous	Oak	57.46
Shannon County		
Sawtimber	Pine	41.77
Posts	Pine	36.90
Shannon County		
Sawtimber	Oak	306.60
Sawtimber	Oak	307.97
Sawtimber	Oak	328.18
Miscellaneous	Oak	182.72
Miscellaneous	Oak	151.03

The Word on the Street

By Jason Jensen

Across the state demand for Missouri wood products finished out the year very strong. Markets appear to have at least recovered if not surpassed markets prior to the economic downturn. This is good news for landowners who may have been waiting for markets to improve. Demand for nearly all products is good. Consumers are finally starting to realize that hickory cabinets and flooring have a lot of character and are very beautiful. As a result there is an increasing demand for good hickory. Red oak markets in the northern part of the state have finally picked back up. This has been a long time coming for foresters and landowners wanting to sell red oak in the north. While pine markets aren't strong, there is a variety of pine products being sold including posts, poles, shavings logs, cants, and even an increasing number of pallets being built from pine. This is good news for landowners with pine. Pine markets have been sporadic at best for the last 15 years or more. A sustainable pine market is critical to maintaining the health and productivity of much of our southern Missouri forests. Stave quality white oak and nearly any quality of walnut continue to be in high demand. In the southern part of the state, markets for nearly all products are good. Every product is in high demand. Grade markets have improved to the point where there may even be a few railroad ties being sawn down into lumber. Flooring and pallet markets continue to be strong as well.

One of the biggest problems affecting nearly every mill in the state, is the lack of log inventory. In 2008 when the economy crashed, many loggers either retired or found another occupation. Now that the economy

has picked back up, the logging infrastructure is no longer adequate to respond and increase production. There is an increasing interest in mechanized equipment to compensate for the lack of available loggers. Many mills went into fall and winter with low log inventories. That is not a good situation especially if December is any indication of how the rest of the winter will be. Competition is intense for standing timber in the southern part of the state. Competition is responsible for driving up stumpage prices in many areas. It is not uncommon to have eight or more bidders for timber sales in some southern counties. This can be a double edged sword. It is good if you are a landowner selling standing timber because increased competition equals increased prices. It can also be bad since increased pressure is placed on the forest resource.

I am often asked why we don't report certain products. My goal is to make this report the best and most inclusive of all species and products that I can. The reason that we don't include products such as cedar, posts, utility poles, scragg blocks, pulpwood and sometimes even staves is because of the lack of reports that we receive for those products. This report is published based on stumpage prices that are received from foresters. If we don't receive reports, then we can't report that particular product. As always, readers should realize that this report only provides a snapshot of the markets. It is not meant to be indicative of what you should (or shouldn't) receive for your timber at any particular time. Ultimately what the landowner is willing to accept and what the buyer is willing to pay is what your timber is worth at any particular time.

Did you know that Missouri has 15.4 million acres of forestland?



Marketing Strategies for Long Term Timber Investments- a *Missouri Wood Brand*

By Terry Truttman

Forest owners and industry look at timber price trends just as Wall Street investors look at the stock markets. Markets for forest products are now based on more than just price, at least on the international playing field.

The Missouri Department of Conservation (MDC), Forestry Division has established goals to work closely with the forest industry, loggers and landowners. These goals highlight the social, economic and environmental advantages of forest management. The goals recognize that without a strong forest products industry, proper management and retention of our forest resources lose both their value and interest to Missouri landowners.

With a focus on these goals, a marketing strategy and *Missouri Wood* brand development initiative has been started by MDC. If Missouri is going to stay competitive with other states and countries for domestic and global forest products, long term buying trends and market concerns need to be addressed. Global markets are asking more than what is the price per board foot. The quality of our wood products has long been established. New concerns being dictated by markets include is the timber legally harvested, does management insure the long term product sustainability, and is the

forest resource being properly cared for.

The entire chain from Missouri's citizens and consumers through the saw mill, logger, forester and landowners, demonstrate that the care and guardianship of Missouri's forest resources is important to them and now a part of the cost of forest products. The *Missouri Wood* brand will include a marketing strategy to look at long term trends and answer consumer questions that are now part of forest products. This brand will look for ways to expand market opportunities and highlight Missouri forest products.

Growing quality, responsible and reliable forest products in Missouri will maintain strong markets. Strong markets will result in forest resources that are valued and managed while providing social, economic and environmental assets to all Missourians for future generations. Missouri's forest resource helped build the state. Today our forestry resource continues to provide many benefits including quality wood products. The *Missouri Wood* brand will help to insure that our forest resources are maintained and improved over time. Missouri's forests endured the necessities of yesterday, can meet the demands of today and grow the needs of tomorrow.

**Forest Product Industry
Buzz is Growing Around
the Need to Get its Message
to the Public**
By DAVE PARCELL -
[FOREST BUSINESS](#)
[NETWORK](#)

One of the emerging themes from the 2013 Small Log Conference earlier this year was the growing recognition that the forest products industry is suffering from a poor reputation and

public perception, and the negative impact it's having on the industry's ability to do business. Things are not getting better on their own. In fact, by following media from across the country, we are witnessing that many facets of our industry are continuing to lose serious ground in the press and in public favor.

One of the fundamental elements of marketing success is the understanding that the public, or consumers, have the ability to provide or deny social permission to conduct business, with potentially severe impact on a company, or even an entire industry. That is why highly successful businesses and industries focus so much energy in nurturing and protecting their reputation.

In the case of the forest products industry, the general public has been influenced over time to believe that cutting down a tree, any tree, is a bad thing and is harmful to the environment. This erroneous belief is fueled by effective communications strategies from small groups of well-funded anti-timber organizations and, perhaps unwittingly, supported by misplaced efforts by many national corporations who want to be seen as "green." Lack of public support, sometimes nearing on outright hostility, has led to gridlock in efforts to actively manage our nation's forest resources.

Our professional public land managers are consistently blocked in their efforts to release public timber sales, stewardship contracts, and even salvage harvests. Forest management professionals and scientists recognize that we are currently harvesting at a much slower rate than the forest are growing leading to overgrown, crowded, and unhealthy forests. The industry's inability to remove excess fiber from our public land forests is a major contributing factor to the severely declining health of these resources. Factor in climate change,

disease, pests, wildfire, and other factors, and our forest resources, along with the people, families, communities, and wildlife that depend upon them are increasingly at risk.

Fundamental change in the way our forest resources are managed is needed. Unfortunately there is very little political will in Washington to implement change.

Why? Because the general public, or voters, believe cutting down trees is bad for the environment.

Changing public understanding of active forest management and perception of the forest products industry is required to effectively address the problem. And while there have been numerous efforts to do this over the years, no one has experienced very much success in the past.

The good news? The need for a comprehensive forest health communications strategy is gaining traction among a wide variety of forest health stakeholders. We hear more and more about various industry groups making communications a high priority agenda item at industry gatherings around the country. In addition, various non-forest product stakeholders are also beginning to support the need to educate the general public on the issues of forest health including mainstream environmental and conservation groups, forest scientists and educators, federal and state forest managers, sportsmen's organizations, and even some progressive politicians who have forest community constituents.

One model of an effective program for managing an industry's reputation when faced with public image challenges was presented during the 2013 Small Log Conference earlier this year. Representatives from

Ketchum Public Relations and The U.S. Farmers and Ranchers Alliance shared their experiences developing and executing a specific communications strategy which is delivering great results for the agriculture industry. FBN believes there are many similarities to the challenges faced by the forest products industry and much that can be learned by studying these efforts more closely.

If you couldn't make it to the conference or would like to see the presentation again, please check out [Ketchum's PowerPoint presentation](#). By the way, it just so happened that the Conference keynote presentation by Evan Smith of The Conservation Fund also reinforced the need for the industry to come together and support a strong, comprehensive communications strategy to better manage our reputation. A representative from an advertising agency outside of the forest products industry was in attendance and was so impressed by Evan's presentation that he posted his thoughts on [his company's blog](#). His comments tell me that our industry's message can resonate well with the public, but we need to be strategic and coordinated in our efforts if we're to succeed on any meaningful level.

The process for turning this situation around won't be easy, it won't be cheap, and it won't be fast. But it also won't happen until we get started. Every day that goes by, the health of our forests suffer along with the opportunities for those who choose to make a living associated with the forest products industry. The current course is not sustainable. Now is the time to begin the process of changing it.

Did you know that in 2012 the primary wood using mills in Missouri processed approximately 670,000 MBF of industrial roundwood?

Join the Forest Certification Movement to Meet Your Sustainability Goals

By Kathy Abusow

Most people treasure healthy forests and want to ensure that they are around for future generations. One of the best ways to do that is to promote responsible management of working forests through a powerful tool called forest certification: providing landowners with a rigorous, science-based standard of responsible forest management and verifying compliance through independent, third-party audits.

Since the mid-90s, the idea of forest certification has grown from a curiosity to the mainstream of North American conservation. Its value can be seen in hundreds of millions of acres of sustainably managed forests that support local communities while protecting wildlife habitat, clean water and soil, and other elements essential to our environment.

In North America, the key certification programs are the [Sustainable Forestry Initiative® \(SFI\)](#), the [Forest Stewardship Council \(FSC\)](#) and [American Tree Farm System \(ATFS\)](#). Overseas, forestlands are certified to the [Program for the Endorsement of Forest Certification](#) and various FSC standards for specific countries and regions.

But despite all this good work, today only 10 percent of the world's forests are certified, which represents about a quarter of global round wood production. It's vitally important for all of us to increase the percentage of timberland that is certified to a credible standard, while also

promoting responsible forestry on uncertified lands.

Here's how business leaders can support this movement.

Getting More Forests Certified

Major purchasers of forest products can support sustainable forestry by joining forces to promote responsible practices across the supply chain. For example, in 2012 we launched the [SFI Forest Partners Program](#) with founding partners Time Inc., National Geographic Society, Macmillan Publishers and Pearson – four leaders in publishing that committed to promoting sustainability by encouraging more landowners, manufacturers, distributors, customers, conservation groups and government agencies across the supply-chain to become certified. The program's goal is to certify 10 million acres of forests to the SFI standard by 2017, starting in the U.S. South.

To give an example of how this program can work, look to South Carolina, where the Forestry Commission was interested in having five state forests certified but struggled in a tight budget environment for funding to demonstrate compliance and complete an independent third-party audit of sustainable practices. The Forest Partners stepped up to help, and last month, South Carolina was able to announce that 103,000 acres of land owned by the Forestry Commission and Clemson University were certified to the SFI and American Tree Farm System standards.

Promoting Responsible Forestry on Uncertified Forests

No matter how hard we all try, some forest land will remain uncertified. One reason is that 60 percent of private forest lands are owned by

family forest owners; many harvest timber from their land, but it's not their primary activity. But it's essential to encourage them to keep their land forested and to practice responsible forestry.

Businesses that purchase wood, paper and packaging can play a role by seeking out certification standards that include fiber-sourcing requirements, which guide the procurement of raw material from uncertified lands. At SFI, for example, we require program participants who own or manage forest lands and those who buy raw materials to show that the fiber in their supply-chain comes from legal and responsible sources, utilizing loggers who are trained in best management practices for water quality; and that they conduct landowner outreach to promote prompt reforestation and measures to address invasive species and other basics associated with responsible forestry.

The future of our forests depends on the actions we take today. Everyone has a role to play in promoting responsible forestry. If you're truly interested responsible procurement and meeting corporate sustainability goals, choose certified wood, paper, and packaging materials. And for a more proactive role in growing our certified supply, join Time Inc., National Geographic, Macmillan Publishers and Pearson in SFI's Forest Partners Program. [Contact me](#) to learn how you can make a difference now.

**Weyerhaeuser Company :
Weyerhaeuser Joins
International Voices in
Support of Forest
Certification**

**Actions Align with
Weyerhaeuser's**

Commitment to High Standards of Forest Management

Nov 5, 2013

FEDERAL WAY, Wash., Nov. 5, 2013/[PRNewswire/](#) -- [Weyerhaeuser Company](#) this week joined 25 of the world's leading forest products companies in announcing the need to significantly scale up sustainable forest management.

Weyerhaeuser and the 25 other members of the World Business Council for Sustainable Development (WBCSD) Forest Solutions Group are responsible for nearly 40 percent of annual global forest product, paper and packaging sales. These companies are committed to transforming forest-related challenges into forest-based opportunities and solutions.

The companies endorsed the announcement following an international discussion including three forest certification systems - the Forest Stewardship Council, the Sustainable Forest Initiative® and Programme for the Endorsement of Forest Certification - at WBCSD's Council Meeting in Istanbul, Nov. 4. The [Leadership Statement on the Value and Future of Forest Certification](#) recognizes that reducing forest loss is a global societal priority requiring immediate and concerted action.

Earlier this year, Weyerhaeuser attained international stakeholder membership in the Programme for the Endorsement of Forest Certification, the world's largest forest certification system and the certification system of choice for small, non-industrial private forests. PEFC, which is made up of large forest owners and hundreds of thousands of family forest owners around the world, has endorsed two North American

certifications standards, including the Sustainable Forestry Initiative. In the United States, PEFC also endorses the American Tree Farm System, which means landowners certified to SFI and Tree Farm also comply with the PEFC's internationally-recognized sustainability benchmark.

"Our collective statement today and our stakeholder membership in PEFC aligns with our commitment to responsible fiber sourcing, especially from family-owned forests," said Weyerhaeuser Vice President for Sustainable Forestry Cassie Phillips.

PEFC promotes good practice in the forest and across the supply chain to ensure that forest products are sourced with respect for the highest ecological, social and ethical standards. Today, PEFC has recognized certification systems in 30 countries. Together these account for more than 593 million acres of certified forests. The PEFC and SFI labels help customers and consumers identify products from responsibly managed forests.

Weyerhaeuser owns, leases or licenses 20.5 million acres of forests in North America certified to SFI, and more than 300,000 acres in Uruguay certified to FSC and PEFC. [Learn more about certification at Weyerhaeuser.](#)

Phillips continued, "Having wood come from sustainably-managed forests is important to our customers and consumers. This commitment is shared by the more than 13,000 Weyerhaeuser employees who work and serve our customers worldwide."

If you would like more information on Weyerhaeuser's statement in support of sustainable forest management and membership in PEFC, please contact Lee Kellerat 206-799-3805 or lee@thekellergroup.com.

Global Sawlog Prices Trending Upward With the GSPI Price Index Reaching the Highest Level Since 2011

The Global Sawlog Price Index (GSPI) increased for the fourth consecutive quarter in the 2Q/13 to reach US\$86.60/m³. The Index, which is based on sawlog prices in 20 regions around the world, has gone up 5.1 percent year-over-year and was at its highest level since the last quarter of 2011, according to the Wood Resource Quarterly (www.woodprices.com).

The largest log price increases the past year have been in regions that are exporting logs or lumber to China, including the Western US, Western Canada and New Zealand. Prices for Douglas-fir and hemlock sawlogs in the Western US have gone up 21 percent and 15 percent, respectively, from the 2Q/12 to the 2Q/13, while prices in Western Canada and New Zealand were up 13 percent and 6 percent, respectively, over the same period.

Exportation of logs and lumber from North America to Asia reached a new high in the 2Q/13 when over 700 million dollars worth of products were shipped over the Pacific Ocean. The high production rates at the sawmills in Western Canada and Western US plus the large volumes of logs that were leaving the West coast for China, Japan and South Korea have caused an upward price pressure on sawlogs in the region for the past few years, with prices almost doubling since 2009, as reported in the WRQ.

During the first seven months of 2013, US west coast log export volumes to Asia were up 29 percent compared to the same period in 2012. Shipments to China have continued to increase with log

volumes being 47 percent higher than the same period last year. Exports to Japan were also higher but only by about ten percent. If this pace continues, 2013 will be the best year on record for log exporters on the US west coast since the mid-1990's.

With New Zealand becoming the world's largest log exporter, prices for sawlogs in the country have gone up dramatically the past five years and in the 2Q/13 were almost double those in 2009. New Zealand has surpassed Russia in 2013 to become the largest softwood log supplier to China.

Outside of North America and Oceania, sawlog prices were generally lower in the 2Q/13 because of weaker lumber markets. The biggest declines from 1Q/13 occurred in Northern and Eastern Europe.

We can take a plant species out of the forest and it is still a forest. We can take an animal species out of the forest and it is still a forest. We can take humans out of the forest and it is still a forest. Forests are only lost when they are no longer managed as forests and tree health is no longer the priority.

Al Murray is the Forest Manager for Forest County Potawatomi Community.

Emerald Ash Borer

The emerald ash borer (EAB), *Agrilus planipennis*, is a non-native forest pest that is causing widespread mortality of ash trees in eastern and central North America. By the end of 2013, it had been detected in 22 US states stretching from Colorado to the East Coast and in Ontario and Quebec, Canada.

The first EAB population detected in Missouri was discovered in 2008 in Wayne County in the southeastern

part of the state. Detection surveys have been conducted annually in Missouri since 2004, by visually examining trees at high-risk sites such as campgrounds (2004-2007), and later with EAB sticky traps after they became available in 2008.

In 2012, additional infested areas were detected in southeast Missouri (Madison and Reynolds Counties) and on the other side of the state near Kansas City (Platte County). In 2013, a total of 922 traps were monitored throughout the state by the Missouri Dept. of Agriculture (MDA) and the U.S. Dept. of Agriculture (USDA APHIS PPQ). EAB was detected in five more counties: Butler, Bollinger and Perry in the southeast, Pulaski in south central Missouri, and Jackson in the Kansas City area (see map on page 2).

In response to the detected EAB distribution scattered from western to southeastern Missouri, the Missouri Dept. of Agriculture expanded the state EAB quarantine in September 2013 to include all Missouri counties.

USDA APHIS PPQ followed suit with a similar statewide federal EAB quarantine in November 2013. Both agencies have been working with forest product industries and other stakeholders since that time to educate about the impacts of the quarantine and the potential use of compliance agreements to move regulated items with specified protocols.

Outreach efforts by the Missouri Dept. of Conservation (MDC) and partners in the Missouri EAB Program continue around the state. Displays, presentations, news releases and other outreach activities occur at many workshops, fairs and other venues throughout the year.

MDC's Forestry Division staff works with communities and green industry groups to educate about EAB management strategies and the need

for each community to start planning and implementing their response to the EAB threat. Missourians are encouraged to be alert for evidence of infestations and visit this web site to learn more and report suspect infestations: <http://eab.missouri.edu>

Biological control is one tool that may eventually be useful in managing EAB populations. Three species of non-stinging parasitic wasps (*Oobius agrili*, *Testrastichus planipennis*, and *Spathius agrili*) that are natural enemies of EAB in

Asia were approved in 2007 for release in North America. Prior to release they were tested for host (EAB) specificity and potential non-target impacts. As of 2013, these parasitoids have been released in 16 of the 22 infested states. The EAB biological control program in Missouri is managed by the Missouri Dept. of Agriculture. All three species of parasitoids were released in 2012 and 2013 at the site of the first detected EAB population in Wayne County. Establishment of parasitoids at that site will be evaluated starting in 2014. Known EAB populations in other Missouri locations will be monitored with sticky traps to determine additional locations where parasitoid releases could be considered. Further details about EAB biological control are available at:

<http://www.emeraldashborer.info/biocontrol.cfm>

Thousand Cankers Disease of Black Walnut

Black walnut is ecologically and economically important to Missouri, and thousand cankers disease (TCD) represents a serious threat to this resource. TCD occurs when the walnut twig beetle (WTB), *Pityophthorus juglandis*, attacks walnut trees, spreading the *Geosmithia morbida* fungus that causes small cankers in the phloem

tissue under the tree bark, eventually causing tree decline and mortality. TCD has not been detected in Missouri; however there is concern that undetected TCD infestations could be present, or that spread may occur from western states or North Carolina, Ohio, Pennsylvania, Tennessee and Virginia where it has been detected. Potential long-distance spread of TCD through movement of infected walnut materials enhances this threat. Existing survey technology is not very sensitive, and TCD is unlikely to be detected until several years after introduction. Detection of well-established infestations makes eradication efforts difficult. It is important to conduct detection surveys for TCD, as well as inform citizens about the disease and the risk of wood movement from areas with known infestations.

In 2013, both the Missouri Department of Conservation (MDC) and the Missouri Department of Agriculture (MDA) conducted surveys for TCD using USDA Forest Service and federal Farm Bill funding respectively (see map). MDC placed 50 WTB pheromone-baited Lindgren funnel traps at high-risk locations with declining walnut trees (urban areas, campgrounds, sawmills) in central and southeast Missouri. MDA placed 143 WTB traps in the St Louis, Kansas City and southwest Missouri metro areas. Visual surveys were conducted by both agencies in high-risk areas to identify potentially infested trees. Branches were examined from suspect trees. When suspicious symptoms were observed under the bark, sample branch sections were triple-bagged, placed in a cooler with ice and transported to diagnostic facilities for evaluation and culturing as needed. Since 2010, 850 locations have been surveyed visually and 255 WTB traps deployed (see map on page 4). No evidence of WTB or TCD has been detected in Missouri. Common walnut problems detected during surveys included

drought stress, site-related issues, and infestation by several other wood-boring insects (primarily round-headed and flatheaded borer larvae).

Outreach efforts were continued to raise public awareness about TCD. Messages included the potential impact of TCD, the threat posed by movement of infected walnut materials, and identification of suspect trees. Several state agencies and institutions including MDC and MDA as well as stakeholder groups were involved in outreach. Efforts in 2013 included TV and radio interviews, presentations, trainings, and displays at a variety of public and green industry meetings. An updated TCD FAQ for Missouri, TCD identification card, and brochure for homeowners are available from MDC to raise awareness. MDC also maintains a website for more information on TCD, www.mdc.mo.gov/thousand-cankers. Missourians are encouraged to report suspect trees via the online reporting form which can be found linked to the TCD website or here on the University of Missouri Extension website. Photos of suspect trees can also be emailed to forest.health@mdc.mo.gov as a first step in determining what trees should be visited by trained personnel.

An action plan has been drafted to organize the Missouri response to the threat of TCD. The plan describes several efforts to slow the spread of TCD and prepare for a potential detection including continued outreach activities and monitoring of trees at high risk sites. It also describes a response to detection of an infestation and includes a list of key stakeholders to keep informed. This action plan will supplement the Missouri Invasive Forest Pest Plan currently under development.

Did you know that Missouri leads the nation in charcoal production?

White Oak Decline

White oak is important in Missouri due to its longevity, mast production for wildlife and saw timber value (2 billion dollars). Increased decline and mortality is a concern for this resource. Beginning in August 2011 and continuing through fall 2013, the MDC Forest Health staff received many reports of rapid white oak decline and mortality, often occurring within one growing sea-son. In 2013 a majority of reports came from east central and southeast Missouri. This syndrome is different from other oak decline patterns reported in Missouri, which typically include red oak species on ridge tops and upper slopes of SW facing aspects and is often attributed to the combined effects of advanced tree age, high stem density, and drought. In many recent white oak reports, pockets of white oak decline in mixed oak stands have been located on lower slopes. Other oak species are rarely affected. Biscogniauxia (Hypoxylon) canker, twolined chestnut borer and other native borers are frequently observed. Some trees have evidence of Armillaria root rot. Depending on the location, white oak has been subjected to many stressors in recent years including multiple extreme weather events and severe jumping oak gall infestation in 2010. Funding has been secured through a USDA Forest Service Evaluation Monitoring grant for a white oak decline research project at the University of Missouri with cooperation and additional funding from MDC. Further investigations will look in greater detail at associated insect and fungal pathogens as well as site characteristics.

Did you know that the forest products industry contributes \$8.0 billion to Missouri's economy and supports over 42,500 jobs?

Master Logger Certification

The logger plays a critical role in the harvesting of your timber sale. The Master Logger Certification (MLC) program can make your choice of selecting a logger easier. The MLC program can help provide piece of mind for the landowner. Master Loggers are professional, properly trained, and meet the highest standards placed on the industry today. The MLC program is a performance based program that recognizes both training and experience. To find a Master Logger in your area visit the following website:

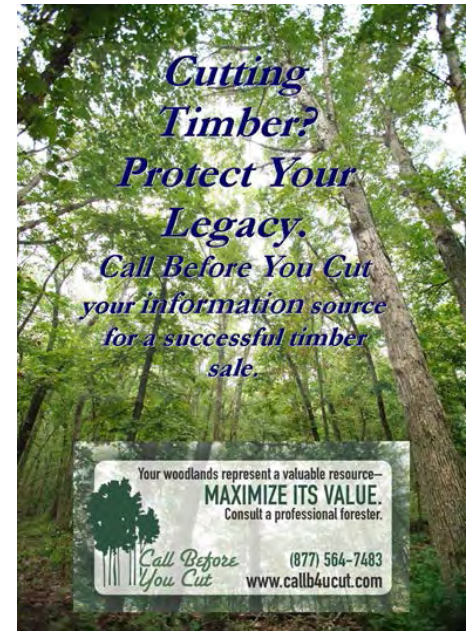
<http://www.moforest.org/MLC/mml directory.html>

Professional Timber Harvester

The Professional Timber Harvester (PTH) program provides four levels of chainsaw safety training and provides instruction on use and implementation of "best management practices" and forest management. PTH trained loggers possess the knowledge to harvest your timber while insuring that your residual trees, soil, and property are properly cared for. To locate a PTH trained logger in your area visit the following website: <http://www.moforest.org/loggersindex.php>

Did you know that Missouri has more black walnut trees than any other state?

Did you know that more wood is harvested in Shannon County than any other county in the state?



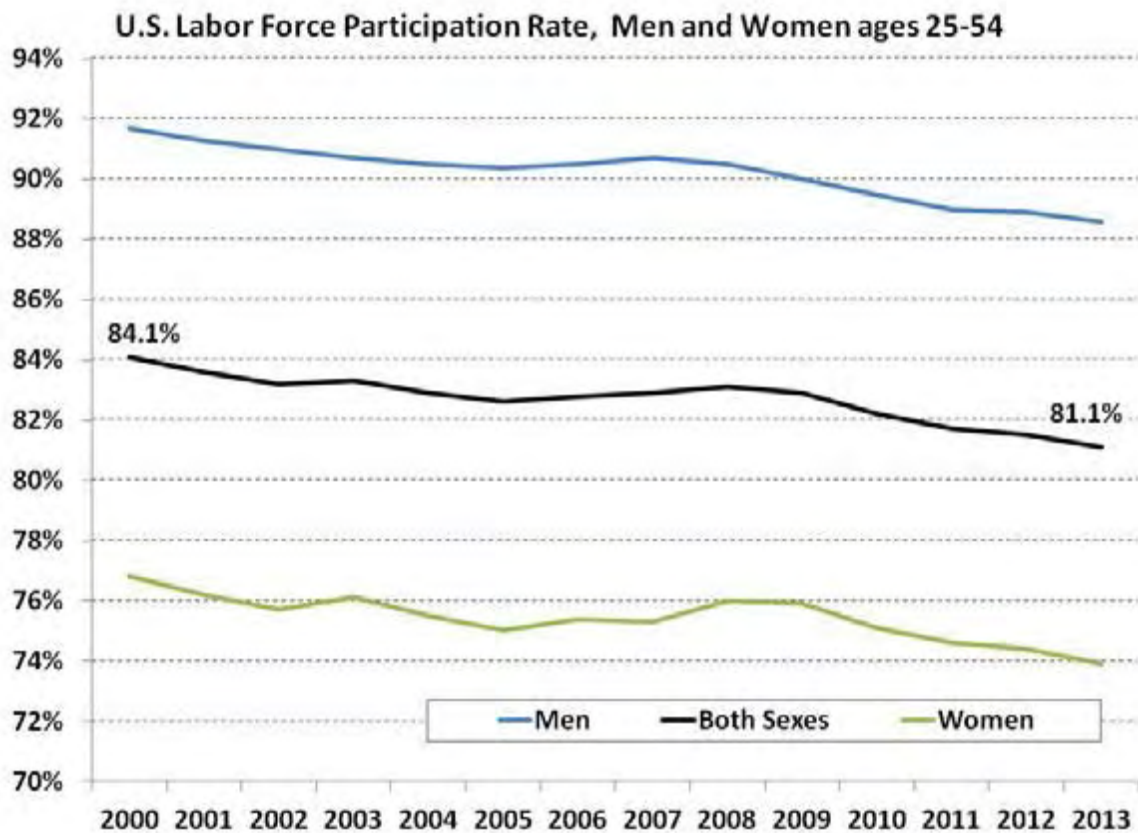
Missouri Timber Price Trends tracks market prices for Stumpage. Reports on the Stumpage Market are received from Missouri Department of Conservation Resource Foresters and private consulting foresters. Stumpage refers to timber sold on the stump and does not reflect delivered mill prices. These reports should serve as a general guide to track stumpage prices. Landowners should not use this report to replace a timber inventory and marketing assistance as methods of conducting a sale. Missouri Department of Conservation Resource Foresters will be able to provide information on current, local market conditions. Details of all private sales and delivered prices are kept confidential.

Did you know that 92% of the residue produced from processing logs is also marketed as a product?

Wood Statistics Monthly

Category & Sub-Category	Latest Month	Month Ago	M/M Change	Year Ago	Y/Y Change
Value of Shipments (US\$ Millions NSA)					
Mfg - Lumber & Wood Products	Oct(p) \$7,910	\$7,677	3.0%	\$7,001	13.0%
Mfg - Pulp, Paper, & Paperboard Mills	Oct(p) \$6,833	\$6,848	-0.2%	\$7,049	-3.1%
Mfg - All NAICS	Oct(p) \$505,321	\$499,417	1.2%	\$497,120	1.6%
Exports F.A.S. Basis (US\$ Millions NSA)					
Logs, Chips, & Misc	Oct \$280.0	\$221.6	26.4%	\$224.6	24.7%
Lumber & Wood Products	Oct \$657.6	\$557.0	18.1%	\$547.0	20.2%
Paper Products	Oct \$2,290.6	\$2,156.8	6.2%	\$2,096.1	9.3%
Capacity Utilization (% SA)					
Mfg - Wood Products	Nov(p) 73.4%	71.1%	3.2%	66.9%	9.7%
Mfg - Paper Products	Nov(p) 82.1%	81.9%	0.2%	81.1%	1.2%
Mfg - All NAICS	Nov(p) 77.5%	77.1%	0.5%	76.5%	1.3%
Housing Market (000s Units NSA)					
Private Housing Starts	Nov(p) 82.8	77.3	7.1%	62.2	33.1%
Private Building Permits	Nov(p) 70.9	90.3	-21.5%	68.7	3.2%
New Residential Sales	Nov(p) 33.0	38.0	-13.2%	28.0	17.9%
New Home Inventory for Sale	Nov(p) 169.0	183.0	-7.7%	150.0	12.7%
Payroll Employment (000s NSA)					
Total Nonfarm Payroll	Nov(p) 137,942	137,521	0.3%	135,636	1.7%
Manufacturing	Nov(p) 12,022	12,025	0.0%	11,939	0.7%
State & Local Govt.	Nov(p) 19,626	19,497	0.7%	19,564	0.3%
Forest Industry Jobs (000s NSA)					
Logging	Nov(p) 55.8	54.2	3.0%	51.7	7.9%
Lumber & Wood Products	Oct(p) 354.7	352.7	0.6%	340.1	4.3%
Pulp, Paper, & Paperboard Mills	Oct(p) 106.9	107.4	-0.5%	108.8	-1.7%
Converted Paper Products	Oct(p) 266.7	267.0	-0.1%	269	-0.9%
Market Pulp SPOT Prices (US\$/ton)					
Eucalyptus (delivered US East)	Dec(p) \$585	\$585	0.0%	\$572	2.3%
NBHK (delivered US East)	Nov(p) \$562	\$558	0.7%	\$522	7.7%
NBSK (delivered US East)	Dec(p) \$671	\$662	1.4%	\$590	13.7%
Recycled Deinked Pulp (US East)	Dec(p) \$699	\$699	0.0%	\$667	4.8%
Lumber Prices (US\$/Mbf)					
RL Eastern SPF Composite	Dec-6 \$405	\$409	-1.0%	\$399	1.5%
KD West-SPF 2x4, #2&Btr. del Chicago	Dec-6 \$435	\$458	-5.0%	\$433	0.5%
Northern Red Oak Grn 4/4 #2A (fob)	Dec-6 \$685	\$645	6.2%	\$480	42.7%
Pallet Lbr Mixed Grn 4/4 RW (fob)	Dec-6 \$265	\$260	1.9%	\$225	17.8%
Structural Panel Prices (US\$/Msf)					
RL Structural Panel Composite	Dec-6 \$363	\$369	-1.6%	\$436	-16.7%
OSB NC 7/16 Sheathing (fob)	Dec-6 \$230	\$255	-9.8%	\$345	-33.3%
OSB SE 7/16 Sheathing (fob)	Dec-6 \$180	\$191	-5.8%	\$315	-42.9%

(p) = preliminary



Data source: Bureau of Labor Statistics Graph: MnDNR

U.S. Labor Force Participation in Decline

November 8, 2013 (Washington Post Remix)—Why does labor force participation matter? For one, if people are leaving the labor force for economic reasons (and they're not going back to school), it would mean that the economy is in much worse shape than the official unemployment rate suggests. The official November jobless rate was 7 percent, down from 7.3 percent on October, but that only counts people who are actively seeking work — not labor-force dropouts. The size of the labor force also goes a long way to determining America's growth prospects. If, say, Baby Boomers are retiring faster than expected, then long-run U.S. economic growth will be lower than projected. Even worse, if discouraged workers are dropping out of the labor force entirely, they may never make their way back into jobs. Their skills erode over time. Companies don't even bother to look at their resumes. They essentially become unemployable. That's a massive economic loss. It could also mean the U.S. economy will be significantly weaker in future. One recent paper from the Federal Reserve estimated that America's economic potential is now 7 percent lower than it was before the financial crisis — in part because workers who lost their jobs during the downturn have become less-attached to the labor force.

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