

WISCONSIN WOOD

MARKETING BULLETIN



A Quarterly Newsletter Published by the Wisconsin Department of Natural Resources

Spring 2015

Weekly webinar series heats up Wisconsin

Have you ever had an interest in heating your residence or workplace with wood but aren't quite sure how to get started?

The Wisconsin Statewide Wood Energy Team (SWET) is currently hosting free weekly webinars for those interested in learning the essentials of wood energy. Webinar topics include wood fuels and appliances, feasibility assessment tools, available grants and funding, and past and current wood energy projects in Wisconsin.

The series features eight webinars led by industry experts and researchers in the wood energy sector. The first six webinars of the series are posted online and can be accessed by visiting the SWET website under the "Learning" tab

or by clicking [here](#). The next webinar will be broadcasted on Wednesday, April 1st at 1:00PM. Although these webinars are free to the public, pre-registration is required to sign into any of the live broadcasts. Please follow this [link](#) or visit the SWET website if you would like to register for any of the upcoming webinars.

The job of SWET is to help homeowners, businesses, and institutions explore the use of wood for heat, power, or both. Wood is a renewable, homegrown energy source and is often a competitively priced fuel source. However, before switching to wood it is a good idea to do your homework. SWET can help.

For more information please visit: <http://www.wisconsinwoodenergy.org/>

Common ways to reduce energy consumption in the wood products industry

Scott Lyon, FPS Specialist

US wood products companies are continually improving their products, production lines, and business practices to better compete in the global market; however, there may be additional opportunities available to reduce costs by using efficient energy consumption practices. The Rutgers Center for Advanced Energy Systems developed the Industrial Assessment Center Database that provides a collection of common recommended energy reduction practices for different industries. Table 1 presents the 2014 top ten recommended energy reduction practices for wood products manufacturers with an average payback of less than 3 years. As seen in Table 1, repairs to compressed air leaks are highly recommended to reduce energy costs and benefit (Con't on page 2)

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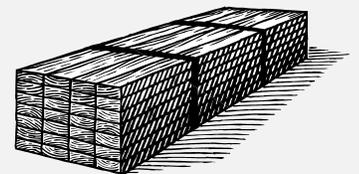


Table 1. Most significant energy reduction practices for wood products manufacturers in 2014¹

Energy reduction practice	Average Savings	Average Costs	Average Payback (Years)
1. Eliminate leaks in inert gas and compressed air lines/valves	\$8,278	\$3,693	0.5
2. Utilize higher efficiency lamps and/or ballasts	\$11,164	\$25,493	2.5
3. Utilize energy efficient belts and other improved mechanisms	\$5,425	\$3,397	0.8
4. Reduce the pressure of compressed air to the minimum required	\$3,983	\$1,927	0.6
5. Install occupancy sensors	\$3,531	\$6,744	1.9
6. Use more efficient light sources	\$7,323	\$18,281	2.4
7. Use most efficient types of electric motors	\$15,224	\$47,732	2.8
8. Upgrade controls on compressors	\$20,005	\$19,080	1.0
9. Insulate bare equipment	\$5,001	\$4,409	2.6
10. Insulate steam/hot water lines	\$5,757	\$4,038	1.8

(Con't from page 1) from a short payback period. Air compressors are commonly used in manufacturing wood products by opening kiln vents, powering tools and machinery, and cleaning the facility after a hard day's work; however, air compressors are often a major contributor toward electricity waste². A noticeable increase in electricity may often result from a leak or an air supply running when not required². Sometimes these leaks are difficult to locate and require time to fix; however, these repairs can provide a substantial amount in energy savings in a short period of time as compared to some more expensive energy reduction practices. In conclusion, establishing a predictive maintenance program including consideration of the practices listed above will not only save you potential down time as a result of an equipment or systems malfunction, but may also reduce energy consumption by supporting well maintained machinery that operates smoothly. Cost savings associated with energy efficiency not only has important benefits for the environment, but also can result in a quick payback to benefit your company. For more information on ways to lower your energy consumption for a specific industry please visit: <http://iac.rutgers.edu/>

Sources: ¹ Rutgers Center for Advanced Energy Systems, ²Energy and Environmental Affairs 2011 ³Wengert, E. M. (1974). "How to reduce energy consumption in kiln-drying lumber". USDA Forest Service. Research Note: FPL-0228.

Industry Headlines

A more robust year for housing may be ahead

Chief economists from Freddie Mac, Nationwide Insurance and National Association of Home Builders predicted more robust year for [housing](#) in 2015.

Lumber prices fall because of overcapacity

The decrease in demand for US lumber from China and Europe, along with a large supply of timber in the market has caused [lumber prices](#) to decrease.

Eau Claire looking for better uses for urban trees

The city of Eau Claire is working with a group of urban wood enthusiasts to use the trees removed in the city to a higher [use](#).

Industry Headlines (con't)

Improvements made in log defect detection

The US Forest Service with the help from the University of Minnesota Duluth is examining if combining several [technologies](#) will better determine the soundness of a log, in addition the location of the defects.

A green fiber bottle for beer?

The Carlsberg Brewery Group is partnering with several other European companies to produce [a beer bottle](#) from sustainably sourced wood fiber or paper pulp.

New Forest Products Lab report on wood and timber

The US Forest Services' Forest Products Lab in Madison recently published an updated version of the [Wood and Timber Condition Assessment Manual](#).

Have you heard of biochar?

Biochar is a 2,000 year old practice that transforms biomass into a nutrient rich soil additive. To learn more about this material please visit the following [link](#).

Wood supply chain component costs analysis: A comparison of Wisconsin and U.S regional costs

As part the Wisconsin Forest Practices Study, [wood fiber costs](#) in Wisconsin were compared with costs in the U.S. Northeast, U.S. South, and Pacific Northwest. Wisconsin's total delivered fiber cost for pulpwood compared to the U.S. Northeast region shows lower aspen and mixed hardwood costs and higher conifer costs. Both northern regions incur higher delivered costs compared to the U.S. South and Pacific Northwest.

Team Updates

Statewide- *Sabina Dhungana*

Hello spring! I have been traveling statewide attending meetings focused on diverse issues related to forest industries in Wisconsin. I have been working to enter and manage the timber products output (TPO) data. I would like to thank you all for helping us out with this survey. I have been responding to a variety of industry requests involving certification, suppliers for various wood products, price inquiries, and urban forest utilization options.

Southeast District-*Scott Lyon*

Here in the Southeast, we are looking forward to spring after the long, cold winter. Recently, I have been working with a few organizations to increase production efficiency and quality of products they manufacture. Some of the inquiries related to quality included proper practices for air and kiln drying. Some helpful information I have passed along to these individuals is the US Forest Service's publication on Air Drying of Lumber, available online at: <http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr117.pdf>. In addition, I have fielded other requests for locating primary producers and utilization options for disease-killed trees. If you are having trouble finding a market or looking to acquire a particular species, please don't hesitate to contact us and we may be able to find you a supplier for your specific needs.

Southwest District-Anna Healy

Hello from south western Wisconsin! I have been busy providing technical assistance to a variety of wood using businesses in my service area. I have been able to facilitate direct assistance from the technical experts at both the Forest Products Laboratory and UW-Extension to primary wood users and dry kiln operations in my district. Two of the more interesting projects involve exploring the opportunities in biochar and thermally modified wood. I have also provided assistance with supply chain problem solving, particularly for niche markets. If you are interested in capitalizing on available technical assistance, discussing opportunities for optimizing your business, or exploring new technologies in the wood products industry, please feel free to contact me. I look forward to working with more wood using businesses in my service area .

Northern District -Collin Buntrock

Across the north, milder weather has kicked spring into high gear, causing frozen road declarations to be lifted statewide on March 9th. As a comparison to last year, snow depth in Park Falls totaled 11 inches on 3/1/2015, which was 14 inches less than at the same location on 3/1/2014. Let's hope for a dry month of April. In other news, I've been helping several companies identify kiln models that suit their operations while also meeting heat treatment standards. Last month, I provided resource data and supplier info to a secondary manufacturer that is interested in establishing business in Wisconsin. In the coming weeks, I will be busy working on a project with local economic development coordinators to align secondary wood-using industries with sawmills in northeast Wisconsin. This project will also investigate markets not currently being captured across the region. As always, thanks for your readership. I wish you a safe and productive spring!

Looking for urban wood utilization options?

Recently, with the increase in the Emerald Ash Borer (EAB) quarantine areas, municipalities have contacted the Forest Products Services team for utilization options for their municipal trees that may become infested. To help communities across the state we are asking for your help in updating the WI DNR's Communities Wood Utilization Options directory: <http://dnr.wi.gov/topic/ForestBusinesses/utilization.html>.

This directory will help your company market your services that you can provide. If you utilize wood material from urban trees please send an email to: Scott.Lyon@wisconsin.gov with the following information:

Company name:

Contact person:

Address:

Phone:

Email:

Website:

Areas served (Counties):

Service description (For example: artisan craft wood working, sawmill and kiln drying services):



Ask Forest Products Services

Question: *What should my targeted moisture content be when drying lumber?*

Answer:

The final moisture content (MC) of lumber is primarily a factor of the equilibrium moisture content (EMC) it will experience when in service. For interior applications, the US Forest Service recommends a dry-basis MC of 6-8% for wood products serviced in Wisconsin and the Midwest. This value is based on well-ventilated buildings without unusual moisture levels and without air conditioning. For the outdoor applications, the final MC largely depends on the outdoor relative humidity and exposure to precipitation and sun. A helpful resource for determining average EMC for a given city/state can be found on page [13-3](#) of the Wood Handbook published by the US Forest Service. In Madison, WI, for example, equilibrium moisture content has averaged between 12.8 and 15.7% depending on the month over a 30 year period. When practical, drying to a recommended moisture content can reduce dimensional changes after installation, minimizing problems such as buckling or splits.

Photos from the Field



Left: FPS Specialist Anna Healy scaling a black walnut saw log at a mill in southwest Wisconsin

Center: FPS Specialist Collin Buntrock demonstrating defect limitations of the Wisconsin Local-Use Dimension Lumber Grading system at a recent short course *(Photo by Scott Lyon)*

Right: (Left to Right) Scott Lyon, Collin Buntrock, and Anna Healy exhibiting at the 2015 Lake States Lumber Association Winter Meeting in Green Bay *(Photo by Sabina Dhungana)*

Crisis is Opportunity-Anna Healy, *FPS Specialist*

On the evening of June 29, 2014, south western Wisconsin experienced severe thunder storms including a tornado that touched down in northern Iowa County. In the area affected by the storm, the damage to the forest was severe. One of the most impacted areas was Governor Dodge State Park just north of Dodgeville where approximately 112 acres of northern hardwoods blew down.

In the tangled mass of broken limbs, damaged tops, and uprooted trees, the DNR Iowa County foresters could see saleable red oak, white oak, basswood and black walnut. They worked with park officials and put together a salvage timber sale. The timber sale accomplished two objectives. It created a market for storm damaged trees and provided the park with the service of clearing some of the most impacted trails and reducing the number of hazard trees in the area most affected by the tornado.

After the foresters established the boundaries of the sale and marked trees to be left standing, the salvage timber sale was put out for bid. Nelson Hardwood Lumber Co. purchased the sale and assigned two logging crews to start working on the salvage harvest in November, 2014. At the time of this writing, they have harvested approximately 400,000 board feet of logs from the storm damage and plan to continue to work in the area until they have salvaged as many logs as is practical.

The logs extracted from the storm damage were hauled to the mill in Prairie du Chien, Wisconsin where they were sawed into grade lumber, cants, rail road ties. The residual material will be used for biomass, mulch, and animal bedding. The cost of extraction was about twice what a typical timber sale would have been, but considering the logs salvaged from this disaster will supply the mill with 10 – 15% of the logs it needs to run this year, it was worth the extra cost.



Harvesting storm damaged trees in Governor Dodge State Park *Photo by Tom Hill*



Red oak logs salvaged from Governor Dodge State Park ready to be processed at Nelson Hardwood Lumber Co. in Prairie du Chien, Wisconsin. *Photo by Anna Healy*



Black walnut lumber made from storm damaged trees harvested in Governor Dodge State Park. *Photo by Anna Healy*

Meeting Reminders:

Great Lakes Kiln Drying Association Spring Meeting

When: April 9th & 10th, 2015

Where: Menominee Casino Resort
N277 Highway 47-55
Keshena, WI

Cost: \$55-member \$75-non-member

Registration: www.glkda.org/Events.html

Great Lakes Timber Professionals Association Spring Celebration

When: April 13th, 2015

Where: Radisson Hotel & Conference Center
2040 Airport Drive
Green Bay, WI

Cost: \$25-member w/ credit \$15-member w/o credit \$40-non-member

Registration: <http://www.gltpa.org/index.html#springcelebration>

Sustainable Forestry Conference

When: April 16th, 2015

Where: Encore on Central
748 Central Avenue
Florence, WI

Cost: \$30/person

Registration: <http://mcabi.com/sustainable-forestry/>

Classifieds:

TIMBER AND FOREST PRODUCTS

WANTED—Bulk quantities of fresh peeled, grade “A” white birch bark sheets.
Contact Matt Garrett, 534 Oak Avenue, Spruce Pine, NC, 28777
(828) 765-9010

WANTED—Veneer logs – hard maple, red maple, black and white ash, white and yellow birch, red oak, white oak, basswood, butternut and walnut.
Contact Ted Fischer, Ike International Corporation, 500 Maple East Street, Stanley, Wisconsin 54768,
Phone (715) 644-5777, Cell (715) 577-7975; FAX (715) 644-5786.
E-mail ted.fischer@ikeinternational.com

EQUIPMENT/SERVICES/EMPLOYMENT

FOR SALE—Lumber Break down line: “Brewer” double arbor gang rip and planer combo; “Taylor” yard fork lift; “Dynaweld” 10 ton construction trailer; “Taylor” – 40 section clamp carrier. Millwork/cabinet shop equipment. Call for a list.
Contact Fred Janik, 6881 Minnick Road, Lockport, New York 14094,
(716) 433-4224, phone after 10 AM.

If you want to list items, fill in the form below and mail to the following address:

Wisconsin Wood Marketing Bulletin
Attn: Phyllis Ziehr
3911 Fish Hatchery Road
Fitchburg, WI 53711

FOR SALE	WANTED TO BUY	SERVICES	EMPLOYMENT
<input type="checkbox"/> Forest Products	<input type="checkbox"/> Forest Products	<input type="checkbox"/> For Sale	<input type="checkbox"/> Available
<input type="checkbox"/> Equipment	<input type="checkbox"/> Equipment	<input type="checkbox"/> Wanted	<input type="checkbox"/> Wanted

Name _____ Date _____
Address _____ County _____
City _____ Zip Code _____ Phone: (_____) _____



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If you wish to use the facilities of the Bulletin, forward a letter, post card or form on page 7 with detailed description of your “wanted” or “for sale” items. All forest products (stumpage, logs, pulpwood, posts, poles, trees and lumber, etc.) and services (custom sawing, custom kiln drying and tree planting, etc.) may be listed. Please be sure your full name, address (including zip code), telephone number accompany your listing, there is no cost for listing any items. If you want items repeated in the next issue, send in a written request. If you have comments about the Bulletin or have suggestions on its content, write to: Collin Buntrock, 107 Sutliff Ave. Rhineland, WI 54501 phone (715) 365-4704

DEADLINE FOR ITEMS TO BE LISTED IS THE 20TH OF: MARCH, JUNE, SEPTEMBER, and DECEMBER.