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The Nebraska Forest Service publishes **Timber Talk** four times annually (March 1, June 1, September 1, and December 1) to serve the forest industry of Nebraska. All questions and correspondence concerning **Timber Talk** should be directed to: Adam Smith, **Timber Talk** Editor, Nebraska Forest Service, University of Nebraska, 203G Forestry Hall, P.O. Box 830815, Lincoln, NE 68583-0815

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Lumber Market Reports

Northern

Activity in the North Country remains in a summer pattern. Logging contractors, sawmill operators, and end users are cautious with whitewood harvesting, sawmill production, and green lumber purchases. But, whitewoods are processed during summer and must be sold, and stacked promptly to avoid degrade from stain damage. There are price pressures for Hard Maple and Soft Maple, resulting in a few listing changes for green stocks. But, production is geared more to Red Oak now. However, supplies are not overrunning demand. In fact, markets are accepting developing supplies. Activity for kiln dried lumber is steady to improving in the international arena. A few sales operations acknowledge demand from domestic customers slipped the past few weeks, which is contrary to earlier this year. Stronger US housing construction and remodeling has benefited cabinet, moulding, millwork, and residential solid wood flooring manufacturers. It is hoped the pause in domestic business is short term.

Southern

A steady upward trend in new home construction has improved demand for hardwood finished goods. Residential solid wood flooring manufacturers have, seemingly, benefited most; a number of producers have extended hours of operations to fulfill customers' needs. Raw material consumption is up for most secondary manufacturers, which is keeping kiln dried inventories low for many species. International shipments are ahead of last year, too. Sales operations are having little difficulty shipping green lumber production: framestock and pallet cants are exceptions.

Appalachian

Markets for grade lumber are holding up well for summertime. Prices for some species are soft, but the large price declines that sometimes characterize business during this time of year are mostly absent. Demand is sluggish for Cherry, Hard Maple, Hickory, and some Poplar items, though most mills and yards are able to move them at or near current published prices. White Oak, Soft Maple, Red Oak, and Walnut are selling at a steady pace. Despite these relatively stable circumstances in grade lumber and timber remain high compared to sales prices for lumber. Furthermore, this problem is compounded by contracting markets and prices for low grade lumber, pallet cants, and residual byproducts from sawmill production.

(Source: Condensed from Hardwood Market Report, August 5, 2016. For more information or to subscribe to Hardwood Market Report, call (901) 767-9216, email: hmr@hmr.com, website: www.hmr.com)

Hardwood Lumber Prices - Green												
Species	FAS				#1C				#2A			
	8/16	5/16	2/16	12/15	8/16	5/16	2/16	12/15	8/16	5/16	2/16	12/15
Ash	925	1055	1120	1120	540	655	680	680	350	425	465	465
Basswood	860	885	885	885	520	555	555	555	300	310	310	310
Cottonwood	780	780	765	765	560	560	545	545	260	260	260	260
Cherry	1055	1100	1100	1140	700	800	735	735	385	435	430	440
Elm	650	650	650	650	420	420	420	420	300	300	300	300
Hackberry	530	530	530	530	480	480	480	480	305	305	305	305
Hickory	820	830	830	830	525	545	545	545	405	425	425	425
Soft Maple	1395	1370	1370	1300	890	890	890	820	510	520	520	520
Red Oak	1120	1195	1145	1030	700	700	655	605	490	490	500	500
White Oak	1505	1435	1435	1360	750	715	700	675	490	490	475	475
Walnut	2515	2515	2455	2425	1270	1270	1270	1270	715	715	730	730

Note: Lumber prices quoted in \$/MBF, average market prices FOB mill, truckload and greater quantities, 4/4, rough, green, random widths and lengths graded in accordance with NHLA rules. Prices for ash, basswood, northern soft grey elm, unselected soft maple, red oak and white oak from Northern Hardwoods list. Prices for cottonwood and hackberry from Southern Hardwoods list. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods list. (Source: *Hardwood Market Report (HMR)*, above prices are from the 1st issue of the indicated month. To subscribe to HMR, call 901-767-9126; email hmr@hmr.com; or go to www.hmr.com.)

Hardwood Lumber Prices - Kiln Dried												
Species	FAS				#1C				#2A			
	8/16	5/16	2/16	12/15	8/16	5/16	2/16	12/15	8/16	5/16	2/16	12/15
Ash	1445	1580	1575	1550	945	1035	1050	1050	665	730	770	770
Basswood	1215	1215	1215	1215	760	770	770	770	510	510	510	510
Cottonwood	980	980	980	980	730	730	730	730	----	----	----	----
Cherry	1770	1770	1770	1770	1140	1150	1150	1150	710	730	765	765
Elm	----	----	----	----	----	----	----	----	----	----	----	----
Hackberry	----	----	----	----	----	----	----	----	----	----	----	----
Hickory	1530	1530	1530	1530	1075	1110	1110	1110	810	855	855	855
Soft Maple	1855	1830	1805	1760	1220	1220	1200	1140	800	800	800	785
Red Oak	1605	1630	1630	1555	1100	1040	1000	945	815	800	780	780
White Oak	2220	2085	2030	1980	1295	1235	1235	1195	910	870	855	855
Walnut	4070	4070	4015	4015	2100	2100	2100	2100	1360	1360	1380	1820

Note: Kiln dried prices in \$/MBF, FOB mill, is an estimate of predominant prices for 4/4 lumber measured after kiln drying. Prices for cottonwood and hackberry from Southern Hardwoods list. Prices for ash, basswood, northern soft grey elm, unselected soft maple, red oak, and white oak from Northern Hardwood list. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods list. (Source: *Hardwood Market Report (HMR)*, above prices are from the 1st issue of the indicated month. To subscribe to HMR, call 901-767-9126; email hmr@hmr.com; or go to www.hmr.com.)

Pallet Lumber - Green				
Dimension	8/16	5/16	2/16	12/15
4/4 x RW	265	275	285	285
5/4 x RW	300	300	300	300
6/4 x RW	325	325	325	325
4/4 x SW	360	370	395	395
5/4 x SW	395	395	410	410
6/4 x SW	410	410	425	425

Ties (7x9) - Green				
Region	8/16	5/16	2/16	12/15
<i>Crossties</i>	----	----	----	----
Northern - 8.5'	25.5-28	25.5-28.5	25.5-28.5	25.5-28.5
Appalachian (South) - 8.5'	25.5-30.5	25.5-31	25.5-31	25.5-31
Appalachian (North) - 8.5'	25.5-29.5	25.5-30.5	25.5-30.5	25.5-30.5
Southern (West) - 9'	27-33.5	27-34	27-34	27-34
Southern (East) - 8.5'	27-32	27-33.5	27-33.5	27-33.5

Note: Pallet lumber prices quoted in \$/MBF, average market prices FOB mill, truckload and greater quantities, rough, green, random widths and lengths graded in accordance with NHLA rules. Tie prices quoted in \$/piece, average market prices FOB mill. Prices for pallet lumber from Northern Hardwood list. Prices for ties from the respective regional lists. (Source: *Hardwood Market Report (HMR)*, above prices are from the 1st issue of the indicated month. To subscribe to HMR, call 901-767-9126; email hmr@hmr.com; or go to www.hmr.com.)

Green Star Gasifier Seeking Wood Fuel

By: Rachel Robinson, Chief Operating Officer
Green Star Gasifiers, LLC

Driving across Nebraska's interstates and highways, it has become a too common sight to witness major tree removal operations with hundreds and sometimes thousands of trees being cut down, stock piled and eventually being burned or left to decay while adding to already existing climate change issues we face.

But what else can be done with necessary tree cuttings, naturally dying and decaying trees or even diseased trees that have been infected by the emerald ash borer in many areas of Nebraska?



Nebraska has now direct solutions that are more environmentally friendly and sustainable while facing its ongoing wood waste challenges.

The solution: Green Star Gasifiers and a new perspective on "green" power generation.

Green Star Gasifiers, LLC is a renewable energy company and US government contractor specializing in power generation through its innovative biomass gasification systems. Originally based in Bowling Green, Kentucky, but now home to South Sioux City, Nebraska, Green Star Gasifier has entered into a Public-Private Partnership with the city of South Sioux City to build a 3MW renewable energy power plant. The power plant will be located within the Roth Industrial Park area in South Sioux City and will be using its rotary kiln gasification technology, which has the ability to utilize multiple sources of available fuel. There fuel sources and feedstock options can include, but are not limited to, wood waste, agriculture waste (such as corn stover), C&D waste (construction & demolition) and MSW (municipal solid waste).

Preliminary work has already begun and the construction of the power plant will commence before the end of this year with a completion target of fall/winter 2017.

Green Star Gasifiers is currently identifying and

securing fuel sources, in particular wood waste and is actively interested in wood suppliers. The power plant requires approximately 63,000 tons per year of fuel which translates into roughly 173 tons per day. The site location will also host a fuel storage facility that can accommodate fuel for 3-4 weeks at a time.

As a member of the Nebraska Wood Energy Team, Green Star Gasifiers is committed to contributing viable solutions for maintaining forest health and is currently exploring opportunities to establish Nebraska's Statewide Wood Market.

Green Star Gasifiers will need additional fuel in the near future as it is finalizing other power plant locations throughout Nebraska. These locations are strategically chosen based on availability of and accessibility to fuel sources while proving an efficient logistical support system to contractors. All geographical areas in Nebraska identified as power plant sites have a direct correlation to establishing operations closer to feedstock options within a 50 mile radius. To date, Green Star Gasifiers has identified 3 additional power plant locations that are in preliminary evaluation stage.



Additional renewable energy power generation sources available through Green Star Gasifiers and its divisions are wind, solar and micro hydro power.

We are very interested in hearing from you and evaluation your wood and/or other fuel sources. Please feel free to contact us at info@greenstargasifiers.com or call us directly at 270-599-4910. You can also reach us through our website at www.GreenStarGasifiers.com



Green Star Gasifiers' Mission Statement: "A desire to change the world, a commitment to protect the environment and a pursuit to promote clean, secure and economically viable renewable energy developments by delivering high quality sustainable energy solutions worldwide."

Emerald Ash Borer Discovered in Eastern Nebraska

After many years of speculating and waiting, emerald ash borer (EAB) has been detected in Nebraska. Initially found in Omaha, and since found also in Greenwood (15 miles northeast of Lincoln), EAB will immediately impact the forest products industry in the area. The find has prompted the Nebraska Department of Agriculture (NDA), along with the United States Department of Agriculture, to establish EAB quarantines in the five county area around Omaha; Washington, Douglas, Sarpy, Dodge, and Cass counties. This quarantine impacts ash, and other hardwood, wood products which are transported out of the designated counties. These requirements, regulated by the NDA, are intended to reduce the spread of EAB into new areas. Although, there will likely be some businesses who are impacted more than others. Below are guidelines established by the NDA for complying with the new regulations. While the Nebraska Forest Service is not an EAB regulatory agency, providing this information to the forest products industry is intended to inform the industry and help businesses avoid penalties related to the EAB quarantines.

Guidelines for Complying with Emerald Ash Borer State and Federal Quarantine Regulations

Preventing the human-assisted spread of the emerald ash borer (EAB) is a huge undertaking. Cooperation among federal and state government agencies, Native American Tribes, municipalities, industry and the public is essential to minimize the impact of this pest.

Regulated Articles include: ash nursery stock, green (ash) lumber and other ash material living, dead, cut or fallen including logs, limbs, stumps, roots, and



branches; all hardwood composted and uncomposted chips, bark or mulch; all hardwood firewood or fuelwood, and any other product the Nebraska Department of Agriculture (NDA) or a federal inspector determines is a risk of spreading EAB.

Below is a brief summary of treatment options that would allow EAB regulated materials to ship out of an EAB quarantined area. State- or federally-issued documentation must accompany all regulated articles shipped interstate. For more information contact the NDA at (402) 471-6847 or the USDA at (402) 434-2345.

Firewood Producers & Firewood Users

All hardwood firewood is prohibited from distribution outside the EAB quarantine area unless it has been heat treated, fumigated or debarked (plus removal of the outer ½ inch of wood). The treatments must be monitored and the firewood must be certified by state or federal agriculture officials. Although firewood may be moved within the EAB quarantine area, moving firewood any distance may also spread EAB and other tree pests. The best firewood options are to “Buy it where you Burn it” or purchase firewood that is treated, certified and labeled.

Nursery Owners & Retailers

Ash nursery stock is prohibited from being sold or distributed within or out of the EAB quarantine area. Pallet Producers Pallets fabricated with green (ash) lumber—destined to a non-quarantined area—must be processed in a manner approved by federal agriculture officials.

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Nebraska Forest Industry Spotlight

High Plains Biochar

By: Rural Electric Nebraska

It was while playing with his dog at Box Butte Reservoir, a simple piece of charred timber sparked an interest in Rowdy Yeatts of rural Chadron. In February 2012, Rowdy and his wife Christi moved to “the Table” south of Chadron and made the former Prairie Home School their new home. The Yeatts owned a marine construction business on Grand Lake in Northeast Oklahoma before relocating to Nebraska. Rowdy originally grew up in Casper, WY. and Christi in Chelsea, OK. “We met in college at Oklahoma State University in Stillwater. I graduated from OSU in 2000 with a Business Degree,” explained Yeatts.

After moving to Northwest Nebraska, Yeatts was employed at Fuller Construction doing estimating and project management for projects such as the Chadron State Park renovations and the USFS energy efficiency renovation at their office in Chadron.

His career began to take a turn about a year ago after that moment at Box Butte. “I became interested in biochar about a year ago and started learning more about it, eventually making it in small quantities utilizing some of the waste in the area,” said Yeatts. “The original kiln only made a few cups of biochar in a batch but it helped me understand the process of gasification.”

Since that time of producing just a few cups in a batch, the Yeatts have scaled up their operations. Later this year they will expand yet again to a kiln that will be able to process over 1,000 tons of wood waste per month. “Both our current machine and the machine that will be delivered later this year are completely portable so we can take the machine to the woodchips,” said Yeatts.

What is biochar good for? Watching so much of the waste in the region simply get piled up and burned really made Yeatts realize that there must be a better solution than that antiquated practice. “I found that neighboring states like Colorado were already utilizing wood waste from fires and beetle kill for biochar so it made perfect sense to try to do the same thing here. We have an abundance of wood waste in the state from invasive cedars in the eastern part of the state to an underutilized forest in the northwest part of the state including thousands of acres of burned



To learn more about biochar, visit their website at www.hpbiochar.com, or email Rowdy@HPBiochar.com, or call him at (308) 430-8213.

timber that’s not suitable for much of anything at this point,” said Yeatts.

Yeatts is anxious about the testing and projects going on across the state with tree planting currently going on in South Sioux City, Bellevue and North Bend. “We are also currently working with UNL and the Nebraska Forest Service to test biochar as a feed supplement for cattle,” said Yeatts. According to Yeatts, this use is very popular in other places like Europe and has been shown to increase digestive efficiency, boost the immune system, improve growth and milk output, increase overall health, and even reduce methane emissions.

“This will be one of the first studies of its kind in the United States and we are looking forward to seeing how biochar can benefit cattle in the state. We have also been testing biochar for use in coal fired power plants to remove mercury from flue gas,” said Yeatts. The initial results look promising and they are continuing to work with experts in the industry to develop that product. “We feel like utilizing biochar as a replacement for activated carbon is a huge opportunity for the state to utilize its wood and manure waste in a responsible way while helping protect the environment,” said Yeatts.

EAB Discovered in Eastern Nebraska (continued)

Mills, Loggers & Haulers

Ash logs cannot be moved out of the EAB quarantine area during EAB's adult flight period (April 1–Sept. 30) unless the logs have been fumigated or debarked (plus removal of ½ inch of wood) and certified. However, during the non-flight period (Oct. 1–March 31), ash logs may be moved to a state- or federally-approved mill outside of the EAB quarantine area for processing. Receiving mills outside the EAB quarantine area must be inspected and certified by state or federal agriculture officials. Bark and wood waste must be processed in accordance with regulations and time frames.

Ash Lumber Manufacturers

Ash lumber, during EAB's adult flight period (April 1–Sept. 30), is prohibited from distribution outside the EAB quarantine area unless it has been kiln dried, fumigated or debarked (plus removal of ½ inch of wood). The treatments must be inspected and the lumber certified by state or federal agriculture officials. During the non-flight period (Oct. 1–March 31), green (ash) lumber may be moved to state- or feder-



ally-approved facilities outside the EAB quarantine area for processing. Processing must be completed according to regulations within specified time frames.

Landscapers & Wood Waste Producers & Haulers

Wood chips and wood waste must meet quarantine specifications (chips less than 1 inch in two dimensions or an approved composting scheme) and be certified. Properly dispose of all wood debris.

Nebraska Forest Industry Spotlight (continued)

Additionally, there are numerous opportunities in the state as well as surrounding states to engage with the mining, oil, and gas industries. Biochar has been used for land reclamation in those industries for several years and is continuing to gain popularity for its ability to protect the environment by preventing leaching of heavy metals and other toxins as well as regrow vegetation on well pads and other reclamation sites with contaminated soil. "The industry is very young but is already very popular in places such as the northwest United States where there are over 20 biochar manufacturers in that region alone,"

said Yeatts. "We are simply trying educate the state on the benefits of biochar and have had a great response so far with people across the state being interested in helping utilize waste and turn it into a product that benefits the environment," he ended.

Rowdy's wife, Christi, handles a lot of the biochar business work and is the office manager at Dawes County UNL Extension Office. The couple has an eight-year-old daughter, Paige, who attends third grade in Chadron. The Yeatts are members of GROW Nebraska and the International Biochar Initiative.

Timber Sales

The following listings are for stands of timber or logs being offered for sale by owners or persons of delegated authority. Timber was cruised and/or marked for harvest by Nebraska Forest Service or other professional foresters. Volumes in board feet (Doyle scale unless otherwise indicated) are estimates by the forester. If no volume is listed, the trees or logs were not marked by a forester and the listing is included only as a marketing service to the owner. Listings are prepared according to information at the time of publication.

Sale Name	Available Timber	Forester/Date	Contact
Weers	Black Walnut, 25 Trees Veneer 3 - 111 bf Lumber 1 - 384 bt Lumber 2 - 2,163 bf Lumber 3 - 1,443 bf Total - 4,101 bf	4/2016 Karloff	Ronald Weers 58115 709 th Road Diller, NE 68342 Ph: 402-793-5853 Location: Gage County
Lavicky	Black Walnut, 9 Trees Lumber 1 - 63 bf Lumber 2 - 462 bf Lumber 3 - 477 bf Total - 1,002 bf	7/2016 Karloff	Catherine Lavicky 1720 25 Road Dwight, NE 68635 Ph: 402-566-2385 Location: Butler County
Honey Creek	Black Walnut, 243 Trees Veneer 1 - 3,979 Veneer 2 - 6,363 Veneer 3 - 17,675 Lumber 1 - 21,701 Lumber 2 - 19,752 Lumber 3 - 23,566 Total - 93,036	4/2014 Karloff Rasmussen Kasten Smith	Andrew Baker Winnebago Agency Route 1, Box 18 Winnebago, NE 68071 402-878-2424 Location: Thurston County SEALED BID ON BIA FORMS. Bids accepted until 2pm, October 5, 2016.
T2074-T2075	Black Walnut, 50 Trees Veneer 2 - 1,285 Veneer 3 - 1,835 Lumber 1 - 2,322 Lumber 2 - 1,604 Lumber 3 - 3,054 Total - 10,100	11/2010 Rasmussen Kasten	Andrew Baker Winnebago Agency Route 1, Box 18 Winnebago, NE 68071 402-878-2424 Location: Thurston County SEALED BID ON BIA FORMS. Bids accepted until 2pm, October 5, 2016.

Trading Post

The Trading Post is provided as a free marketing service for forestry industry. Only forestry-related advertisements will be accepted. Please submit written ads to the Timber Talk editor at least 15 days before scheduled Timber Talk publication dates. Ads may be edited to meet space constraints.

For Sale

Sawmill. Sanborn Minimax band sawmill, new 80 hp Deutz motor with 232 hours, 36" log capacity, hydraulic-operated belt on/off table, hydraulic log cleaner, digital levels, new track system, straight angled pressure guides. Also includes 60 extra 6" blades, Armstrong filing room equipment, box of new grinding stones. \$30,000. Contact George Hawley, Home 620-473-3468 or Cell 620-365-9744, email: hawleylumber@gmail.com.

Sawmill. Timber King portable sawmill, 34" x 20' log capacity, 50+ extra blades (some new). \$16,000. Contact: David Champlin. Phone: 785-275-2181.

Sawmill. Mighty Mite bandsaw. 20 HP electric motor, tandem axles w/ brakes on one axle, 36" x 24' log capacity, (have cut 46" beams) hydraulic operation includes winch, knees, taper, near arm, dogging arms, far arm, dogging spike, log loading arms, and electric clutch and blade lift. Includes automatic blade sharpener, setting machine, 12 used blades and 4 new blades. Excellent condition. Never been used commercially. \$17,500. Contact: Gary Fisher, Crawford, NE. Phone: 308-665-1580; email: fisher@bbcwb.net.

Edger. Corley SN E536-054, chromed in-feeds and out-feeds (no visible wear), 6-cyl Deutz engine, laser lights. \$20,000. Contact George Hawley, Home: 620-473-3468 or Cell: 620-365-9744, email: hawleylumber@gmail.com.

Timber Harvester. HYUNDAI ROBEX 130. Cuts and delimbs. Works well on cedars. \$18,500. Call Todd Book, 712-251-4464.

Walnut Lumber. All dimensions. \$3.00 per board foot. Falls City, NE. Contact: Bruce Walker at 402-245-2031.

Wanted

Wood Residue. Slab wood, cutoffs, sawdust, mulch, bales, etc. Lincoln, NE. Call Scott Hofeling at 402-432-0806 or email scott@hofelingenterprises.com.

Logs and Slabwood. Cottonwood, cedar and pine. 4-26" diameter and 90-100" lengths. Below saw grade logs acceptable. Contact: American Wood Fibers, Clarks, NE at 800-662-5459; or email: Pat Krish at pkrish@AWF.com

Cottonwood Logs. Veneer-quality cottonwood logs, 16-36" diameter, 7' and longer. Pick up service available. Contact: Barcel Mill & Lumber, Bellwood, NE 68624. Ask for Barton or Megan. Phone: 800-201-4780; email: bj@barcelmill.com.

Services and Miscellaneous

Woodshop Services. Millwork made from your lumber on my planer/molder. Chris Marlowe, Butte, NE 402-775-5000. Marlowepasture@nntc.net.

Sawmill Service and Supplies. Saw hammering and welding. Precision knife and saw grinding. Contact: Tim Schram, Schram Saw and Machine, PO Box 718, 204 E. 3rd St., Ponca, NE 68770, 402-755-4294.

Used Portable Sawmills. North America's largest source of used portable sawmills and equipment. Contact: Sawmill Exchange, 800-459-2148, website: www.sawmillexchange.com.