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Nebraska Forest Service

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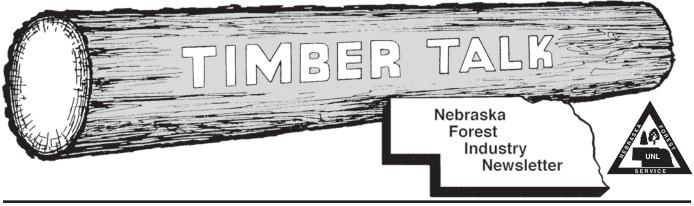


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NEBRASKA FOREST SERVICE



Nebraska Forest Service

Institute of Agriculture and Natural Resources

University of Nebraska-Lincoln

February 1, 2010 Vol. 48, No. 1

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The Nebraska Forest Service publishes **Timber Talk** four times annually (February 1, June 1, September 1, and November 1). The purpose of the newsletter is to serve and promote the forest industry of Nebraska. All questions and correspondence concerning *Timber* Talk should be directed to: Dennis M. Adams, Timber Talk Editor, Nebraska Forest Service, University of Nebraska, 109 Entomology Hall, P.O. Box 830815, Lincoln, NE 68583-0815. Phone (402) 472-5822, FAX (402) 472-2964. E-mail: dadams2@unl.edu. *Timber Talk* is partially supported by University of Nebraska-Lincoln Extension funding.

Lumber Market

HARDWOODS

Northern. The market is active for most species and grades key to the region. Business intensity is concentrated on green stocks, as resale operations and secondary manufacturers strive to restore inventories. In the meantime, sawmill production is down. Some mills



remain idled. Many more are running reduced production schedules. Inadequate log supplies are often cited as the reason, but the primary culprit preventing production expansion is access to additional working capital. Today's market energy is a supply-drive circumstance. Nothing yet has occurred to measurably increase demand.

Southern. Strong markets of pulpwood and sawlogs have prompted increased logging activity. However, inclement weather is problematic for harvesting timber. Furthermore, the extended downturn in the wood products business has decreased the number of qualified loggers. In addition, there has been a limited volume of timber sold the past year, restricting log availability further. The result is low log decks at the mills, and green lumber production remains at historically depressed levels as a result. For many grades and thicknesses, buyer interest is outpacing supplies, pressuring higher prices. On the other hand, activity for kiln dried stocks is more controlled. End users are reluctant to purchase beyond short-term needs.

Appalachian. Worldwide demand for hardwood lumber dropped dramatically in 2009, after falling consistently since new home construction began to decline. In the US, estimates for consumption declined 31% in 2009 from 2008 to approximately 6.35 billion board feet. New residential construction bottomed out in April at 479,000 units on an annual basis and, after regaining some momentum, reached 574,000 units in November. In comparison, economists state that between 1.4 and 1.8 million new homes per year are required to satisfy residential requirements. Because construction is low, demand for interior fittings and furniture is also off. End users are purchasing for immediate needs. Many sawmill operators are strapped for working capital. Also, there is a limited number of timber offerings and too few qualified logging contractors. Competition from pulp and paper mills and bio-fuel plants has added another element of demand strain on available log supplies. Eastern hardwood log production ended 2009 at an estimated 5.73 billion board feet, falling below consumption. The result has been an uptick in pricing for many key species.

(Source: Condensed from *Hardwood Market Report*, Jan. 23, 2010. For more information or to subscribe to *Hardwood Market Report*, call (901) 767-9216, email: hmr@hmr.com, website: www.hmr.com)

Hardwood Lumber Price Trends—Green

		FA	AS			#10	С		#2A				
Species	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09	
Ash	675	665	625	640	460	450	420	435	345	325	295	305	
Basswood	685	685	685	685	330	330	340	350	205	205	205	205	
Cottonwood	605	605	605	605	405	405	405	405	220	220	220	220	
Cherry	1530	1530	1550	1710	625	625	625	655	320	320	320	340	
Elm (No. soft grey)	635	635	635	635	420	420	420	420	235	235	235	235	
Hackberry	475	475	475	475	455	455	455	455	265	265	265	265	
Hickory	615	615	615	630	500	500	490	490	350	350	350	350	
Soft Maple (UNSD)	960	960	960	960	505	505	480	515	260	260	260	270	
Red Oak	935	845	785	785	610	525	510	520	450	430	420	430	
White Oak	940	940	940	940	500	490	490	500	360	350	350	360	
Walnut	1800	1800	1800	1870	765	765	765	830	360	360	360	395	

Note: Hardwood prices quoted in dollars per 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, soft maple-unselected, red oak and white oak from Northern Hardwoods listings. Prices for cottonwood and hackberry from Southern Hardwoods listings. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods listings. (Source: *Hardwood Market Report Lumber News Letter*, last issue of month indicated. To subscribe to Hardwood Market Report call (901) 767-9126, email: hmr@hmr. com, website: www.hmr.com.)

Hardwood Lumber Price Trends—Kiln Dried

		FA	AS		#1C				#2A			
Species	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09
Ash	915	915	905	905	685	675	685	680	590	590	580	580
Basswood	875	875	890	915	500	500	520	550	385	395	395	395
Cottonwood	740	740	740	755	510	510	510	520	_	_	_	_
Cherry	2260	2260	2260	2415	860	860	860	905	555	555	555	580
Elm (No. soft grey)	_	_	_	_	_	_	_	_	_	_	_	
Hackberry	_	_	_	_	_	_	_	_	_	_	_	_
Hickory	985	985	985	1055	825	825	825	860	695	695	695	735
Soft Maple (UNSD)	1340	1355	1355	1475	735	725	715	750	525	525	515	540
Red Oak	1210	1150	1095	1145	820	785	785	820	620	610	610	645
White Oak	1360	1340	1340	1490	740	715	715	760	615	595	585	610
Walnut	2690	2670	2670	1790	1340	1320	1450	1685	755	755	835	1060

Note: Kiln dried prices in dollars per MBF, FOB mill, is an estimate of predominant prices for 4/4 lumber inspected and graded before kiln drying. Prices for cottonwood and hackberry from Southern Hardwoods listings. Prices for ash, basswood, Northern soft grey elm, soft maple-unselected, red oak, and white oak from Northern Hardwood listings. Prices for cherry, hickory and walnut (steam treated) from Appalachian Hardwoods listings. (Source: *Hardwood Market Report Lumber News Letter*, last issue of month indicated. To subscribe to Hardwood Market Report call (901) 767-9126, website: www.hmr.com.)

Softwood Lumber Price Trends

	Selects ¹				Shop ²			Common ³			Dimension ⁴					
Species	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09	12/09	9/09	6/09	3/09
Ponderosa Pine*	710	NA	451	491	NA	NA	346	229	461	NA	409	397	NA	NA	216	208

^{*}Rocky Mountain Ponderosa Pine

NA = Not available due to insufficient producers.

Note: Average Softwood prices quoted per MBF rounded to nearest dollar, FOB mill, KD. This information is presented to indicate trends in the softwood lumber market. Actual prices may vary significantly from prices quoted.

(Source: Excerpt from *Inland Grade Price Averages*, Western Wood Products Association (WWPA) for the month indicated. To subscribe contact WWPA, phone: (402) 224-3930, website: www.wwpa.org).

Hardwood Lumber Market History—Green

This hardwood lumber market summary is presented to provide a historical perspective of lumber prices since 1979 with emphasis on the preceding 5 years.

Hardwood prices quoted per MBF, FOB mill, truckload or carload quantities, 4/4, rough, AD, RL & W. Prices for ash, basswood, elm, soft maple, red oak & white oak from Northern Hardwoods listings. Prices for cottonwood and hackberry from Southern Hardwoods listings. Prices for cherry, hickory, and walnut (steam treated) from Appalachian Hardwoods listings. #2C column indicates price for grade 2A lumber unless otherwise indicated. Prior to 1990, the #2C column listed only #2C prices.

SPECIES	DATE	FAS	#1C	#2C	SPECIES	DATE	FAS	#1C	#2C
ASH	1/79	565	440	230		12/05	1570	1320	625
	12/85	600	445	210		12/06	2350	1335	655
	12/90	745	585	215		12/07	2290	1230	640
	12/95	765	630	325		12/08	1895	790	425
	12/00	755	615	380		12/09	1530	625	320
	12/05	730	565	415	FIM (G)	12/02	212	202	102
	12/06	620	470	335	ELM (soft grey)	12/83	313	293	183
	12/07	600	430	305		12/85	410	390	255
	12/08	655	450	325		12/90	665	440	165B
	12/09	675	460	345		12/95	665	440	210B
DA CCIAIO O D	4/50	455	215	170	†	12/00	635	420	235
BASSWOOD	4/79	455	315	170		12/05	635	420	235
	12/85	560	310	182		12/06	635	420	235
	12/90	550	295	170B		12/07	635	420	210
	12/95	620	365	195B		12/08	635	420	235
	12/00	720	425	225		12/09	635	420	235
	12/05	710	435	225	HACKBERRY	4/79	387	367	262
	12/06	750	415	225	Interestrict	12/85	345	325	220
	12/07	695	365	205		12/90	390	370	240
	12/08	685	350	205		12/95	485	465	275
	12/09	685	330	205		12/00	475	455	265
COTTONWOOD	4/79	455	315	170	1	12/05	475	455	265
COTTOTITIOED	12/85	320	267	142		12/06	475	455	265
	12/90	400	285	150B		12/07	475	455	265
	12/95	605	405	185B		12/07	475	455	265
	12/00	600	400	220		12/09	475	455	265
	12/05	600	400	220		12/07	17.5	133	203
	12/06	600	400	220	HICKORY	4/79	310	290	165
	12/07	600	400	220		2/85	325	305	160
	12/08	615	415	220		12/90	335	315	195
	12/09	605	405	220		12/95	455	435	265
	12/07	003	103	220	+	12/00	625	515	340
CHERRY	12/83	760	580	285		12/05	770	650	405
	12/85	785	615	305		12/06	755	660	450
	12/90	965	620	285		12/07	735	610	425
	12/95	1185	845	445		12/08	650	490	350
	12/00	1605	1115	585		12/09	615	500	350

¹Selects = D and Btr Selects, Stained Select, Mld and Btr.

 $^{^{2}}$ Shop = 4/4 Factory Select - #2 Shop.

³Common = #2 and Btr Common.

⁴Dimension, Timbers and studs = Std and Btr, #2 and BTR Dimension and Timbers.

SPECIES	DATE	FAS	#1C	#2C	SPECIES	DATE	FAS	#1C	#2C
SOFT MAPLE (UNSD)	4/79	390	310	185	WHITE OAK	4/79	535	415	212
	12/85	400	335	200		12/85	660	355	225
	12/90	420	335	200B		12/90	800	445	215
	12/95	600	490	205B		12/95	800	565	340
	12/00	850	640	340		12/00	770	535	340
	12/05	1200	790	400		12/05	910	625	400
	12/06	1185	750	380		12/06	1015	600	400
	12/07	1130	600	320		12/07	1105	620	400
	12/08	1100	545	280		12/08	1065	570	400
	12/09	960	505	260		12/09	940	500	360
RED OAK	4/79	505	415	215	WALNUT	1/79	1250	795	480
	12/85	715	450	225		12/85	1565	855	255
	12/90	815	645	295		12/90	1605	855	290
	12/95	1025	840	475		12/95	1535	810	290
	12/00	1095	910	660		12/00	1455	785	315
	12/05	1150	740	500		12/05	2040	1030	650
	12/06	1020	675	500		12/06	2100	1210	885
	12/07	945	630	500		12/07	2180	1300	940
	12/08	930	585	490		12/08	2010	1065	520
	12/09	935	610	450		12/09	1800	765	360

(Source: Hardwood Market Report Lumber News Letter. To subscribe to Hardwood Market Report call (901) 767-9126, email: hmr@hmr.com, website: www.hmr.com)

What Is The Difference Between Right Hand, Left Hand, and Even-Handed Circular Saws? And What Do You Have To Do Differently When You Hammer Them?

Circular head saws in sawmills are usually "handed," meaning that they are either "right-handed" or "left-handed". Slasher saws, cut-off saws, end trimmer saws, and edger saws are usually what we call "even-handed." Head saws have a log side and a board side, while edger saws, gang saws, and trim saws don't have a log side versus a board side.

Circular head saws are usually tapered one or two gauges, meaning that they are approximately 0.015" to 0.030" thicker at the center than they are at the rim. This extra metal is supposed to give them more strength while they are cutting, so that they are more likely to saw in a straight line and less likely to crack. On a conventional headrig, the log is held fast to the carriage by dogs. As the saw is in the cut, there is a spreader that slightly pries the board away from the log as it is being cut. This keeps the board far enough away from the body of the saw to prevent friction, and minimize any tendency the saw might have to throw the board back at the sawyer or whoever else is standing nearby.

Since the log is not moved away from the body of the saw, there are two things that prevent the log from rubbing the saw and causing friction. One is the saw kerf, or side clearance of the teeth. The rim of a 7 X 8 gauge saw measures approximately 0.165" and the bits will measure 9/32" or 0.281". So that would give you a side clearance of 0.058". The other thing that keeps the log from rubbing the saw is the fact that if the saw is hammered correctly, it will be flat on the log side when it is standing in a vertical position.

There are some who will hammer a saw to be dished towards the log side with the theory that it will prevent rubbing and heating. Well, it will, but it will also prevent accurate sawing. The more dish you put in the saw, the more it will have tendencies to run off line in the direction of the carriage. Although saws that heat on the log side will also run off line, (usually out of the log) that doesn't mean you should be having the saw hammered to be inaccurate on purpose.

I define a correctly hammered saw as one that is flat on the log side, with an acceptable amount of wobble (+/- 0.015" for a 48" to 60" saw) and the right amount of tension in the right location. As long as you have a properly hammered saw, with teeth that have been maintained properly (sharpened accurately and with enough side clearance), any heat in the saw would be coming from troubles with collars, bearings, and/or mill alignment.

By the way, don't think that making a saw flat on the log side means that you only hammer on the log side. If, for example, a saw is dished towards the log side to start with, you would have to do your hammering on the board side to bring the saw back to flat on the log side.

So, to get back to your original question, it's the log side that determines the hand of the saw. As you stand at the infeed end of the saw, looking it square in the teeth, you will see that the log either passes the saw on your right or on your left. If it passes on the right, we call that a right-handed mill and, therefore, it will require a right-handed saw.

When we hammer a saw, we really don't need to know whether it is left- or right-handed. All we need to know is

which side is the log side. Armed with that knowledge, we just go ahead and hammer the saw so that the log side is flat. Now, if we had a saw that had no taper, hammering it so that the log side was truly flat would produce a saw with a board side that is also flat by virtue of having no taper. If we hammer a tapered saw to be flat on the one side, it follows that the board side will automatically have all the taper.

What about even-handed saws? Generally, even-handed saws are run in situations where there are no board-side versus log-side considerations, such as in a gang sawing operation, end trimmer or even a firewood processor. Most saws that are meant to be even-handed are also not intentionally tapered, although some are. I say intentionally because plenty of untapered saws actually measure a little different at the rim and the center just because that sort of thing can easily happen in the manufacturing process. Sometimes it is only a matter of a couple of thousandths difference. That won't affect how the saw runs, but it will be something you will be able to easily find with a straight edge.

So when hammering an even-handed saw, it is very important to make both sides look exactly the same relative to flatness, rather than getting one side flat and assuming the other side will follow suit. In a sense, when you hammer a saw that is meant to be even-handed, it is most important to center the saw instead of trying to get both sides perfectly flat. If there is no taper at all, then when you get the saw centered you will find that it is also flat on both sides.

The important thing to remember is that nothing will ever be perfect if you measure close enough, but the closer you get to perfection, the more forgiving the saw will be to other inaccuracies in the mill and the better chance you will have of achieving greater accuracy in your end product and hopefully more production and reduced sawing costs. Accuracy pays.

(Source: The Northern Logger, January, 2006. Article written by Casey Creamer, saw doctor and president of Seneca Saw Works, Inc., P.O. Box 681, Burdett, NY 14818, tel. 607-546-5887, Email: casey@senecasaw. com. To subscribe to The Northern Logger, phone: 315-369-3078, email: npetrie@northernlogger.com)_

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time your prediction was right?

Walter Williams, Proj.
George Mason Universu "Few groups have been so consistently 'environmentalists...' The next time an

Growing Wood Pellet Market

The global wood pellet industry has developed remarkably fast, evolving from being practically non-existent 15 years ago to being an important wood fiber consumer which is increasingly competing with pulp and wood-panel industry for wood raw material.

Global pallet production was close to 10 million tons in 2008, according to the Wood Resource Quarterly. It is estimated that production will double over the next 4-5 years and some industry experts forecast an annual growth of 25-30% globally over the next ten years.

Europe is currently the major market for pellets, but the interest for non-fossil fuels in North America is growing. The new leadership in the US government is going to have a positive impact on alternative fuel usage and the expected change in energy policy could very well result in increased imports of pellets from Canada to the US, which will eventually diminish the flow of biomass from North America to Europe. As a result, European pellet consumers will have to search for alternative supply sources in Asia, Latin America, Africa and Russia.

The major raw material used for pellet manufacturing has traditionally been sawdust and shavings from the sawmilling industry. As this supply source has started to tap out, there is now an increased interest in searching for alternative fiber. European pellet manufacturers will increasingly use forest residues, urban wood waste and fastgrowing tree species. They will also begin to compete in more aggressively with pulp mills and woodpanel mills for sawmill chips and pulp logs. Imports of wood chips from overseas may also be an option for some pellet plants.

A surprisingly large share of the global pellet production is being shipped to markets outside the producing country, not only between countries but also intercontinentally. According to the Wood Resource Quarterly, an estimated 25% of world production was exported in 2008. Most of the overseas volume was shipped from British Columbia to Belgium, the Netherlands and Sweden, despite the seemingly prohibitively costly 15,000 kilometer journey from the Interior of BC to the European market. The situation can be explained by the currently low costs for raw material (shavings and sawdust) in Canada and the high prices for wood pellets in Europe.

The rapid expansion in global trade of biomass (both wood chips and pellets) is likely to continue over the next three to five years as more countries favor renewable energy and as local, relatively inexpensive supplies of biomass reach

(Source: Paper Age, March/April 2009)

Important Trivia

The first novel ever written on a typewriter? Tom Sawyer

Nebraska Forestry Industry Spotlight



JENNINGS CASKETS



Ralph Jennings began building hand-made wooden caskets in 1992 after seeing another wooden one at a funeral he

attended. He decided this was something he could do and came up with his own design. Jennings noted that these caskets have to meet vault specifications.

Usually it is rural people, sportsmen, and those who have known about these caskets in their families that he sells to. Customers like the natural wood, rope handles, and the idea that it is something connected to the ground. For others, it is less expensive than the average cost of a casket today. Jennings

Jennings' caskets are hand-made from solid eastern redcedar lumber. They are intentionally plain in construction and furnished simply with broadcloth and a pillow. But, with the striking

does not advertise. Business is generated

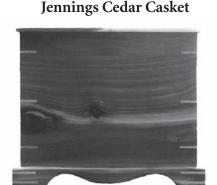
by word of mouth only.

redcedar color; they are quite attractive. Jennings typically sold 10 to 12 caskets per year, but has cut back to making

about 4 per year. He also makes and sells box-shaped urns made from solid eastern redcedar.

Jennings primarily utilizes 1" x 8' eastern redcedar boards to construct his products. He used to have his own bandsaw to cut the lumber, but now purchases boards from area sawmills in Custer, Lincoln, and Logan counties.

Jennings also makes furniture, trim, and other small hand-crafted items. He found that most people don't realize the cost involved in making the furniture and they aren't willing to pay the price for the wood and his time. So Jennings likes to work on his own, utilizing slabs from logs and smaller branches to trim his windows and doors. He uses roots and branches from other plants, such as the lilac. His home displays his handiwork, including a beautiful spiral staircase and a wide



Jennings Cedar Urn

porch supported by cedar posts.

Ralph Jennings maybe contacted at 308-532-3503.

You know you're from Nebraska if...

you carry jumpers in your car and your wife knows how to use them.

New Threat To Nebraska Black Walnut Trees

A newly described destructive pest complex known as Thousand Cankers Disease (TCD), poses a serious threat to the walnut trees in Nebraska. TCD is a pest complex involving infestation by the Walnut Twig Beetle (Pityophthorus juglandis) and an associated fungal pathogen (Geosmithia morbida), which eventually kills the walnut tree. TCD has recently been identified as the primary cause of walnut (Juglans spp.) mortality in at least eight western states. It is particularly lethal to black walnut (Juglans nigra). Nebraska forests contain more than 1.5 million black walnut trees, including over 40 million board feet of merchantable wood, worth \$40 to \$80 million. Approximately 1 million board feet of walnut wood is harvested annually, contributing \$3.5 million to the Nebraska economy. The state is also home to several hundred nut tree growers, with nearly 4,000 bearing trees in production. These growers produce over 70,000 pounds of hulled nuts annually, worth approximately \$150,000. The overall value of the Nebraska nut crop to the state economy is estimated at \$1.2 million per year. TCD threatens to cost the state over \$81 million in uninsured losses to trees killed, and over \$4.7 million annually in lost income from wood and nut processing and sales. TCD has not yet been found in Nebraska or other states in the native range of black walnut. In order to protect Nebraska black walnut resource from TCD, the Nebraska Department of Agriculture will probably impose a quarantine to prevent the importation of walnut plants and plant parts from states infected with

Black Walnut (*Juglans nigra*) has been planted in the western US since the 1840's and has been cultivated as a nut tree, shade tree, and also for timber products due to its resilience in difficult growing conditions and potential for good growth on more hospitable sites. Four species of walnut are native to various areas of the western US, and some hybrids between black walnut and these western walnuts have been developed. In addition, Persian or English walnut, *Juglans regia*, is also planted extensively on hybrid rootstock in California for nut production.

In the 1990's and early 2000's significant mortality was noted in black walnut in several western states. The mortality was initially attributed to drought or other environmental stress. Mortality continued and further investigation revealed that black walnuts were actually being killed by the combined actions of a minute walnut twig beetle (Pityophthorus juglandis) and a fungus (Geosmithia sp.) carried by the beetle that formed cankers in the bark and phloem. The massive number of attacking beetles combined with the formation of cankers where the beetles excavate gradually kills the tree. The beetle appears to be a native of the southwestern US and is a minor pest of Arizona walnut (Juglans major) infesting small, weak twigs, but not causing mortality or major damage. The fungus is suspected to be a native based on early genetic evaluations, but has not been previously described. The beetle acts as a very effective vector, introducing the fungus to the nutrient conducting phloem of the tree, where numerous cankers form and merge, essentially starving the tree. Death

of the tree is the result of continuous and sustained attack by the beetles and infection and canker formation by the fungus, and may take 10 years or more to result in mortality. The disease is very difficult to detect in its early stages. Sampling limbs 1 inch or larger in diameter for beetles and cankers could provide an early detection method. Visual symptoms include upper branches with yellowing or wilting foliage and dieback of upper limbs. The disease is usually advanced by this time and tree death occurs within one to four years.

Initial screenings indicate black walnut is highly susceptible to attack by the beetles and subsequent fungal infection and spread of the disease. Butternut also appears to be very susceptible. California walnuts (*J. californica* and *J. hindsii*) have shown some damage and mortality from the disease as well, but *J. hindsii* has demonstrated resistance in some cases. Texas walnut, (*J. microcarpa*) has shown some resistance to the disease and has not been found infested with the beetle. English walnut has been attacked by the beetle, but demonstrates some resistance to the disease, although J. hindsii rootstock may be susceptible. Several walnut hybrids are also present in the western US and demonstrate variable resistance, but generally better resistance than pure black walnut. Pecan and other hickory species screened for infection susceptibility were resistant to the disease.

There is currently no effective treatment for this disease. Sanitation is the main form of control treatment, but is difficult due to the fact that the beetle and fungus can survive chipping of limbs and trunk wood and can survive in cut limbs and trunk until the bark and wood have dried significantly – perhaps 2 or 3 years. Debarking has yielded mixed results: incomplete debarking did not eliminate all life cycles of the beetle. Completely debarked logs still attracted beetles, but the rapid drying of the wood prevented effective infestation of the logs. Drying, heating, or fumigation appear to be the most promising means of killing the beetles and fungus, but additional tests need to be made to confirm the effectiveness of these techniques. The beetle can endure temperatures of at least 107 degrees F, which is to be expected in its native range of the southwestern US, and can survive in USDA plant hardiness zones 4 through 10, which would include most of the native range of eastern black walnut.

The disease is now widespread in the western US and black walnut is rapidly disappearing in infested areas. The most easterly known infection is in on the western edge of the Plains of Colorado. Efforts have already begun to document the location and extent of black walnut trees and likely points of disease movement (campgrounds, wood processing facilities, firewood processors or vendors) in eastern Colorado and neighboring areas. Disease movement could occur through several methods:

- Raw logs, stumps, or burls being shipped east for manufacturing
- Firewood carried east for resale or personal use
- · Untreated wood pallets and crating

- · Craft-wood sold or carried east by vendors or hobbyists
- · Nursery stock or grafting wood
- Natural spread across the range of native and planted walnuts.
- Debarked and dried wood and nuts provide no risk of infection, but infested wood with bark attached and undried or otherwise untreated is highly infective.

Although the thousand cankers disease has been deadly to black walnut planted in the western US, a few points should be remembered:

- Western walnut burls, stump-wood, and logs have been marketed to eastern veneer and lumber processors for several decades.
- The evidence suggests that both the insect and fungus are natives of the southwestern US and Mexico and have had the opportunity to move east through the range of Arizona and Texas walnut into the range of eastern black walnut, but apparently have not done so.
- Black walnut is essentially an exotic species in the western US.

A meeting of people interested in the thousand canker disease problem was held in St. Louis, MO on November 3 and 4, 2009 to provide updated information on the disease and provide input for future research, monitoring, and policy activity. This summary is based on the information from that meeting.

The general consensus was to do what could be done to prevent introduction of the beetle and fungus into the native range of black walnut, to develop effective sanitation techniques that would allow marketing or disposal of western walnut without spreading the disease, and to continue researching approaches to manage the disease and host trees. People should not despair and stop managing their walnuts because of this disease. We don't know if this beetle or fungus can become established or cause disease in the native range of black walnut.

The lead organization in the effort to control thousand cankers disease will be the USDA Forest Service Forest Health Protection section.

(Source: Adapted from a white paper written by Manfred Mielke, USDA Forest Service Plant Pathologist, Northeastern Area, St. Paul, MN and Lenny Farlee, Extension Forester, Purdue University, West Lafayette, IN)

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