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In This Issue

Lumber Market News	1
Hardwood Lumber Price Trends—Green	2
Hardwood Lumber Price Trends—Kiln Dried.....	2
The Independent Contractor Definition Dilemma Continues.....	3
Is There Still Room for Circle Saws in the Sawmill?.....	4
Nebraska Forestry Industry Spotlight.....	6
The Trading Post.....	7
Using a Kiln Schedule.....	7
Timber Sales.....	8
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The Nebraska Forest Service publishes *Timber Talk* four times annually (February 1, June 1, September 1, and November 1) to serve 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, 203E Forestry Hall, P.O. Box 830815, Lincoln, NE 68583-0815. Phone (402) 472-5822, FAX (402) 472-2964.

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Lumber Market

HARDWOODS

Northern. There is a much improved supply situation for most species. The common grades continue to generate steady results in terms of buyer participation in the marketplace. However, business is more controlled and competitive for upper grades.

Secondary manufacturers purchasing green lumber are quite active, whereas, those operating from purchased kiln-dried materials are buying for short-term or immediate needs. Yards are also tightly controlling purchases to avoid excess inventory.

Southern. The dominant theme for producers, resale operations, and secondary manufacturers is lack of sustained business. Finished goods sales are off due to slow residential construction and economic uncertainty. If buyers do not have adequate markets for products, mills and resellers do not have consistent outlets. Increasing supplies of green lumber and kiln-dried inventories have impacted pricing for a number of species, grades and thicknesses.

Appalachian. There is optimism about business even in this market climate made difficult by a weak economy and struggling housing industry. Even with a surge in residential construction the first quarter of this year, housing starts remain at historically low numbers. Residential construction is projected to increase from approximately 600,000 starts this year to 900,000 next year (+50%). Economists estimate that static demand for new homes is between 1.4 and 1.6 million units per year. For businesses that have survived the downturn during the past few years, opportunities exist for a strong recovery. There is also realization that exports, to China in particular, can be a difference maker in bolstering business. The question applied to each of these possible develops is “when”? In truth, no one knows.

(Source: Condensed from *Hardwood Market Report*, October 16, 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

Species	FAS				#1C				#2A			
	9/10	6/10	3/10	12/09	9/10	6/10	3/10	12/09	9/10	6/10	3/10	12/09
Ash	800	785	705	675	570	550	485	460	405	395	355	345
Basswood	730	730	700	685	385	385	360	330	205	205	205	205
Cottonwood	625	605	605	605	425	405	405	405	220	220	220	220
Cherry	1530	1530	1530	1530	655	655	655	625	330	330	330	320
Elm	635	635	635	635	420	420	420	420	210	235	235	235
Hackberry	475	475	475	475	455	455	455	455	265	265	265	265
Hickory	655	640	615	615	530	530	500	500	405	405	375	350
Soft Maple	930	1000	960	960	585	600	545	505	325	325	300	260
Red Oak	1095	1135	1060	935	770	770	665	610	575	575	470	450
White Oak	1035	1035	1010	940	645	645	570	500	500	500	395	360
Walnut	2060	1975	1820	1800	1095	1025	850	765	675	605	425	360

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, unselected soft maple, 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

Species	FAS				#1C				#2A			
	9/10	6/10	3/10	12/09	9/10	6/10	3/10	12/09	9/10	6/10	3/10	12/09
Ash	1165	1090	1060	915	890	850	775	685	695	685	650	590
Basswood	985	1000	990	875	585	575	550	500	415	415	415	385
Cottonwood	740	740	740	740	545	545	520	510	—	—	—	—
Cherry	2260	2260	2260	2260	990	930	890	860	615	605	565	555
Elm	—	—	—	—	—	—	—	—	—	—	—	—
Hackberry	—	—	—	—	—	—	—	—	—	—	—	—
Hickory	1110	1090	1030	985	945	915	865	825	790	780	735	695
Soft Maple	1200	1315	1340	1340	830	830	785	735	595	595	555	525
Red Oak	1550	1535	1380	1210	1140	1140	965	820	865	850	760	620
White Oak	1650	1605	1540	1360	955	920	865	740	795	765	695	615
Walnut	3045	2930	2705	2690	1750	1635	1450	1340	1185	1010	795	755

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, unselected soft maple, 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.)

The Independent Contractor Definition Dilemma Continues

The long-running controversy over properly labeling workers and independent contractors shows no signs of easing. But what is in a label? In fact, why do so many loggers—and those who employ them—appear to covet the label of “independent contractor?”

FedEx recently agreed to settle a California lawsuit in which workers claimed they should have been treated as employees, rather than as independent contractors. A whopping \$26.8 million was reached in a case involving employees of RPS, which later became FedEx Ground, who claimed lost overtime and expense reimbursements because of their classification as independent contractors.

Fortunately, FedEx announced earlier that the Internal Revenue Service had withdrawn a proposed \$319 million tax penalty related to its contractor model. However, how these workers and other workers are classified for IRS tax purposes has major tax consequences because employees and independent contractors are treated differently for federal tax purposes.

How Independent is “Independent?”

At its most basic, the employee-independent contractor controversy boils down to the argument that by labeling a logger or other worker as an independent contractor rather than as an employee, an employer can avoid the voluminous paperwork and payroll tax burden. Loggers and other workers in the timber industry who are independent contractors can exclude certain types of compensation from income or deduct work-related expenses.

Among the many advantages to being self-employed are:

- You are your own boss
- You may be paid more than employees
- No federal or state tax is withheld from your pay
- You can take an increased number of business deductions.

On the downside, being a self-employed worker is not always a bed of roses. The major drawbacks include:

- You have no job security
- You might not get paid
- You must pay self-employment taxes
- You may be personally liable for business debts
- You have no employer-provided benefits
- You have no unemployment insurance benefits
- You have no employer-provided workers’ compensation
- You have fewer labor law protections.

As mentioned, employers prefer to use independent contractors because they are not subject to payroll taxes and need not be included in fringe benefit programs such as health insurance, retirement plans and the like. Of course, employers are facing increasing scrutiny over their use of independent contractors and not just by the IRS. State agencies for unemployment and workers’ compensation are also jumping into

the fray. And, don’t forget workers upset at being excluded from a benefit program as in the FedEx lawsuit.

Backing It Up

It is critical that logging contractors and sawmill owners correctly determine whether an individual providing services is an employee or independent contractor. Potential disaster awaits any business when a worker is classified improperly for tax purposes. Improper classification for tax purposes can cause problems that could financially destroy the business.

A sawmill or logging operation must, as mentioned, withhold income tax on employees’ wages, and must pay Social Security Tax (FICA), as well as withhold the employees’ portion of FICA. Employers are also responsible for unemployment tax (FUTA) and must provide the employee with a Form W-2, “Wage and Tax Statement,” showing the amount of wages and tax withheld for the year.

Complex Rules = Uneven Victories

A dispute with another employer over whether a worker was an employee or an independent contractor recently drew the attention of the IRS and the U.S. Tax Court. In this situation, the taxpayer performed services as a project manager working on a project-by-project basis. Although he had the authority to supervise his employer’s personnel, he did not have hiring and firing authority. He had a company credit card as well as a business card and invoiced the company for services rendered per project. He received a Form 1099-MISC for the years he worked for the company.

Because of the degree of control, the lack of permanency in the relationship and the skill required, when the worker drew the attention of the IRS by failing to file a tax return one year (and failed to make estimated tax payments); the IRS labeled the worker as an independent contractor, liable for self-employment tax. The U.S. Tax Court, for its part, was not convinced that a job that continued for five years could be “impermanent.”

The Tax Court labeled the worker an independent contractor. While the fact that he disputed his employment status with the company did not relieve him of his obligation to pay estimated taxes and file tax returns, the Tax Court found the worker not liable for the self-employment tax. Of course, he was liable for income taxes and penalties for failure to make estimated tax payments as well as for failure to file or pay.

The Blame Game

Who decides whether a worker is an employee or an independent contractor? Initially, it is joint decision of the worker and an employer. However, this decision is subject to review by various government agencies, including the IRS, state workers’ compensation and unemployment compensation agencies.

(continued on page 4)

Generally, the IRS is more likely to classify a worker as an independent contractor if the worker:

- Can earn a profit or suffer a loss from the activity
- Furnish the tools and materials needed to do the work
- Is paid by the job
- Works for more than one firm at a time
- Invests in equipment and facilities
- Pays his or her own business and traveling expenses
- Hires and pays assistants, and
- Set their own working hours.

Does that definition work for you or for the independent contractor in your life?

Defining the Undefinable

Surprisingly, the term “independent contractor” is not defined in our tax laws. Fortunately, loggers and other workers can obtain a written determination from the IRS regarding the status of a particular worker as an employee or independent contractor for purposes of Federal employment taxes and income tax withholding.

For those who remain uncertain whether a worker is an employee or an independent contractor, the IRS has a form, Form SS-8, “Determination of Worker Status for Purposes of Federal Employment Taxes and Income Tax Withholding,” that can be filed by either the timber processing business or the worker.

The form allows the IRS to review the facts and circumstances and officially determine a worker’s status. Unfortunately, it can take at least six months to get a determination. However, a sawmill or timber processing operation that continually hires the same types of workers to perform particular services may want to consider filing this form.

Worker Relief

For workers who believe they have been improperly classified as independent contractors by their employer, there is also a form, Form 8919, “Uncollected Social Security and Medicare Tax on Wages,” to help them figure and report their share of uncollected Social Security and Medicare taxes due on their compensation.

A Safe Haven for Employers

Should the ever-vigilant IRS discover that an employer has incorrectly labeled a logger or worker as an independent contractor an employer can avoid employment taxes by meeting the relief requirements of Section 530 of our tax law. In order to qualify for that relief, however, an employer must meet all three of the following requirements:

- Have consistently treated the worker or similar workers as independent contractors
- Have filed all required forms, and
- Had a reasonable basis for treating the worker as an independent contractor, either because of industry practices, court rulings, or because prior tax auditors never questioned the practice.

The Worker Classification Settlement Program (CSP)

Under the IRS’s Worker Classification Settlement Program (CSP), an IRS examiner must first determine whether the employer is entitled to relief under the guidelines for determining the employment status of a worker. Section 530 of the tax law generally allows a so-called “service recipient” to treat a worker as not being an employee for employment tax purposes, regardless of the worker’s actual status under the common-law tests, unless there is no reasonable basis for such treatment, or the service recipient fails to meet certain requirements.

If a service recipient is entitled to Section 530 relief, under CSP there is no assessment and the service recipient can continue to treat the workers in question as independent contractors. If the service recipient desires to begin treating the workers as employees, it can agree to do so in the future (no later than the beginning of the next year) without giving up its claim to Section 530 relief for earlier.

It is no secret that the self-employed and independent contractors contribute greatly to the ever increasing “tax gap,” the difference between the taxes owed and the taxes actually paid. Thus, with the IRS and quite a few other government agencies looking over their shoulders, every sawmill, logging and other timber processing operation, along with their workers, should carefully weigh the options before determining who is and who isn’t an independent contractor. The best time to make this determination is before one of those government agencies, the courts or the IRS make it for you.

(Source: *The Northern Logger*, January 2009. Article written by Mark E. Battersley; to subscribe to *The Northern Logger*, Phone 315-369-3078, email: npetrie@northernlogger.com)

Is There Still Room for Circle Saws in the Sawmill?

While the dependable chisel bit saw is no longer the mainstay of the sawmill business, as it was decades ago, it still has a strong, loyal, and profit-making following. Many small to mid-size sawmills continue to find the inserted-tooth wood (ITW) saw a dependable, low-maintenance, and economical tool. While the standard 9/32 inch (0.280 inch) kerf on an ITW saw may sound wasteful when compared to the 0.082 inch of a thin band, the ITW still has its economic advantages and admirers.

Some Advantages

But why, one might ask, would a sawmiller be willing to put an extra 0.200 inch of wood fiber into saw dust. Of course, it comes down to the profitability equation of each operation. But the ITW saw does have some advantages over its narrow-kerf band saw brethren. In today’s small to medium-sized sawmill business, sawmiller are frequently processing smaller diameter logs than their predecessors. Smaller diameter logs mean the likelihood of squeezing an extra dozen or so board feet out of a log by decreasing kerf by 0.200 inch per line is not all that great.

And for small logs, where the value of lumber is not high (compared to larger logs), the trade-off between higher production and yield loss with an ITW begins to favor higher production. This favoring of higher production with an ITW is even stronger if the mill is manufacturing a large timber, cant, or railroad tie from the log.

When first opening a log, this larger kerf is actually in the slab or non-lumber product, so it does not affect the amount of lumber that is produced. In fact, many medium and larger mills will use a large-kerf circular saw to open the log and make a large cant. The cant is then re-sawn with a band re-saw. This operation allows high production and higher yield.

Other Benefits

How about productivity or up time? Most mills using ITW saws can cut for half a day at a time or more before sharpening their saw. And when it comes to sharpening, how about 10 minutes or so while the saw blade remains on the sawmill for an ITW? A well managed operation can usually fit the sharpening process into regularly scheduled down time. And whether it's a hand file guide or jockey grinder, the sharpening process remains "on site." When an ITW saw is shut down for sharpening, it can often be performed by the sawyer in short order. That direct connection between the sharpener and the user helps ensure that ITW saws provide the productivity and up time to make sawmilling a positive income source not just a hobby.

The large circle saw will saw a 12-inch-long log in about 3 seconds. That is, each inserted tooth can saw about 0.110 inch. So 50 teeth on a 48-inch-diameter saw spinning at 500 rpm (about 8 revolutions or 450 teeth per second) means a saw can cut about 50 inches per second if there is enough power and the equipment is heavy enough. (Most sawmills are designed to cut this fast with this blade.)

Maintenance

ITW saws provide durability of investment. They are not "throw away" saws. A well maintained ITW saw can often last 10 years or more. The key phrase in the prior sentence is "well maintained." That is probably one of the biggest threats to the long-term survival of this technology. Because ITW saws can run so well for so long, some users tend to overlook the need for basic total productive maintenance (TPM) on this total and the associated machining center.

A well maintained ITW saw has saw guides. A guide is not used to push the saw, but rather to guide it and prevent catastrophic deviations. (By the way, an ITW saw is more than capable of cutting through knots, alive or dead, wet or dry, without any problems, including blade wandering or saw breakage.)

A well maintained saw has properly machined saw collars that fit and support the saw.

A well maintained saw has proper side clearance and well maintained shanks to properly control and expel sawdust. Sawdust must not be allowed to spill to the side of the saw and heat it. When running carbon-steel saw bits, the bits must be swaged periodically to maintain adequate side clearance. Swaging, while not physically difficult, does require a level of skill that has become somewhat of a "dying

art." Thankfully, ITW users can turn to carbide-tipped bits. Carbide-tipped bits maintain proper side clearance without swaging. But whether carbon steel, hard chrome coated, or carbide tipped, it is critical that the cutting edge of the ITW saw, like any sawmill cutting tool, be maintained with proper sharpness and cutting angles.

But even a "well maintained" saw has to deal with the realities of modern log supplies, including trash in logs. One key advantage for primary breakdown of ITW saw versus narrow-kerfs band saw blade is its ability to "cut through" any number of interesting artifacts found in logs from suburban or even formerly rural woodlots. All sawmillers can speak to the interesting artifacts found in logs. From musket balls, to barbed wire to horseshoes, a little iron in a saw log lot is not unusual. The beauty of an ITW saw is that in all but the most extreme cases, contact with trash in a log means only a few minutes of downtime to hone an edge or insert a few new saw bits. And the cut being made can usually be finished. Anyone who has had to deal with removal of a portable sawmill band saw blade from a log can attest to the time lost on this exercise.

But in the end, that 0.200 inch of extra sawdust from an ITW saw—as compared to a band saw—continues to have a negative impact on the long-term survival of bit saw technology. As with all things in business, trade-offs need to be considered. The ITW saw tends to require less "day-in, day-out" maintenance than a portable sawmill blade. But when an ITW blade needs maintenance a good quality "Saw Doctor" can sometimes be a challenge to locate. But before we all decide the ITW saw is a past technology, let us remember that there is still a healthy buggy whip and horseshoe business in North America. Is it what it once was? Of course not. But there are a substantial number of folks who still participate in that business.

Maybe those sawmillers who continue to use the ITW saw for all the benefits it provides at a primary breakdown and slabbing have the best of both worlds. An increasingly popular choice is to use the ITW to three-or four-side a cant and then feed it to a band saw. These sawmillers get the productivity and strength of the ITW saw when breaking open logs from "suspect" woodlots and the benefits of thin kerf band saws in clean cants and pulling out extra board feet.

For those interested in pursuing the art of swaging, hammering, maintaining, and tensioning ITW saws, there remains a steady demand and a few centers of learning for the art. The population of quality "Saw Doctors" for ITW saws continues to diminish. But the few that this author knows take pride in their profession and in helping sawmillers succeed with ITW technology. Likewise, there are booklets and schools available to help teach the diminishing skill set of ITW maintenance.

Yes, the demise of the ITW saw has been clearly exaggerated. While it doesn't carry the load it did when it was the primary technology of our predecessors, it does fill a valuable and profitable niche in breaking down logs, minimizing maintenance, and preserving the art of saw doctoring, which is at the core of our sawmilling heritage.

(Source: *Independent Sawmill & Woodlot Management* magazine, Oct/Nov 2007. Article written by Dave Purinton, Product Manager with Simonds International. For more information or to subscribe to IS&WM, call: 1-88-762-8476 or website: www.sawmillmag.com)

Nebraska Forestry Industry Spotlight



HEARTLAND NUTS 'N MORE



Based upon 35 years of research conducted by Nebraska Nut Growers Association in cooperation with the University of Nebraska–Lincoln, numerous landowners have planted walnut and pecan trees for commercial nut production in southeast Nebraska and adjacent states. As these trees matured and began to produce crops of nuts, the lack of good local markets for selling high-quality nuts became apparent.

In 2005, several members of Nebraska Nut Growers Association (NeNGA), recognizing the marketing problem, formed Heartland Nuts 'N More (HN'NM) as a cooperatively-owned business to assist nut growers sell their nut products.

Larry Martin, an active member of Nebraska Nut Growers Association, said they always planned on starting a cooperatively-owned business, but one of the first things needed was a core group of supporters. Initially, 32 members made financial commitments to form the cooperative. HN'NM now boasts 46 members from four states: Nebraska, Iowa, Kansas, and Missouri.

Their financial commitment provided opportunities to secure grants from a variety of sources. "If we hadn't received those grants, we probably wouldn't have started up at all," said Martin.

Grant funds were used to purchase a variety of equipment. A mechanized "tree shaker" loosens nuts from trees, allowing the nuts to be collected on tarps or plastic. HN'NM also has a mechanized "nut harvester" to collect nuts off the ground.

Collected nuts are brought to the coop's headquarters building in Valparaiso, NE, which also serves as the nut processing plant where a series of machines crack, sort, and package the nut meats. The nuts are stored in a cooler until sold.

The highest quality black walnuts and pecans are sold in several local stores in Omaha and Lincoln including, Boiler Room, Whole Foods, Open Harvest, Ideal Foods, and Grow



Larry Martin processing nuts.

Nebraska. Bakers Candies in Greenwood, NE, have used HN'NM nuts in their black walnut clusters for a several years. Martin said, "the clusters are just flying out the door!" HN'NM is also currently negotiating with Prairie Land Dairy to use the cooperative's black walnuts in some of their ice cream.

Martin said they advertise in several magazines, including Nebraska Life Magazine. They are also members of other cooperatively-owned businesses, including Buy Fresh Buy Local Nebraska® and Grow Nebraska. Through Grow Nebraska they sell nuts in both Kearney and Grand Island stores.

HN'NM is planning to expand their product line to use some of the waste/by-products created when the walnuts and pecans are cracked. Products from the husk, shell, and black walnut juice are already available.

A by-product using the black walnut husk is a dietary supplement pill that is used as an intestinal cleanser. The black walnut juices can be used as a wood stain or a tanning stain.

The very hard shell can be ground into size grades for various products. The course grades are often used for "sand blasting" purposes. The advantage of ground walnut shell is that the pieces stay intact and sharp so they can be reused four to five times, rather than just once like sand. Martin added that one of

the medium grades is used as a facial cleanser and the finest grade is used in dental polishing.

Walnut shell is also being pelletized and sold for fuel in wood pellet stoves. In fact, the HN'NM building is heated with pellets made from the shell of walnut and pecan.

As with any new business, HN'NM still has some major hurdles to overcome to become profitable, but there seems to be a market for the high-quality nut meats and the organization is optimistic about the future.

HN'NM products can be purchased through their website or through the Nebraska Nut Growers Association's website, www.nebraskanutgrowers.org.

Heartland Nuts 'N More can be contacted at: 206 West 2nd Street, Valparaiso, NE 68065; phone: (402)784-6887; website: heartlandnutsnmore.com.

The Trading Post

The *Trading Post* is provided as a free marketing service for forestry industry. Only forestry-related advertisements will be accepted with the exception of products manufactured in the normal course of your business. 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

Circular Sawmill. Includes power unit and two 48-inch insert tooth blades. Contact: R&R Sawmill at (308) 569-2345.

Planer. 24" Goodall & Waters planer. 2 knives. Includes 5 HP electric motor. Manufactured about 1890 in Philadelphia. Best offer. Contact: Carl Hinds, 450 Gulf Rd., S. Sioux City, NE 68776. Phone: (402) 494-2127 or cell (712) 281-1472.

Wanted

Belsaw Woodworking Planer. Model 9103. 12¼". **Bandsaw Lumber Mill.** Push type. Contact: Charles Cressman, 231 Walnut St., Butte, NE 68722-3518. Phone: (402) 775-2468.

Logs and Slabwood. Cottonwood, cedar and pine. 4" to 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@AWE.com

Straight Line Ripsaw. Also, **Power Wedge or Dynamite Wedge** for splitting large logs. Contact: Carl Hinds, 450 Gulf Rd., S. Sioux City, NE 68776. Phone (402) 494-2127 or cell (712) 281-1472.

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. Certified Stihl chainsaw sales and service. 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.

Using a Kiln Schedule

Nine basic principles govern the kiln drying of hardwood. These principles must be understood before standard kiln schedules can be used successfully.

1. The standard schedules for hardwood lumber provide a temperature and relative humidity (or Equilibrium Moisture Content or wet-bulb) that should be used at a given moisture content (MC) level. The moisture content level is the average MC of the wettest half of all the kiln samples. Because the kiln typically contains 10 or 12 samples, the wettest five or six samples are used for kiln schedule control. From time to time, an operator will use only the wettest sample instead of the wettest half. Using only the wettest sample is extremely conservative in most cases and is not necessary.
2. The MC of the kiln sample is the average MC for the entire piece, not just the core or shell MC.
3. In addition to measuring the kiln sample's MC, the sample is also inspected to ascertain whether any degrade (checks, stains) is developing. The visual inspection is often the first indication that conditions in the dryer are not what they should be.
4. When the lumber is above 40% MC, the drying quality is monitored and predicted by measuring the rate of drying – that is, the percentage of MC loss per day. This is not the average rate, but rather the individual daily rate of each sample. For "normal" wood, each species and thickness has a published safe drying rate. Exceeding the drying rate of any piece of lumber at higher MC's greatly increases the risk of drying degrade such as splits, checks, and honey-

comb. Operating substantially under this rate is experience and may increase the risk of cupping and stain.

5. A dryer control system that frequently has a wide fluctuation in conditions (that is, overshoots or undershoots the desired values of temperature) is much more likely to develop short-term drying conditions that will damage the wood. With each out-of-control excursion, the damage accumulates and the final result is a serious loss of quality.
6. Published kiln schedules for almost all species are conservative.
7. When drying hardwood for high-value uses such as furniture, millwork and cabinets, the final MC must be controlled to within narrow limits. The wood is typically dried to 6% to 7.5% MC. Over-drying any piece must be avoided as this will increase shrinkage, cupping, and machining defects (especially planer splits), and gluing problems. At the same time, under-drying must be avoided at all costs, because these pieces will shrink and develop end checks and open glue joints.
8. After kiln drying, MC of individual boards varies and an equalizing period is required to reduce variability to acceptable limits.
9. Drying stresses (also called case hardening) develop during kiln drying and must be relieved by a high-humidity conditioning step to avoid immediate warp when machining.

(Source: *Independent Sawmill and Woodlot Management* magazine, March 2007. Article written by Gene Wengert, professor emeritus, University of Wisconsin-Madison and President of The Wood Doctor's RX, LLC in Madison, WI. For more information or to subscribe to IS & WM, call: 1-888-762-8476 or website: www.sawmillmag.com)

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 appraised or 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.

Item	Forester/Date	Contact
1. Walnut (55 trees) 18,855 bf Veneer 2 - 5,551 bf Veneer 3 - 4,482 bf Lumber 1 - 3,444 bf Lumber 2 - 2,916 bf Lumber 3 - 2,462 bf Sealed Bid. Bid Opening November 19, 2010.	Rasmussen 10/10	Merle White 604 Stage Coach Rd. S. Sioux City, NE 68776 (402) 494-6460 (712) 490-4886 Location: Dakota County
2. Cedar (6 logs) 14-22" diameter, 18-23' long		Alvin Duba 2078 County Rd. 1900 DeWitt, NE 68341 (402) 821-2481 Location: Saline County
3. Walnut (36 trees) 7,133 bf Veneer 2 - 520 bf Veneer 3 - 1,214 bf Lumber 1 - 1,158 bf Lumber 2 - 1,688 bf Lumber 3 - 2,553 bf Redcedar (100 trees) 8-12" dbh, 30' tall Sealed Bid. Bid Opening December 1, 2010.	Rasmussen 10/10	Mike Keller (308) 981-0652 mkeller_70@yahoo.com Location: Dakota County
4. Walnut (57 trees) 6,973 bf Veneer 3 - 1,089 bf Lumber 1 - 1,275 bf Lumber 2 - 1,459 bf Lumber 3 - 3,150 bf Sealed Bid. Bid Opening December 1, 2010.	Rasmussen 10/10	Del Lieber 512 E. 31st St. S. Sioux City, NE 68776 (402) 494-4311 (712) 333-2022 Location: Dakota County

*You know you're
from Nebraska if...*

your kid's Halloween
costume is designed to fit
over a snow suit.