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NEBRASKA FOREST SERVICE

TIMBER TALK

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In This Issue

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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.
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Lumber Market

HARDWOODS

NEWS

Northern. Markets continue with a cautious approach toward purchases. There is an overriding sense of uncertainty about the economy, if not outright pessimism. Despite the enormous amount of supply-side correction, perceptions of business conditions are tainted. New home inventories provide such an example. The number of completed units available for sale is hovering near the record low level (data available to 1959). Yet, the mindset is that new home inventories are too high. Another justification for caution: cash is tight. In the meantime, hardwood supplies are contracting with volumes declining at each stage within the processing stream. Resale operations and most secondary manufacturing sectors are experiencing the declines firsthand. In general, prices are firming and are moving higher for selective species and grades. In a broader view, the business environment for Northern hardwoods is competitive and challenging.

Southern. One specific item impacting current and future plans — working capital. Banks have tightened lending, and most seem to have a negative position on the wood products industry, in particular. Businesses in this industry have faced a prolonged period of weak demand, primarily from contraction in residential construction and remodeling. Increasing raw material inventories, be it timber, logs, or lumber, will be difficult if possible.

Appalachian. The length and severity of the housing market and economic downturn have been well documented. The negative effects on sales of cabinets, flooring, furniture, and other hardwood interior fittings and furnishings are well known. Secondary manufacturers reduced operating hours, finished goods inventories, and raw material receipts to survive the protracted business decline. Over the past three plus years, demand has fallen significantly. At the same time, sawmill operators took similar steps to remain in business. Contracted production has helped ease supply-based pressures. As painful as the process has been, estimates show sawmill output has declined below the market's needs. While business to domestic and international markets is not robust, lower production of green stocks and declining kiln dried inventories have reversed the downward pricing trend for a number of species, grades, and thicknesses.

International. There are signs that the global recession has eased. Most analysts attribute improvements in economic conditions to government outlays rather than growth from the private sector. The World Economic Outlook (WEO) report states that financial conditions have improved more than expected due to government

(continued on page 3)

Hardwood Lumber Price Trends—Green

	FAS				#1C				#2A			
Species	**9/09**	**6/09**	**3/09**	**12/08**	**9/09**	**6/09**	**3/09**	**12/08**	**9/09**	**6/09**	**3/09**	**12/08**
Ash	665	625	640	655	450	420	435	450	325	295	305	325
Basswood	685	685	685	685	330	340	350	350	205	205	205	205
Cottonwood	605	605	605	615	405	405	405	415	220	220	220	220
Cherry	1530	1550	1710	1895	625	625	655	790	320	320	340	425
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	630	650	500	490	490	490	350	350	350	350
Soft Maple (UNSD)	960	960	960	1100	505	480	515	545	260	260	270	280
Red Oak	845	785	785	930	525	510	520	585	430	420	430	490
White Oak	940	940	940	1065	490	490	500	570	350	350	360	400
Walnut	1800	1800	1870	2010	765	765	830	1065	360	360	395	520

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

	FAS				#1C				#2A			
Species	**9/09**	**6/09**	**3/09**	**12/08**	**9/09**	**6/09**	**3/09**	**12/08**	**9/09**	**6/09**	**3/09**	**9/08**
Ash	915	905	905	905	675	685	680	680	590	580	580	560
Basswood	875	890	915	950	500	520	550	575	395	395	395	395
Cottonwood	740	740	755	755	510	510	520	520	—	—	—	—
Cherry	2260	2260	2415	2625	860	860	905	990	555	555	580	700
Elm (No. soft grey)	—	—	—	—	—	—	—	—	—	—	—	—
Hackberry	—	—	—	—	—	—	—	—	—	—	—	—
Hickory	985	985	1055	1100	825	825	860	870	695	695	735	745
Soft Maple (UNSD)	1355	1355	1475	1600	725	715	750	750	525	515	540	540
Red Oak	1150	1095	1145	1310	785	785	820	945	610	610	645	730
White Oak	1340	1340	1490	1660	715	715	760	895	595	585	610	700
Walnut	2670	2670	1790	2905	1320	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	9/090	6/09	3/09	12/08	9/09	6/09	3/09	12/08	9/09	6/09	3/09	12/08	9/09	6/09	3/09	12/08
Ponderosa Pine*	NA**	451	491	541	NA**	346	229	217	NA**	409	397	382	NA**	216	208	262

*Rocky Mountain Ponderosa Pine
**Not available due to insufficient producers.
[1]Selects = D and Btr Selects, Stained Select, Mld and Btr.
[2]Shop = 4/4 Factory Select - #2 Shop.
[3]Common = #2 and Btr Common.
[4]Dimension, Timbers and studs = Std and Btr, #2 and BTR Dimension and Timbers.
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: ww.wwpa.org).

Lumber Market *(continued from page 1)*

stimulus plans. However, growth is uneven throughout the world. Government intervention during this financial crisis has helped maintain a level of stability in international trade, exhibited by improved shipments of hardwood lumber from the U.S. to major trading partners. A declining U.S. dollar has also helped bolster exports. Year-to-date, the U.S. dollar has fallen 3.7% against the euro. Some economists predict one euro could equal $1.50 by the end of 2009. Since February, the Mexican peso gained 7.2% against the U.S. dollar.

USDA Foreign Agricultural Service data point out stronger hardwood lumber shipments in July versus previous months in 2009. However, exports of U.S. hardwoods declined 29.2% the first seven months of 2009 versus 2008. Canada edged out Mexico as the top destination of U.S. hardwood lumber though shipments across the northern border have fallen 40.9% year-to-date. Still, exports to Canada totaled an impressive 111.7 million board feet. China comprised 22.4% of total exports of U.S. hardwood (94.7 million board feet), but shipments were off 17.0% from 2008. Together, Canada and China account for 48.9% of total U.S. hardwood lumber exported through July 2009.

White Oak maintained the top spot, with shipments totaling 83.0 million board feet in the first seven months of this year. Red Oak exports fell 31.0% during this time period, and Poplar declined 29.1%.

(Source: Condensed from *Hardwood Market Report,* Sept. 26 and Oct. 17, 2009. For more information or to subscribe to *Hardwood Market Report,* call (901) 767-9216, email: hmr@hmr.com, website: www.hmr.com)

Important Trivia

What is the only food that doesn't spoil?
Honey!

Know the Value of Your Logs

Log costs make up approximately 60-70% of the total costs of sawmilling operation; therefore, determining the appropriate value to pay for logs can significantly impact the bottom line.

Most sawmills base the purchase price of logs on what the local market values are or what they must pay to get the resource into the mill, rather than on what the associated profit from the logs are. Sawmills are typically set up to profitably handle a certain size and quality of raw materials. Logs that fall outside of the ideal size and quality range actually lead to losses for the mill; therefore, knowing this range is vital to maintaining profitability.

It seems that log costs continue to increase each year as lumber prices remain stagnant or increase at a slower rate, leaving a shrinking opportunity for profit. As the trend for increasing raw material costs continues, it becomes an even greater priority to be able to manage your raw material cost accurately.

Many mills approximate log values by comparing the value of the total volume and grade of products produced from a single run or multiple runs for a particular species. While this method gives an indication of the bottom line, it does not account for the variability due to diameter, length, and grade (quality) of logs that went into the mill. Luckily for most mills there are logs that are processed at higher profits that offset the losses by those that produce little profit. While the bottom line shows a profit, in reality, a loss has been incurred since many of the logs did not yield products that had enough value to compensate the prices paid.

Knowledge about the value produced for each log grade and size would allow greater decisions to be made about which logs to process and which to merchandise. The ideal log to process should have: lower purchase cost, high grade yield and high volume yield for the specific markets that you serve. Poorer logs have higher processing costs, excessive purchase price, maybe undesirable species or hidden defects. They may not yield material that meets the need of your specific markets.

Most mills cannot afford to buy only ideal and good logs for their unique market. But if they knew what particular

log types were processed at a loss and the level of loss was determined, they could better determine which logs should be processed and which should be merchandised. Also, many log grades and values associated with those grades often do not reflect the value of finished products from those grades. Knowing your actual product output would allow a mill to structure letter log grades and grade prices.

Determining the actual value of a log comes from knowing all the costs associated with the production and sale of the material and subtracting that from the value of material processed, with some profit margin included. To determine this value you must know:

1. What your processing costs per minute are;
2. How long it takes to process a particular size and quality of log; and
3. What the value of the output of that log quality and size are.

Determining Costs

Typical hardwood sawmill operating costs vary between $4.50 and $20 per minute based on mill size and the technology used. With such a large potential range of operating costs, having knowledge of your actual operating cost is vital for planning and controlling sawmill operations. For those interested in methods of how to determine your operating cost. I recommend obtaining a copy of COST(Cost of Sawing Timber) from the USDA Forest Service, which is a stand alone computer program that calculates the cost-per-minute to operate your sawmill. To obtain a free copy of COST, contact the USDA Forest Service in Princeton, West Virginia by telephone 304-431-2700 or visit their webpage: http://www.fs.fed.us/ne/princton/.

Another approach to determining sawmill operation is the cost management system developed by Robert Pajala at the University of Wisconsin. A copy of the publication *"A Simple Profit Planning and Cost Management System for Small Sawmills"* by Robert Pajala can be downloaded at: http://www.extension.umn.edu/distribution/naturalresources/DD6075.html.

Processing Time and Output

Once you know the cost of processing, it would seem that obtaining the actual value of logs would be a simple process; however, it is made complex by the difficulty in separating the output of individual logs or groups of logs. The larger the variability of logs going into the mill the greater the variability of the value estimate when you are done.

I propose three different methods to determine the value or products produced from a log or group of logs with similar characteristics and the time required to produce those products:

1. A batch study
2. Grade yield and volume study and
3. The "continuous" study.

The first method consists of processing a batch of logs with the same grade, but with similar length and diameter through the mill. The time to process the logs and the product output is measured. To simplify measurement, processing cost are often associated with the amount of time the log spends at the head rig. If a sawmill is used, this measurement becomes more complex as the time the log is being processed at the resaw must be accounted for. This measurement usually is taken only when the cant is being sawn, not as the cant is moving in material handling.

A value for all lumber and cants is then compared to the cost to process those logs. Batches of other log grades and sizes are then run for comparison. All materials must be accounted for and cleared before the next batch is processed. The advantage of this method is that large batches can be run so that little special effort must be made for the study.

The main problem with this method is that the more the variability included in the batch of logs, the less accurate the log value information. For example, if you were determining the value of three clear face grade logs compared to two clear face grade logs, it is known that the diameter and length difference will also lead to lumber value differences.

The second method is to conduct a large scale grade yield and volume study. In this study, log of different sizes and grades can be processed at the same time, but the lumber from each log must be tracked through the mill (you need to measure the processing time, volume and value of lumber produced). The more simple and linear the production flow in the mill, the easier this type of study is to conduct. This type of study is not practical in mills that contain multiple head rigs and resaws, since it is very difficult to reliably determine processing time and track the origin of each board.

With multiple sawing centers, there are just too many logs in the mill producing boards at one time. One advantage of this method is that it allows for mills to continue producing without interruption; however, it does require large amounts of manpower to track and measure. Each board must be tracked and the more machines in the mill, the more effort is required to track boards.

The final method suggested is known as the "continuous" study method. This is similar to the last one in that all the lumber produced from a log is tracked and accounted for. The difference is that only one log is tracked at a time. This method allows for very accurate accounting of material and requires the least amount of personnel to conduct.

The downside is that it takes a significant amount of time to accumulate enough data to cover all logs and sizes. This method works well regardless of the mill size and number of machines. Such a study could easily be carried out by a "roamer" when not needed where one or two logs could be tracked each day.

For more information about this method, you should obtain a copy of Continuous Sawmill Studies: Protocols, Practices and Profits by Robert Mayer and Jan Wiedenbeck, from the USDA Forest Service in Princeton, West Virginia by telephoning 304-431-2700 or by visiting their web page: http://www.fs.fed.us/ne/princeton.

Once you have determined the operating costs per-minute, the total processing time for a log or batch of logs and the value of lumber produced from those logs, it is easy to calculate the actual value of your logs. Don't forget to include a desire profit margin. I have found conducting this type of exercise to be rather eye opening at many operations.

The variability within clear face log grades is often quite large, with many logs actually being marginal or not profitable within a log grade. While conducting such a study does require time, effort and some cost, the information gained will provide

you with valuable information about your log values.

Knowing the value of material produced from logs will allow you to develop more accurate log grades and assign log grade values. Also, knowledge of your break even log cost will allow you to make better decisions regarding when to process a log and when to merchandise it. Both of these decisions will directly impact your ability to remain profitable as the cost of raw material continues to increase.

(*Source: Timberline, January 2007. Author: Dr. Brian Bond, Asst. Professor, Virginia Tech University. Dr Bond may be contacted by phone at 540-231-8752 or e-mail: bbond@vt.edu.*)

Biomass Crop Assistance Program

The U.S. Department of Agriculture, Farm Service Agency (FSA) is implementing the Biomass Crop Assistance Program (BCAP) which was authorized by the 2002 Farm Bill as amended in the 2008 Farm Bill.

BCAP provides matching payments to eligible material owners for the sale and delivery of eligible biomass material (including woody biomass) to eligible biomass conversion facilities for use as heat, power, bio-based products, or biofuels. Bio-based products include intermediary products such as wood pellets.

Matching payments will be available to eligible material owners at a rate of $1 for each $1 per dry ton paid by the conservation facility, limited to a maximum of $45 per dry ton and limited to a 2-year payment duration.

The FSA began taking applications from biomass conversion facilities in July. For producers to access BCAP payments, they must own and sell eligible biomass to a qualified facility. FSA offices will assist producers with registration and eligibility requirements.

For more information on BCAP, consult the online site: http://www.fsa.usda.gov/energy.

Carbon Credits: A New Forest Income Source

People worldwide are dealing with global climate change, which has fluctuated throughout earth's history. In the past few years, the scientific community began to notice an acceleration of change with probable human causes.

Industrial processes, as well as deforestation due to demands for agricultural lands are the main factors responsible for the vast majority of carbon dioxide emissions. These emissions are the principal component of the "so-called" greenhouse gases (GHG), which is thought to be a significant factor in global climate change.

Climate change can result in severe fluctuations in temperature, precipitation, and natural disasters such as severe storms. Reducing the net carbon dioxide emission to the atmosphere is increasingly being considered by many scientists as a way of addressing the climate change.

Efforts by the international community to reduce and stabilize the accumulation of GHGs in the atmosphere resulted in the 1997 Kyoto Protocol Treaty, which involved the participation of over 150 countries including the United States. In the Kyoto Protocol, developed countries such as the United States, Canada, and the United Kingdom agreed to reduce its GHGs emissions to levels comparable to the 1990s. The United States did not sign the treaty, but set a domestic goal of cutting emissions by 18 percent on a voluntary basis by the year 2010.

Carbon Credits

Forests and tree plantations are seen as part of the solution since they store carbon at a rate 20 to 100 times higher per acre than pastures and croplands. In addition, capturing stored carbon, called carbon sequestration, through tree cultivation can become a potential source of income for farmers and the forest industry. Thus, the use of "carbon credits" was born.

Carbon credits are the credits an individual, landowners, or industry can receive for implementing a project such as tree planting, which results in high levels of carbon sequestration. Credits also represent key components of national and international emissions trading schemes that have been implemented to mitigate global warming. This provides a way to reduce greenhouse effect emissions on an industrial scale by capping total annual emissions and letting the market assign a monetary value to any shortfall through trading.

Credits can be exchanged between businesses or bought and sold in international markets at the prevailing market price. Credits can be used to finance carbon reduction schemes between trading partners around the world.

Carbon Credits Trading

The carbon credit market is now entirely voluntary in the United States, with buyers seeking credits to "offset" carbon dioxide. Legislation, backed by senators Lieberman and Warner, (the proposed Lieberman-Warner Bill) is currently under consideration in Congress. It would establish mandatory industrial emission limits implemented through a "cap-and-trade" system of carbon credits. This system would offer greater participation and reasonable pricing for carbon credits.

For example, assume an industry needs to reduce its emission 20,000 metric tons per year. Doing this will require new investments in equipment or alterations in operations levels. The industry emitter weighs its options as to whether it would be cheaper to buy an offset credit from the carbon credit market or install new equipment to reduce emissions levels. In some cases it may be more economical to invest in new machinery but in others, it may be more profitable to buy offset credits from the market.

Current Status of Carbon Trade

The ability of landowners, whether in tree farming, ranching, or perennial crop farming to enter the carbon credit trading depends on the availability of markets and on policies set forth by the government to reduce GHG emissions. The United States government allows voluntary reduction of GHGs. However, the voluntary nature of the GHGs emission program hasn't stimulated a widespread national market. Instead, there has recently been some state, regional, and private industry initiatives to reduce GHG emissions.

Last November nine Midwestern states and the Premier

(continued from page 7)

Nebraska Forestry Industry Spotlight

WOOD SOLUTIONS

Wood Solutions, owned and operated by Jerry Wagner, has only been in operation since May, 2006. Woods Solutions' sawmill operation is located one mile south of Osmond, NE. The vast majority of the logs processed are cottonwood, but other hardwood tree species are processed. Logs are mostly obtained from within a 45 mile radius of the mill. Wood Solutions does not have its own logging equipment so relies on several local independent loggers for logs. Many of the logs come from old windbreaks, county road renovations, or other land clearing sources.

In the recent past, Wood Solutions employed as many as 7 people and cut up to 10,000 board feet per day. Due to the recent economic recession, the mill currently saws 2,000 to 3,000 board feet per day with a crew of two people. Most of the material produced is 4"X 4" or 4"X 6" by 8' dunnage.

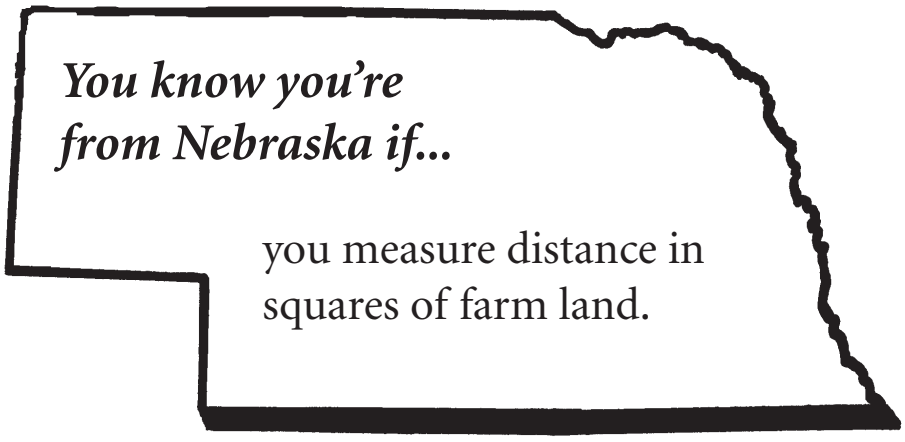
Jerry with Peterson Mill.

Wood Solutions Log Deck.

Wood Solutions sawmill is a 'Peterson swing-blade mill' with a 24 inch blade. The swing-blade mill can cut a seven foot diameter log by cutting horizontal and then rotating the blade to cut vertical. Waste slabs are chipped and sold for mulch or biomass fuel. A large volume of woodchips was recently sold for supplemental fuel at an ethanol plant in South Dakota.

As the name implies, Wood Solutions is interested in finding other uses for wood beyond traditional lumber products. Mr. Wagner has investigated woody biomass for fuel, biodiesel production from wood chips, and other potential uses for the waste or even whole logs. Like most sawmillers in the business these days, he is unsure of the future for traditional sawmill products and sees the need to find alternative uses for the wood resource we have in Nebraska. Mr. Wagner is constantly investigating alternative uses for the logs delivered to his mill.

Wood Solutions can be contacted at: P.O. Box 157, Osmond, NE 68765; phone: (402) 649-4073, e-mail: wagner@huntel.net.



Carbon Credits: A New Forest Income Source *(continued from page 5)*

of Manitoba, Canada signed the Midwestern Green House Gas Reduction Accord, an agreement to establish regional goals and initiatives to increase energy security, promote renewable energy, and reduce greenhouse gas emissions.

Among the provisions in the new accord is the development of a regional multi-sector cap-and-trade system. A cap-and-trade mechanism sets limits on the total amount of GHGs that can be emitted by certain sources and permits those entities under "the cap" to trade pollution credits or "allowances" with each other. Trading emissions in a well-designed market system creates incentives for entities to arrive at a least-cost solution for reducing their emissions.

The Regional Greenhouse Gas and the Western Climate initiatives also employ a cap-and-trade system. This system forms the cornerstone of several climate bills currently under consideration by Congress. It is notable to point out the consortium of Midwestern states that are fully participating in the multi-sector cap-and-trade component of the Accord — Illinois, Iowa, Kansas, Michigan, Minnesota, and Wisconsin, (Indiana, Ohio, and South Dakota are observers) because the total GHG emissions of this group is the largest of the three regional cap-and-trade initiatives, accounting for 14 percent GHG emissions nationwide. California is in the process of setting up a similar market. The Northeastern market aims to reduce emissions from power plants by 10 percent in 10 years.

Chicago Climate Exchange

A voluntary market is already in place. The Chicago Climate Exchange (CCX) enables firms to buy and sell carbon credits. It is a publicly traded business that provides a market-based mechanism for reducing greenhouse gas emissions. The CCX is North America's only active, voluntary, and legally binding carbon trading system. Trading operations began in 2003.

The CCX trade carbon credits in large quantities when major greenhouse gas producers voluntarily participate as carbon credit buyers to offset their emissions. The CCX then connects these emitters with carbon-storing or sequestering projects as carbon credit sellers through aggregators.

Currently the price of carbon credit in this country is about $4 to $6 per metric ton of carbon dioxide, while in Europe it trades between $30 and $45 per ton due to stricter emission regulations. It is envisaged that in the future when tighter control measures are implemented in the United States, the price for offset will be increased making it more lucrative for landowners to enroll into the carbon trade business.

CCX Membership

Large forest landowners can be members and small forest landowners can participate in providing offsets through an aggregator, which is a CCX-registered entity that pools smaller projects to make them marketable on the exchange. Forestry is one of several types of CCX offset projects.

At present, the only qualifying forestlands are those planted or reforested through natural regeneration since 1990. If qualified, the amount of the payment would be dependent on the species and age of the forest stands and the price of carbon credits at the time of enrollment.

Landowners will receive annual payments on the value of the project, but the price will fluctuate depending on the price of carbon. A percentage of the project value will be paid to the broker, who organizes and presents the contract to CCX. Another 20 percent of the project credits will be set aside in a reserve pool to offset the risk of a natural calamity, such as wildfire. This reserve value belongs to the landowner. If the contract is fulfilled in 2010 with no acreage losses, the full value of the annual 20 percent reserve will be paid to the contract holder.

How to Enroll

Landowners interested in applying need to show evidence of ownership, supporting documents for direct measurement calculations, if applicable, and a signed Letter of Intent to maintain a forest carbon stock beyond 2010. In addition, copies of supporting documents that shows proof of planting and a map of enrolled acres is required.

All aggregated pools must obtain independent third-party CCX-approved verification. This ensures that project protocols are properly followed and that the appropriate volumes of carbon dioxide are being recorded. All offset projects are subject to initial and annual verifications.

The impacts of carbon market son forest management is an emerging issue that will take time to mature.

For more information concerning carbon credits access the websites listed below.

Center for Integrated Natural Resources and Agricultural Management: A landowner's guide to carbon credits. http://www.cinram.umn.edu/publications/landowners_guide1.5-1.pdf

Chicago Climate Exchange (CCX):
http://www.chicagoclimateexchange.com

Dovetail Partners Inc: provides information on the impacts and trade-offs of environmental decisions, including consumption choices, land use, and policy alternatives. http://www.dovetailinc.org/reportView.php?action=displayReport&reportID=92

Minnesota Farmers Union: www.mfu.org
National Farmers Union: www.nfu.org
North Dakota Farmers Union: www.ndfu.org or www.carboncredit.ndfu.org

University of Minnesota:
http://www.cfans.umn.edu/Minnesota_Terrestrial_Carbon_Sequestration_Project.html

United Nations Convention on Climate Change:
http://cdm.unfccc.int/index.html

Voluntary Carbon Standards: http://www.v-c-s.org

Western Climate Initiative:
http://www.westernclimateinitiative.org

Midwestern Greenhouse Gas Reduction Accord:
http://www.midwesternaccord.org/

(Source: *The Market Place Bulletin*, Fall 2008. Minnesota DNR. Article by Mohammed Iddrisu, Utilization & Marketing Forester)

Woody Biomass Raw Materials and Markets

As every logger knows, before they harvest trees they need markets for all the raw materials. For them to be a sustainable business, the market price has to cover their costs, plus allow for a profit margin. As with any business, some loggers will be more efficient and cost-effective at producing a specific product than others. This can depend on equipment, operators, type of timber sales purchased, etc.

With the current interest in alternative energy and in particular wood energy, most logging contractors are looking at whether than is an area they want to expand into, if they don't already have the capability. The prices being quoted by many biomass chip users, presently, do not make woody biomass chip production very attractive. Many of the companies that are looking into utilizing biomass chips are unrealistic about the price they will have to pay for a sustainable supply of chips.

With the continuing decline in both the primary forest industry (sawmills, veneer mills, pulp mils, and OSB/particleboard mills) and secondary forestry industry (wood working, doors, flooring, etc.), there is less residue being produced, which has caused a shortage of raw material for products, such as animal bedding, wood pellets, wood flour, etc. These industries are now looking at other sources of raw material, roundwood, or residue (tops/branches) being an obvious source. Some of these products require a "clean chip," meaning debarking first then chipping while other products can take a whole tree or logging residue chip.

Wood Biomass can be a confusing term. Technically, any wood portion of the tree (roots to branch tips) can fit this definition. Typically, it refers to the above ground portion of the tree, with higher end markets, veneer, sawlogs, pulpwood, etc. being sorted out before the remainder of the tree is processed into "biomass" chips. As other markets vary, biomass chips might creep up the food chain into the pulpwood markets, with it being very unlikely that no matter how bad lumber markets are, landowners would accept biomass chips prices for their sawlog trees.

As markets for all wood products fluctuate and wood energy/biomass technologies evolve, the viability of getting into woody biomass chip production will have to be calculated by each company.

(Source: *Wisconsin Wood Marketing Bulletin,* April/May/June 2009. Article by Don Peterson, Renewable Resource Solutions, LLC, Crystal Falls, MI.)

The Trading Post

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For Sale

Timberjack 380 Cable Log Skidder. 5.9 Cummins. Several extra chokers. Ready to work. $11,500. Contact: Wayne Chriswisser at (402) 234-2133; or email: W_chriswisser@yahoo.com.

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

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@AWF.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. 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. Buy/Sell. Contact: Sawmill Exchange (800) 459-2148, (205) 661-9821.

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