



The Market Place

Timber • Products • Equipment • Services

Fall 2011

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A service to Minnesota forest industry.

Tamarack: The Untold Story

By Mimi Barzen, Editor

The word Larch Arabinogalactan, more commonly known as LAG, does not roll right off the tongue, but it might be rolling off your hair, traveling your intestinal tract, or being fed to farm animals you may own. The compound is a Minnesota grown, extracted, and processed product that has world exposure and demand. It originates in the swamps of northern Minnesota, hidden inside tamarack trees.

In the beginning

It was a long road to the current product and an even longer road to come to fruition. Back in the 1960s, St Regis Paper in Montana knew there was a high concentration of LAG in the western larch it used in the papermaking process. If they could extract the substance, it would decrease the cost of the pulping process. St Regis not only wanted to extract the compound, they wanted to find a use for it.

After much research, AG received Food and Drug Administration, commonly known as the FDA, approval to market it, which the company did on a limited basis. This was later abandoned by St Regis because it was not an integral part of the core business. The lead researcher though, had a bigger vision for the compound and pursued funding sources from a variety of investors, all of whom coincidentally lived in Minnesota, the home of

eastern larch, or what we know as tamarack.

Larex is born

By the mid 1990s, a new company, Larex, was incorporated and set up shop in Cohasset, well within the natural range of tamarack. The first product, Laraprint, an industrial printing ink additive that acts as a dispersant of pigments, rolled off the line. The beauty of this product was its water solubility, which enabled printing press operators to easily clean and store printing plates without the use of corrosives.

Eventually, a liquid form of LAG was used in animal products that improved the health of the intestinal tract. This also transitioned into a human nutrition product that stimulated the immune system and improved digestive health.

Demise of larch

In spite of Larex's location in the heart of tamarack country, western larch logs continued to be railed to the plant. By 2005, the "waste" butt logs of western larch, which were rejected by paper companies due to the large diameters and abundance of defects, were becoming scarcer. Log diameter was shrinking to the point that it was not much larger than the tamarack found in the local swamps and the switch was made. From that point on, Minnesota tamarack has been used in the processing of LAG.

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New Sawmill Directory

After months (and more months) of interviewing, researching, and delving into files for elusive information, the 2011 edition of the Primary Forest Products Directory has been printed.

The directory includes a listing of all sawmills in Minnesota by county. In addition it has listing of dry kilns, veneer log buyers, wholesalers, and specialty operations, such as: chippers, shavings mills, and post, pole, and piling mills. The two newest sections include a listing of biomass facilities statewide and sawmills within the Twin City metropolitan area.

Each section consists of contact information and pertinent details for that specific type of operation. For instance, the sawmill section lists the type of products each mill produces, the tree species accepted at the mill, equipment on the

premises, and specialized work the mill can provide. Information on dry kilns includes the type of kiln used, its capacity, and whether custom drying is available.

Detailed information on all the mills listed in the directory can also be found online at the DNR website by going to: <http://www.dnr.state.mn.us/forestry/um/index.html>. Click on Minnesota Primary Forest Products Producer Directory link.

From there, the database can be searched using any number of ways, including, but not limited to: tree species, location, type of mill, or county. This site is updated continually, so it will have the most current information available.

A limited number of copies of the directory can also be obtained through Tami Brue at the Department of Natural Resource (DNR) in St Paul on a first come, first served basis. Her phone number is 651-259-5286 or email a request to her at: tami.brue@state.mn.us.



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The Lonza purchase

Fast forward to 2006 when Larex was purchased by Lonza, a global chemical and ingredient company. LAG was a good fit, as it had proven itself as a desirable commodity. Ownership changed, but the process hasn't.

Like so many other companies, 100-inch logs are utilized at the Lonza facility. Enough logs are chipped each day to feed into an extractor, resulting in a liquid that contains LAG. After being clarified to remove impurities and suspended solids, the liquid goes into an evaporator to concentrate the LAG to a 50 percent solution. At this point the liquid looks (and smells) much like molasses but the final product requires it be colorless. Hydrogen peroxide is used to remove the color. The clear liquid concentrate is then shipped to a contracting company where it is transformed into a powder before being shipped to clients.

Tamarack use

Tamarack, LAG's source, is currently an underutilized species in Minnesota. Consequently, the health of a stand can deteriorate long before the trees can be harvested. Lonza is willing to take standing dead tamarack if the bark is not sloughing and the trees aren't losing limbs. The company can utilize trees from 3 inches to 18 inches in diameter, not uncommon

specifications. However, Lonza does not have its own loggers. All the wood procured is received through contract loggers and good rapport with paper companies. Sometimes Lonza has to buy black spruce that they don't need in order to get a logger's tamarack. Paper companies may have to buy tamarack, which isn't the best ingredient in the paper recipe, in order to get a logger's black spruce. Sounds like the beginnings of a horse trade and it seems to be working for Lonza so far.

Lonza has refined its processing system so there is literally no waste. After the LAG is extracted from the chips, the residue, still in chip form, is marketed to landscape companies as well as used for fuel, animal bedding, and erosion control. The bark is also turned into mulch for landscape use. Fine wood fiber and some dust are the only by-products that do not have a secondary use.

Daily grind

Even though the company is small, it runs 24 hours each day, seven days per week and its 15 employees can fill the shoes of more than one job when needed. Many have been with the company since its inception, so they not only know the system from the ground up, they have a strong belief in the product they produce.

If you down a pill to improve your immune system, you just might be ingesting a bit of northern Minnesota's woodlands.



The transformation of a tamarack log into LAG is shown above. The first step is chipping the debarked log prior to extracting the chemical compound. The three bottles on the far left show the before and after appearance of the chips in this process and the liquid compound. The middle bottle is a sample after the liquid has been clarified. The dark-colored liquid is the 50 percent concentrate, followed by the colorless liquid once hydrogen peroxide has been added. The final product is the white powder on the far right.



Yes For Hardwoods

By Steve Vongroven, Utilization and Marketing

The hardwood lumber industry is trying to recover from the housing debacle that started in 2007. In order to raise awareness and promote the use of hardwood lumber in this country, this industry has decided to pursue a marketing campaign called the check-off.

A check-off program is an industry-funded generic marketing and research program designed to increase domestic and/or international demand for an agricultural commodity. This is done through promotion, research, new product development, and a variety of other marketing tools. This type of program is similar to businesses funded by shareholders (producers, processors, handlers, importers, etc.) with a board of directors who are accountable to the shareholders.

The check-off would be an industry-wide initiative coordinated through the U.S. Department of Agriculture (USDA), aimed at building an operating fund to support a broad array of promotion, research, and educational projects in support of hardwoods.

Who pays?

Green sawmill producers and kiln operating facilities with annual sales in excess of \$2 million would be subject to the check-off. The check-off fee applies to all hardwood lumber, cants, and railroad ties produced from American hardwood logs. All operations and concentration kiln drying yards producing annual sales greater than \$2 million would pay \$1 per \$1,000 of sales. Hardwood plywood mills producing over 10 million square feet of annual production would pay \$4 per 1,000 square feet of production. This mimics several agricultural commodities that have voted for check-off programs, most notable are the dairy, beef, pork, and egg industries.

Each check-off program is supported entirely by its funders. No taxpayer or government funds are involved once the program is underway. The hardwood check-off program would be no different.

Nuts and bolts

The fundamental goal of every check-off program, as established by Congress, is to increase commodity demand, thereby increasing the potential long-term economic growth of all sectors of the industry. Check-off programs are designed to assure that benefits are not disproportionate to any segment of an industry. While smaller mills are exempted from paying into the fund, they are able to benefit, along with the larger companies, from the promotion and research programs funded by the check-off.

Check-off programs are directed by industry-governed boards, appointed by the U.S. Secretary of Agriculture. These boards are responsible for allocating funds and approving business plans and programs. All check-off program participants have the right to retain or discontinue their respective programs.

USDA personnel oversee the check-off programs to assure it is being administered according to the requirements of federal law. Additionally, the federal government can assist in enforcing compliance if the industry requests it.

USDA's Agricultural Marketing Service (AMS) has primary oversight responsibilities.

The Foreign Agricultural Service (FAS) provides additional oversight responsibilities for check-off program activities in global market. The AMS provides on-going staff assistance including attending meetings, reviewing and approving check-off budgets and marketing plans, conducting management reviews, and overseeing financial audits of the check-off.

“A check-off program is an industry-funded generic marketing and research program designed to increase... demand for a... commodity.”

Voting

Once the hardwood check-off process has been approved through the federal agency review, a vote will be taken of all eligible companies. A simple majority of more than 50 percent of those voting will be required to approve the check-off. If the check-off is approved, activation would begin in the fall of 2012.

If the check-off doesn't work as planned, the industry can revoke the program through a referendum vote, which is required at least every seven years. Most existing check-off programs require a vote at least every five years. For more information go to: www.hardwoodcheckoff.org

The softwood lumber industry approved a check-off program this past June.

BIRCH RESURRECTED

By Mimi Barzen, Editor

The birch bolt market is experiencing an uptick in demand, due to the relocation of two manufacturers that utilize this resource. Jarden Home Brands, a home-grown Minnesota company, has brought back a portion of its flat toothpick manufacturing from overseas. At one time, toothpicks were a large scale production item of the company. In the 1990s demand began to diminish until the Cloquet plant was one of the only toothpick factories remaining in the United States. It turned out several billion slivers of wood per year. In 2006, this production line was re-established in China.

But now, five years later, it is back and the Cloquet mill is now actively seeking birch bolts for this production line. Jarden is seeking bolts, which are high-quality sawlogs, between 8 inches and 22 inches in diameter and from 100 inches to 105 inches long.

While not Minnesota grown, the second company, Global Sticks, sports an address in Thunder Bay, Ontario. The name may conjure up an image of hockey sticks to a northern Minnesotan, but that would be far from the truth. In reality, Global Sticks manufactures wooden sticks for the food, dairy, paint, and the craft industry.

Prior to its relocation, Global Sticks was also sourcing its sticks in China, where labor was cheap and birch plentiful. Both still are, but they are no longer the key issues driving the manufacturing craze abroad.

Both companies were experiencing production problems in China. Because so many companies were outsourcing to China, the energy demand has grown exponentially, outpacing China's ability to keep up with it. This has resulted in rolling blackouts, making it difficult to do business consistently. In addition, the cost of oil has caused shipping prices to increase rapidly too, almost doubling in the last 12 months.

Also problematic is the quality of the final product, worker reliability, and food safety. With China in the news about the lead paint scare, food contaminants, and other issues, the benefits of overseas manufacturing have begun to pale.

While Jarden Brands didn't have to look far for a new production site, Global Sticks cast a wide net, ending up building a state-of-the-art facility in Thunder Bay. However, the company certainly has its eye on Minnesota, or at least its supply of birch bolts, which are required for stick manufacturing.

The facility opened this past May and the company has been purchasing birch bolts since January. So far, 95 percent of the raw material has been purchased in Minnesota. The company anticipates it will need 30,000 cords to produce about 3 million sticks annually.

The sticks are used for ice cream bars, food on a stick holders, paint paddles, and tongue depressors. The product line could expand in the future if a steady stream of bolts continues to enter the wood yard.

But why birch? Other species, such as aspen have been tried, but birch has some unique qualities. For an unknown reason, only birch sticks will stay in ice cream once frozen. Other hardwood sticks pop out. When veneered, the wood stays smooth, unlike aspen, which gets "fuzzy." Another important consideration is taste. Birch imparts no taste or odor. Balsam fir ice-cream anyone?

Global Sticks is looking for birch bolts that are a minimum of 8 inches in diameter and are 103 inches long. Loggers need not be tied to a major company to sell their wood, and payments are made weekly. The company "stick" scales on the truck when it enters the yard, rather than

using a weight scale.

The Department of Natural Resources now has a consumer scale agreement with Global Sticks, so state wood can cross the border, provided other border regulations are met.

These two value-added operations may be just the ticket some loggers need to continue riding the economic roller coaster.



If you wish to list an ad in the winter issue of the MarketPlace Bulletin, please fill out and return this form by January 15, 2012. There is no cost for placing the ad.

Forest Products:	Wanted __	For Sale __
Equipment:	Wanted __	For Sale __
Services/ Misc.:	Services __	Notice __

(Examples of items to be listed include: stumps, lumber, logging, sawmill and woodworking equipment, sawing, drying, marketing services, employment, or other forestry-related items.)

Name: _____ Company: _____
Address: _____ City: _____ State: __ Zip code: _____
Phone: _____ Fax: _____
email address: _____

Please note: Due to limited space all ads may not be printed in every issue. Please limit your ads to one page or less. Ads will not carry over from one issue to the next. Resubmit them for each issue.

Mail ads to:
Mimi Barzen
DNR Forestry
1201 East Hwy 2
Grand Rapids, MN 55744
Phone (218) 327-4119; Fax: (218) 327-4391
email: mimi.barzen@state.mn.us

The Minnesota Department of Natural Resources reserves the right to edit all items included and accepts no responsibility for the accuracy of description or for the commercial integrity of the persons or firms making offers in this bulletin.



For Sale: Forest Products and Equipment

FOR SALE: 1) Ash, basswood, birch, butternut, poplar, walnut, cherry, hickory, and red and white oak with some quarter sawn, plus spruce, balsam fir, red cedar, and red and white pine; 2) small quantities of lumber for crafters and carvers; Contact: Jim Mielke of Mielke's Mill and Crafts, 37885 Park Trail, Center City, MN 55012; Phone: 651-583-2813

FOR SALE: 100" northern white cedar bolts, delivery available; Contact: Richard Hufnagle of Page and Hill Forest Products, Inc., 7556 County Road 31, Big Falls, MN 56627; Phone: 218-276-2551; Fax: 218-276-2352; email: pagehill@citlink.net

FOR SALE: Cottonwood lumber; Contact: Loren Strei; 3835 121st Avenue, Ortonville, MN 56278; Phone: 320-839-2057

FOR SALE: 1) White oak logs 14' and 22' and 12" to 14" diameter small end; 2) butternut surfaced; 3) quarter sawn red and white oak 4/4 and 5/4 and 5" to 11" wide; 4) yellow popple select grade, 4/4; 4) red oak select, #1 and #2, 4/4; 5) black ash #1 and better, 4/4; 6) hard maple #1 and better, 4/4; Contact: Jack Lewison of Lewison Lumber, 330 South Park, Mora, MN 55051; email: lewisonlumber@yahoo.com

FOR SALE: 1) Kiln-dried pine logs 3", 4", and 6" diameter; 2) furniture grade kiln-dried ponderosa pine; 3) log and barnwood furniture for bedrooms, living, and recreation rooms; 4) log-style kitchen cabinets; 4) log pool tables 7' and 8'; Contact: Mike Legatt of Viking Log Furniture, 38169 County Road #2, St Joseph, MN 56374; Phone: 320-259-0909; Fax: 320-259-4705; email: mlegatt@vikinglogfurniture.com; Website: www.vikinglogfurniture.com

Equipment

FOR SALE: 1984 GMC Brigadier straight truck and pup trailer, 13-speed, 350 Cummings engine, spring ride, good brakes and tires; Contact: Mike Thompson of Thompson Logging, 27796 260th Street, Shevlin, MN 56676; Phone: 218-657-2665

FOR SALE: 1) 2- and 4-sided planer, needs some work; 2) edger head no table; 3) solid tooth sawmill blade; Contact: Edwin Haverinen, 34928 119th Avenue, Menahga, MN 56464; Phone: 218-564-4883

FOR SALE: 1) Morbark chipper knives sizes 23'x5'x1/2" and 15'x5'x1/2"; 2) Peterson 7400 new anvil and 3" and 4" screens; Contact: Lee Ledford of Metro Wood Recycling, 1815 Stagecoach Trail South, Afton, MN 55001; Phone: 309-314-3050; e-mail: metrowoodlee@hotmail.com

FOR SALE: 1) 1995 John Deere 648G dual arch grapple skidder; 2) 18" and 22" roto sawheads; 3) 1989 and 1990 Timberjack grapple skidders; 4) 608 FB muffler new; 5) Cat 227 F.B. undercarriage parts; 6) used skidder parts; Contact: Carl Huber of Huber Logging, Box 31, Mine Center Ontario, Canada, P0W1H0; Phone: 807-599-2835; Fax: 807-599-2822

For Sale: equipment continued

FOR SALE: Older saw gumming machine for circle solid tooth lumber blades; Contact: Duane Myklejord, 34683 350th Avenue SE, Fosston, MN 56542; Phone: 218-435-6820

FOR SALE: 1988 19'6" Mack pulp truck with 350HP, 12 speeds, camelback suspension, includes Prentice F90T 22' loader and 1987 Rosa pup trailer 16' 3" spring ride, all in good running condition; Contact: Lloyd Wiese of Lloyd Wiese Logging, W3117 County Road A, Stetsonville, WI 54480; Phone: 715-678-2319; Cell: 715-965-6331

FOR SALE: 1) Trim saw cuts 8' material in half, self feed, all automatic; 2) 14" carbide saw blades shop built on trailer; Contact: Cory Hayden, Box 270, Biwabik, MN 55708; Phone: 218-865-7089; email: poncho119@netzero.net

FOR SALE: 1) Used parts for skidders, crawlers, loaders, backhoes, excavators, wheel loaders and skid steers; 2) reconditioned engines and transmissions dyno-tested; 3) rebuilt winches, final drives and used tires; Contact: Schaefer Enterprises of Wolf Lake, Inc, 4535 State Route 3 North, Wolf Lake, IL 62998; Phone: 618-833-5498 or 800-626-6046; email: parts@sewlparts.com; website: www.sewlparts.com

FOR SALE: Slightly used Fas Trac model #307 with left hand blade sharpener for bands 2.5" to 7" wide and maximum length 20'; Contact: Harry Schell of Harry R. Schell Sawmill Sales and Supplies, Inc. 601 West Park Street, Blue River, WI 53518; Phone: 800-462-5907 or 608-537-2987; Fax: 608-537-2032; email: hirschell@mwtnet.net; website: www.schellsaws.com

FOR SALE: 1) 220 cat power unit; 2) 50" saw blade; 3) 3-point Farmi cat I log winch; Contact: John Payne of Payne Sawmill; 10833 County Road 20 SE, Stewartville, MN 55976; Phone: 507-259-3958

FOR SALE: 4-sided planer with knives and heads with top and bottom heads 15" long and 6.75" round; Contact: Kenneth Vickerman, 39771 State Highway 6, Deer River, MN 56636; Phone: 218-246-2227; email: wandaken@paulbunyan.net

FOR SALE: Christmas tree baler for use with plastic netting, 12", 14", and 16" cones, excellent condition; Contact: Don Klande, 13699 County Road 72, Swan River, MN 55784; Phone: 218-492-4338

FOR SALE: 60" Siiro slasher; Contact: Jerry Shuster, 11613 Willow River Road, Gheen, MN 55771; Phone: 218-787-2264



WANTED: Spruce, pine, and fir sawbolts or stumpage; Contact: Brian Bignall of Potlatch Land and Lumber, 50518 County Road 45, Bemidji, MN 56601; Phone: 218-759-4302; email: brian.bignall@potlatchcorp.com

WANTED: Bur oak sawlogs by the semi-load delivered to mill; Contact: Dave at Dave Mast Sawmill, 11648 460th Street, Gonvick, MN 56644; Phone: 218-487-6122 (please leave a message)

WANTED: Red pine 2" to 6" in diameter, 100" or longer with little taper and straight, need 30 to 50 cords; Contact: Tim Gross; Phone: 763-242-6321

WANTED: 30.5x32" tires and wheels, any condition, any model; Contact: Jerry Shuster, 11613 Willow River Road, Gheen, MN 55771; Phone: 218-787-2264



Services and Miscellaneous

SERVICES: Structural engineering, timber frame, and round log homes, difficult foundations; registered Minnesota professional engineer; Contact: John E. Wilkinson P.E., 604 2nd Avenue North, Sartell, MN 56377; Phone: 320-253-1019

SERVICES: Dehumidification kiln with 600 board foot capacity; Contact Jim Mielke of Mielke's Mill and Crafts, 37885 Park Trail, Center City, MN 55012; Phone: 651-583-2813

SERVICES: Band saw and circle saw runs daily and lumber cut to your specifications; Contact: Loren Strei, 3835 121st Avenue, Ortonville, MN 56278; Phone: 320-839-2057

SERVICES: Custom sawing up to 33' timbers plus lumber planing and drying, can accommodate specialized orders; Contact: Dean Hansen of Wilderness Wood Products, Inc, PO Box 188, Orr, MN 55771; Phone: 218-757-3747; Fax: 218-757-3748; email: wwood@rangenet.com

SERVICES: 1) Narrow bandsaw sharpening; 2) circle, wide band, and carbide saw blade repair; Contact: Harry R. Schell Sawmill Sales and Supplies, Inc, 601 West Park Street, Blue River, WI 53518; Phone: 608-537-2987 or 800-462-5807; Fax: 608-537-2032; email: hirschell@mwt.net; website: www.schellsaws.com

SERVICES: Certified forester will do stewardship plans, property tax programs, and wildlife habitat improvement; Contact: Erik Eggen of Timberlane Forestry, 13116 Timberlane Drive South, Baxter, MN 56425; Phone: 218-232-3055; Fax: 218-828-0246; email: erik@timberlaneforestry.com; website: www.timberlaneforestry.com



The MarketPlace
 DNR Forestry
 500 Lafayette Road
 St Paul, MN 55155-4044



Change service requested

DNR Timber Auctions Winter 2011/2012

Date	Auction	Area	Location
Nov 21	Regular	Baudette - sealed bid	Baudette area office
Nov 22	Regular/Intermediate	Baudette	Baudette area office
Nov 22	Regular	Cambridge	Cambridge area office
Dec 1	Regular/Intermediate	Hibbing	Minnesota Discovery Center
Dec 6	Regular/Intermediate	Deer River	Big Fork Town Hall
Dec 7	Regular/Intermediate	Orr/Tower	Orr American Legion
Dec 7	Regular	Rochester - sealed bid	Rushford Fire Hall
Dec 7	Regular	Sandstone - salvage	Rutledge City Hall
Dec 8	Regular/Intermediate	Warroad	Warroad area office
Dec 8	Regular/Intermediate	Little Falls	Onamia field office
Dec 12	Regular/Intermediate	Aitkin	Long Lake Conservation Center
Dec 13	Regular/Intermediate	Blackduck/Deer River	Blackduck Senior Center
Dec 13	Regular/Intermediate	Bemidji - sealed bid	Bemidji area office
Dec 14	Regular	Littlefork/Orr - sealed bid	Littlefork Community Center
Dec 15	Regular/Intermediate	Littlefork	Littlefork Community Center
Jan 4	Regular/Intermediate	Two Harbors	Americinn Silver Bay