USDA Forest Service State & Private Forestry

The Forest Products Conservation & Recycling Review

Volume 16, No. 1/2 January/February 2004

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People News

Ed Williston, an industry consultant who participated with the Forest Products Laboratory (FPL) in the development of such concepts as SDR (Saw-Dry-Rip) and EGAR (Edge-Glue-and-Rip), passed away on December 31, 2003. Ed authored several books, including *Lumber Manufacturing: The Design and Operation of Sawmills and Planer Mills*; *Manufacturing Lumber from Small Logs*; and *Saws: Design, Selection, Operation, Maintenance*. He will surely be remembered as one of those friends who helped to bring great credit to the FPL's research programs as well as assisting the sawmill industry in North America.

Miscellaneous News

Conference Reminders—Don't miss the opportunity to attend the following conferences dealing with utilization of small logs.

Small Log 2004 Conference on Utilization: March 31–April 2, Coeur d'Alene Resort, ID. Produced by TimberWest Publications, LLC.

Topics include identifying small log supplies (Federal and private land), benefits of intensive forest management, innovative and marketable solutions for processing large quantities of small logs, and value-added products. In addition to 2 full days of speakers, a Supplier's Showcase will profile technology and products of companies involved in the utilization of small logs. For more information, contact Jan Raulin, Conference Manager (1–866–221–1017 or tenaj@telus.net) or visit www.forestnet.com/slc/index.htm.

SmallWood 2004 Creating Solutions for Using Small Trees: May 18–21, Radisson Hotel Sacramento, CA. Sponsored by the USDA Forest Service and the Western Forestry Leadership Coalition, in cooperation with the Forest Products Society (FPS), the Universities of California and Idaho, the Department of Energy's National Renewable Energy Laboratory, the Department of the Interior, the Forest Resources Association, the California Division of Forestry, and the California Association of Resource Conservation and Development Councils.

Two full days (Wednesday and Thursday) of technical and poster presentations, discussions, and tabletop exhibits on community partnerships, forest health restoration, supply and availability, harvesting systems, processing and manufacturing, markets for products, energy from woody biomass, and workforce training are planned. Pre-conference and post-conference tours are also scheduled. The pre-conference tour (Tuesday, May 18) will visit mill sites, biomass energy facilities, and small forest products businesses in the Redding area. The post-conference tour (Friday, May 21) in the Sacramento area will include several facilities utilizing wood energy, a state-of-the-art small log sawmill, and related forest products businesses. For more information, contact FPS at 608–231–1361, ext. 208 (fax: 608–231–2152; e-mail: conferences@forestprod.org) or visit the conference website (www.forestprod.org/confsmallwood04.html).

Academic Coordinator I: Forest Products Marketing & Utilization Position—The University of California (UC) is soliciting applications for a full time, 2-year contract position in wood utilization and marketing based at the UC **Berkeley,** Richmond Field Station, Richmond, CA. This position is focused on issues facing the Pacific Northwest and Southwest regions and is designed to provide outreach, education, and technical assistance on issues related to the use of wood resources, with a focus on small-diameter trees and other woody biomass materials. Qualifications include a Masters degree in wood science and technology or closely related field; broad and diversified knowledge of forest product utilization, marketing, and resource management; ability to apply this knowledge to individual situations and a wide range of audiences and to build and maintain working relationships with multiple agencies and a diverse clientele; knowledge of biomass and small-diameter issues, problems, and opportunities; and strong writing and oral communication skills.

Responsibilities include coordinating a program that encompasses multiple State and Federal organizations and universities; identifying technical assistance needs, including local market considerations, properties of available resources, processing challenges, and new technology; planning outreach and information-sharing activities; providing direct technical and marketing assistance to startup and small businesses; and generating and coordinating grant funding from State, Federal, and private sources. Travel and participation in workshops and conferences is also required.

Beginning salary will be commensurate with experience and qualifications, within the range of $41,352 to $54,720 (midpoint). The University of California offers a comprehensive benefits plan. For complete information on this position, contact John Shelly, University of California, at 510–231–9414 or john.shelly@nature.berkeley.edu.

News from Forest Service Offices Across the Country is available online. The following is a partial list of electronic Forest Service newsletters, along with their websites and respective offices:

- *Northern Region News* (www.fs.fed.us/r1/news/nrn_index.shtml) — Region 1
- *Pacific Southwest NewsLog* (www.fs.fed.us/r5/newslog/) — Region 5
- *NC News* (ncrs.fs.fed.us/news/) — North Central Research Station
- *NA News Notes* (www.fs.fed.us/na/morgantown/nanews) — Northeastern Area State & Private Forestry (S&PF)
- *Southern Aspect* (www.srs.fs.usda.gov/about/newsletter/index.htm) — Southern Research Station
- *NewsLine* (www.fpl.fs.fed.us/newsline.htm) — Forest Products Laboratory (FPL)
- *Global Leaflet* (www.fs.fed.us/global/news/welcome.htm) — International Institute of Tropical Forestry

Dividends From Wood Research, the semiannual listing of publications on wood utilization research at the FPL, has been released for July through December 2003. To get on the mailing list for *Dividends*, contact the FPL Office of Communications at 608–231–9200, 608–231–9592 (fax), or mailroom_forest_products_laboratory@fs.fed.us. Because the FPL has a number of mailing lists for various topics, be sure to specify the *Dividends* mailing list in your request. *Dividends* is also available online (www.fpl.fs.fed.us/pub_lists.htm).

A Forest Products Technical Assistance Providers & Facilitators Forum, hosted by the Colorado Wood Utilization and Marketing Assistance Center, Four Corners Sustainable Forests Partnership, Oregon State University's Wood Products Extension Program, and the USDA Forest Service, was held November 6–8, 2003, in Fort Collins, CO. The purpose of the forum was to improve communication among western U.S. forest products technical and economic development assistance providers to enhance effectiveness and leverage investments and resources. Attendees shared examples of recent, current, and planned assistance efforts and results, identified personal expertise or strong interests they are willing to share with other assistance providers, and discussed areas where help is needed. Several "hot topic" presentations were also given on subjects such as biomass power generation, wood-plastic composites, and small-diameter roundwood connections.

Notes from the forum, including the agenda, a list of participants (and their expertise), and links to presentations given, can be found at wood.oregonstate.edu/forum/2003/notes.htm. Feel free to use the list of participants to find individuals who can provide technical assistance. A more user-friendly, searchable database of western utilization & marketing (U&M) contacts is in progress. See wood.oregonstate.edu/westernum/ for the first draft. Comments and suggestions are welcome and should be sent to Scott Leavengood at scott.leavengood@oregonstate.edu or call 503–725–2123.

[Source: Scott Leavengood, Oregon State University Extension Service]

Marketing and Feasibility

Bulletin of Hardwood Market Statistics: First Half 2003 **(RN–NE–382)**, written by David Emanuel and Carol Rhodes of the USDA Forest Service, Northeastern Research Station, provides current and historical information on

primary and secondary hardwood products, production, prices, international trade, and employment. Hardwood stumpage, log, and lumber prices are described for selected states. Composite hardwood product prices, production, and employment, as well as international trade, are also reported.

Data contained in the bulletin provide a general overview of recent trends in the hardwood market for use by hardwood-related industries, forest mangers, the academic community, and the public. The statistics presented are not inclusive. Specific series were selected on the basis of their availability and completeness, and were derived from a variety of sources. The reported import and export data for hardwood logs, lumber, veneer, and plywood are reproduced in their entirety as received from the U.S. Department of Commerce, Bureau of the Census.

The publication is available online (www.fs.fed.us/ne/newtown_square/publications/research_notes/pdfs/2003/ne_rn382.pdf) or copies can be requested by contacting David Emanuel at 304–431–2737 or demanuel@fs.fed.us.

Sources of Marketing Information for the Forest Products Industry—This comprehensive resource for finding marketing information available from sources such as government agencies, universities, commercial businesses, and international contacts was originally announced in the March/April 2003 issue of the *FPC&R Review.* According to coauthor Eric Hansen (Department of Wood Science and Engineering, College of Forestry, Oregon State University), an updated version is available electronically at www.cof.orst.edu/cof/fp/faculty/hansen/Market Info november.03.pdf. Copies can be requested by contacting Eric at 541–737–4240 or eric.hansen2@oregonstate.edu.

Eric also coauthored *Strategic Marketing in the Global Forest Industries* with Heikki Juslin (Department of Forest Economics, University of Helsinki). According to the literature, this new forest products marketing textbook is designed for university and industry use. More information about the book, including cost, is available at www.fpmarketingsolutions.com or by calling 541–740–0703.

Virginia Tech Announces Training/Workshop in Blacksburg—For more information, including registration and fees, contact Joanne Buckner (ctrfpmjo@vt.edu) or Bob Smith (rsmith4@vt.edu) at the Center for Forest Products Marketing and Management, Virginia Tech (phone: 540–231–5876; fax: 540–231–8868).

The 11th Annual Workshop on Forest Products Marketing, May 6–7
The basics of marketing will be introduced to new marketing and sales personnel, and current personnel will be updated as to the changing factors affecting the industry. Topics include an overview of marketing, definition of marketing, products, pricing, promotion, distribution, strategy, and marketing research methods.

Advanced Sales Training in the Forest Products Industry, April 1–2
This training is designed for forest products sales personnel and managers who want to improve their ability to relate to customers. It will focus on the attributes of a good salesperson, how to effectively communicate, relationship building, sales negotiation strategies, effective time management, and how to stay positive during difficult times. Registration can be completed online at www.conted.vt.edu/astfpi/.

Economics and Financing

Tax Tips for Forest Landowners for the 2003 Tax Year by Larry Bishop, a forest management and taxation specialist with the USDA Forest Service Southern Region, Atlanta, GA, is available online through the National Timber Tax Website (www.timbertax.org/). The site contains many links to tax-related sources, as well as a link to Landowner Assistance Programs.

Surviving in Today's Markets: A Conference for Wood Product Companies will be held May 13 in Green Bay, WI. With the increase of global competition and government regulation, it is more important than ever to be current with trends, technologies, and opportunities that can assist companies in being both competitive and profitable. Steve Lawser, executive director of the Wood Component Manufacturers Association, will lead the conference. "Where Are We and Where Are We Going?" is the title of his keynote address. Presentations on wood waste opportunities, financial analysis, OSHA, permitting, WoodLink, and niche markets are also scheduled. To register or request additional information, contact the Glacierland RC&D at 920–465–3006.

Studies of Waste Reduction Provide Conflicting Conclusions Regarding the Importance of Recycling and a Weak Economy—According to data from the U.S. Environmental Protection Agency's (EPA) annual survey of garbage generation, recycling, and disposal, Americans generated less trash in 2001 than in 2000. Total tonnage was down by 2.8 million tons, and individual waste generation was down by 0.11 pound per day.

The size of the waste stream is relative to the population and the strength of the economy. A growing population and economy will increase garbage production. An economic recession will lead to less garbage as people buy and consume fewer things. Although the population grew in 2001, the EPA blames the decline in the waste stream on a weak economy, especially in the paper industry, which had a 5.7% production decline in 2001. According to EPA, packaging still has the biggest share of the waste stream, with paper products by far the largest waste material produced. With 20 million tons recycled, corrugated boxes are the most recycled product by weight.

Fewer landfills and fewer waste-to-energy facilities operated in the United States in 2001. The decrease in the number of landfills is a continuation of the trend toward fewer, but larger, regional facilities. Each year, the EPA publishes the agency's most recent data on the amounts of waste generated, the composition of the waste, amounts incinerated and landfilled, and amounts of composition of materials recycled and composted. Municipal solid waste (MSW) within the Subtitle D definitions does not include construction and demolition (C&D) debris; hazardous, medical, and radioactive wastes; or other nonhousehold and nonbusiness refuse. The EPA's data are just one estimate of the size of the waste stream. Other methods usually find considerably more garbage being generated and recycled.

Every other year, one magazine compiles state disposal and recycling data. Its data showed that 409 million tons of solid waste were generated in 2000, with 131 million tons (or 32%) recycled or composted. However, many of the states include nonhazardous solid waste in their data—including C&D debris and industrial waste—in addition to tradition MSW.

Finally, the Environmental Research and Education Foundation (EREF) in Alexandria, VA, surveyed all disposal facilities in the United States and estimated that approximately 545 million tons of waste were managed, of which 146 million tons (or 26.7%) were recycled or composted in 2000. The EREF data cover all nonhazardous Subtitle D solid waste that is managed outside of the generator's facility. This is the broadest universe of solid waste.

State data provide a better picture of the amount of waste managed at the state level. The EREF data show the best view of the total amount of nonhazardous waste managed in the United States. The EPA's facts are most useful and consistent for analyzing trends in individual elements of the waste stream since 1960. [Source: *Waste Age*, December 2003]

Financial Performance of North American Paper Industry—Professors and graduate students at the University of Washington conducted a financial performance analysis of all publicly traded U.S. and Canadian pulp, paper, and packaging firms with high market penetration from 2001 and 2000 annual reports. A total of 37 firms, of which 29 were from the United States and 8 from Canada, were included. Study variables included return on equity earnings per share, total annual sales, global sales and production, capital expenditures and capital expenditure intensity, debt-to-equity ratios, and identification of product sector competitors.

The year 2001 was a challenge for the pulp, paper, and packing industry in North America. Reasons for dampened financial performance included increased foreign competition, continued weakness in Asian economies that adversely affected sales volume and price, rising raw material and energy costs, and, for U.S. firms, export markets weakened by a then strong U.S. dollar. It appears as though Canadian firms performed better than U.S. firms in 2001, suggesting that U.S. firms may have been more affected by the recession. Specific study findings include the following.

The global economy in general, and U.S. economy in particular, experienced a recession in 2001, so it came as no surprise that U.S. firms averaged a return on shareholders equity of only 5.4%, dropping from 13.6% in 2000.Return on equity ranged from a low of -21% to a high of 32%. Of the 29 U.S. firms analyzed, 20 (69%) reported a positive return on shareholders' equity, but unfortunately, only 5 (17%) firms reported increases in return on equity over the previous year. Average return on equity in 2001 was 8.4% in Canada, a decline of over 5%, from 13.7% in 2000. It ranged from a low of 2% to a high of more than 14%. Although seven (88%) Canadian firms had a positive return on equity, all represented a declining return on shareholders' equity.

Overall, earnings per share performance for both U.S. and Canadian firms were poor, but more so for U.S. firms. On average, U.S. pulp, paper, and packaging firms experienced an 84% decline in earnings per share, from $2.00 in 2000 to $0.32 in 2001. For Canadian firms, earnings per share decreased less, or almost 54%, from $0.82 in 2000 to $0.39 in 2001. In 2001, 28% of U.S. firms and 88% of Canadian firms had negative earnings per share.

Total annual sales for the U.S. pulp, paper, and packaging industry was almost $172.9 billion in 2001, a decrease of 0.9% from 2000; and paper annual sales for the industry were about $105.2 billion, an increase of 1.1% from 2000.
[Source: *Tappi Journal*, January 2004]

***Identifying Future Competitive Business Strategies for the U.S. Residential Wood Furniture Industry: Benchmarking and Paradigm Shifts* (GTR–NE–304)—**During the past decade, the residential wood furniture industry has lost approximately a third of its market share to imports. The problem is spreading to other wood-based industries such as kitchen cabinets, upholstered furniture, and wood office furniture. Authors Al Schuler (research economist with the USDA Forest Service, Northeastern Research Station) and Urs Buehlmann (extension specialist at North Carolina State University in Raleigh) describe benchmarking activities undertaken to provide a basis for comparing the U.S. wood furniture industry with other nations that have a globally competitive furniture manufacturing industry. Strategies to help the U.S. furniture industry survive and thrive in a global business environment are also discussed. A case is made for a paradigm shift in the business of designing, manufacturing, marketing, and distributing wooden furniture, as it is perhaps the most promising vehicle for the industry to sustain a prosperous U.S. manufacturing base into the future. Furthermore, a change in business models (a paradigm shift) is proposed to avoid cost-based competition with low-cost producers such as those located in Asia and South America.

To obtain a copy of this report, contact Art Francis (740–368–0127 or afrancis@fs.fed.us). It is also available at www.fs.fed.us/ne/newtown_square/publications/technical_reports/pdfs/2003/gtrne304.pdf.

Waste Wood and Paper Recycling

Mill Seeks Recovered Fiber as Raw Material to Manufacture Paper Products—SCA North America's new tissue mill in Barton, AL, is slated to begin production of 100% recycled tissue, napkin, and paper towel products in March and to reach full capacity by the end of 2004. The company is seeking local and regional suppliers to provide the plant with recovered fiber (old corrugated containers, residential mixed paper, sorted office paper, and book stock), which company officials say will amount to more than 140,000 tons each year. According to David Bricker, manager of fiber procurement for the southern region at SCA, the company is particularly interested in business relationships with municipalities involved in paper collection. For more information, contact Bricker at 256–370–8166.

[Source: *WasteNews*, January 2004]

Recycled Paper as Fuel Source—The Department of Energy's Savannah River Site is testing a cost-effective new source of heating fuel. The fuel is expected to cut the Site's coal usage, reduce emissions, and decrease the amount of paper trash sent to the landfill. The Site traditionally has used coal in its A-Area steam plant boiler to provide steam for heating and process support for the Savannah River Technology Center and other A-Area buildings. In August 2003, the steam plant began testing a fuel that is a mixture of approximately 70% coal and 30% pellets made from compressed recycled paper and cardboard. South Carolina granted permission to use the pelletized paper fuel for 1 year to verify uniform consistency.

[Source: *DOE This Month*, November 2003]

Deconstruction of Old Buildings Succeeds in North Carolina and California—Most wood recycling comes in the form of grinding and reconstituting the material. But in North Carolina, a prosperous family-owned business is turning ancient timbers from barns, textile mills, and farmhouses into flooring, molding, and furniture for the well-to-do. *Knight Ridder/Tribune Business News* reports that increasing demand for Carolina heart pine and other recycled wood is creating an opportunity to develop business and create jobs in eastern North Carolina. The Foundation of Renewal for Eastern North Carolina, a private economic development group based in Greenville, will become a broker of old buildings made from the massive pines and hardwoods famous in the state. Those who donate buildings to the foundation can deduct their value on income tax forms. The foundation will arrange for someone to dismantle the buildings and turn the wood over to processors.

In California, Whole House Building Supply of East Palo Alto helps homeowners and contractors who are planning residential demolition. Operating under the auspices of the East Palo Alto Council of Tenants, Whole House Building Supply invites contractors and the public to demolition sites to remove materials and pay favorable prices. Anything left unsold is stripped by a Whole House crew and taken to its salvage yard. Doors, windows, cabinets, countertops, and other materials are then sold.

Donors get a tax writeoff for diverting salvageable materials from the structures they are having destroyed. Whole House manages each demolition and the sale of materials and returns any profit to the Council. The founder of Whole House says he has been concerned about reuse and recycling ever since his days as a carpenter's apprentice 15 years ago. According to California's Integrated Waste Management Board, waste from construction and demolition (much of which is recyclable) made up 12% of the state's total waste stream in 1999. For more information, contact Whole House by phone (650–328–8731) or send e-mail to gardner@batnet.com. [Source: *Resource Recovery Report*, January 2004 & September 2003]

Recycling Municipal Trees: A Guide for Marketing Sawlogs from Street Tree Removals in Municipalities, by Ed Cesa, a marketing specialist with the USDA Forest Service Northeastern Area; Ed Lempicki, a utilization and marketing specialist with the New Jersey Forest Service; and J. Howard Knotts, editorial assistant with the West Virginia University; has been revised and reprinted. Originally published in 1994, the concepts of the paper are as relevant today as they were 1994. The purpose of the guide is to make officials of municipalities aware of an alternative strategy for using their street tree removals—a "recycling" strategy that can potentially turn a cost-burden scenario into an income-generating opportunity. The strategy involves merchandising sawmill-size logs from street tree removals to sawmills or other companies that have unique uses for these trees. Case studies showing how several tree service companies began utilizing the tree removals are included.

The guide is available online by visiting www.fs.fed.us/na/morgantown/frm/cesa/rmt/rmt_index.html or in hard copy form. To request copies, contact Ed Cesa (304–285–1536; ecesa@fs.fed.us) or Ed Lempicki (609–292–2531; elempick@dep.state.nj.us).

Environmental Issues and Protection

More on Forest Certification—There are four major certification schemes competing for recognition in the marketplace: CSA (Canadian Standards Association); FSC (Forest Stewardship Council); PEFC (Pan European Forest Certification), and SFI (Sustainable Forestry Initiative® Program). Each of the four schemes takes a slightly different approach to certification. These differences often cause confusion and misunderstanding within the forest products industry. Therefore, Roy C. Anderson and Eric N. Hansen with the Department of Wood Science & Engineering at Oregon State University wrote *Forest Certification: Understanding Ecolabel Usage Requirements*, which briefly explains the broad concept of forest certification, including the chain of custody component, and then focuses on describing two components of third-party forest certification schemes—ecolabel usage and the steps that must be taken in order to use the label.

Ecolabels are the marketing mechanism used to distinguish certified products from similar noncertified products. An ecolabel is an on-product label meant to inform consumers that the product differs from similar products based on environmental impacts that may be associated with the production, distribution, use, or disposal of the product. In the case of forest certification, the ecolabel only signals that the raw material used to make the product has come through a forest certification system. For this reason, forest certification ecolabels are often referred to as single-issue labels. It is important to note that ecolabels differ from many "green" claims made by manufacturers because ecolabel claims are verified by an independent third party.

To learn more about the use of ecolabels or to request a copy of the paper, contact Eric Hansen at 541–737–4240 or eric.hansen2@oregonstate.edu. The paper is also available online at www.cof.orst.edu/cof/fp/faculty/hansen/EHpubs.htm.

International Paper (IP) Has Released Its *2002-03 Sustainability Report*, summarizing an array of environmental, forestry, financial, and social responsibility programs. Accomplishments include a 54% reduction of emissions 2 years ahead of schedule. A full range of recycling programs is also featured. IP's paper and packaging mills generate 65% of their energy from wood fiber and other biorenewable fuels. For more information, visit www.internationalpaper.com. [Source: *Resource Recovery Report*, January 2004]

Arizona Biomass Electric Plant Begins Operation—According to *WasteNews*, Arizona's first biomass plant that addresses forest health issues began operating February 17. The 3-megawatt Eagar Biomass Project will create electricity using biomass, including forest waste from the thinning of ponderosa pine growth. The plant will serve about 3,000 homes. Western Renewable Energy will operate the plant, which is located in Eagar, about 200 miles northeast of Phoenix.

Arizona Public Service, Arizona's largest electric utility, paid most of the $4 million plant construction costs. Serving more than 92,000 customers, Arizona Public Service is the largest subsidiary of Pinnacle West Capital Corporation. The company will receive green credits to apply to the Arizona Environmental Portfolio Standard, which requires it to generate 1.1% of its power through renewable sources of 2007. (Source: www.wastenews.com, February 20, 2004]

Information Requested for the *Pallet Phytosanitary Project Newsletter*—As described in the March/April 2003 issue of the *Review*, this newsletter is an online document designed to distribute news pertaining to the heat treatment of pallets for export use. Curt Hassler, project manager, is requesting that readers who are providing information, solutions, and support to clients in the wood packaging industry share their experiences with colleagues and the industry through future issues of the *Phytosanitary Project Newsletter*. Contact Curt by phone (304–282–5417) or e-mail (curth@mail.wvnet.edu) for more information.

Wood in Transportation & Engineered Wood Products

Mississippi State Demonstration Plant Showcases Engineered Lumber from Small-Diameter Trees—A new $1 million demonstration plant unveiled on December 12, 2003, at Mississippi State University (MSU) has the potential to stimulate alternative, profitable markets for small-diameter trees thinned from pine plantations. Through a partnership with TimTek Australia Ltd., scientists at the MSU's Forest Products complex will demonstrate technologies they hope will ultimately produce commercially viable engineered wood products from 3- to 8-in.-diameter southern pines.

Developed in Australia by the Commonwealth Scientific Industrial Research Organization, the TimTek process forms high-strength, engineered lumber using small-diameter trees that are crushed into strands. Coated with an exterior-type adhesive and dried, the strands then are formed to desired shapes in a specialized steam-injection hot press.

Walter Jarck, TimTek's director, said the TimTek product "is a unique, long-fiber structural engineered lumber with high-strength properties of select-grade sawn timber. It can be produced in lengths and cross sections greater than can be achieved from the largest logs available." The process can be incorporated into existing plants; therefore, owners of wood-processing operations have the potential to realize immediate economic benefits, Jarck added.

Further research will both determine the strength values of the product and test the product to help gain building code acceptance. Initial examinations in MSU's Forest Products Department indicate that the engineered lumber has the potential to compete favorably with beams and timbers used in residential and commercial construction.

For more information about the facility, contact Dr. Liam Leightley (662–325–4444 or lleightley@cfr.msstate.edu) or Dr. Dan Seale (662–325–3072 or dseale@cfr.msstate.edu) at the Department of Forest Products. Information on the TimTek/MSU partnership is available online at www.cfr.msstate.edu/timtek/index.html.

North American Panel Output Sets Record in 2003—U.S. and Canadian production of structural panels totaled a record 40.9 billion ft² (3/8-in. basis) in 2003, up from 40.4 billion ft² in 2002, according to APA–The Engineered Wood Association. Oriented strandboard (OSB) production in the fourth quarter of 2003 surpassed the same quarter of 2002 by 10%, and ended the year with a 4% gain. The 2003 U.S./Canada total of 23.655 billion feet was a record for OSB. Total North American plywood production finished the year 3% below the 2002 total—a loss of 494 million feet.

[Source: Random Lengths *WoodWire*, January 20, 2004]

Wood In Transportation (WIT) Program Proposals for commercialization projects for fiscal year (FY) 2004 are being accepted by the USDA Forest Service. A commercialization project is defined as a project that results in the design and construction of multiple structures per project; e.g., construction of four bridges using the same basic design, the same engineer and/or engineering firm, the same fabricator, the same construction firm, and preferably local timber resources within a single- or multicounty area. The purpose of these projects is to foster the commercialization of modern WIT technology that has been developed during the past 15 years of the Program. Types of structures that are eligible for funding include vehicular bridges, pedestrian bridges, portable bridges, railroad bridges, piers, and sound barriers.

The WIT Program anticipates about $200,000 in funding for the FY 2004 demonstration program. The maximum Forest Service grant for a commercialization project will be $150,000. It has been indicated that 2004 will be the last year that funding will be available for WIT project grants. Proposed projects should focus on advancing one or more of the following objectives, while emphasizing the use of local timber when feasible:

- Structural adequacy: designs that will perform as required.
- Longevity: preservative treatment processes, quality control, design, and installation features that will maintain the integrity of the treatment.
- Serviceability: features that will simplify inspection and maintenance requirements or could eliminate future checks and adjustments to maintain structure specifications.
- Cost: designs that will be economical.

Even though WIT emphasizes commercialization projects, they will accept applications that propose a single vehicular or pedestrian bridge or related transportation structure. Applications can be downloaded from the National Wood In Transportation Information Center's website (www.fs.fed.us/na/wit/grant.htm). Completed applications are due to the appropriate WIT coordinator by April 9. A list of regional coordinators and contact information can be viewed at

www.fs.fed.us/na/wit/WITPages/coordinators.html. For questions or comments, contact Ed Cesa, program coordinator, at 304–285–1591 or na_WIT@fs.fed.us.

Improved Utilization of Solid Wood

Forest Products Industry Trade Shows in 2004—Mark your calendars for the following trade shows and machinery expositions.

2004 Northeastern Forest Products Equipment Expo—April 30–May 1, West Springfield, MA
This trade show, touted as the premier logging, sawmilling, and pallet equipment show in the Northeast, is cosponsored by the Northeastern Loggers' Association (NELA) and The Northern Logger & Timber Processor magazine. Seminars will be held on innovations in logging and sawmilling, chainsaw maintenance and safety, and ethics and images. For more information, visit the Expo website (www.nefpexpo.com), contact the Expo main office at 315–369–3078, or send e-mail to pamleach@northernlogger.com.

In-Woods Expo 2004—April 30–May 1, Hot Spring, AK
This new trade show is sponsored by the Forest Resources Association and the Arkansas Timber Producers Association. New technologies, including tomorrow's timber harvesting, wood processing, and forest management tools and techniques, will be showcased in field conditions. Seminars and hands-on workshops will also be available. Call 301–838–9385, e-mail rlewis@forestresources.org, or visit www.in-woods-expo.com for more information.

29th East Coast Sawmill and Logging Equipment Exposition—June 4–5, Richmond, VA
Known as the Richmond Expo, this biennial trade show will be the largest showcase of logging, sawmill, pallet, and related machinery and equipment in the eastern United States. There will be active hands-on machinery and equipment demonstrations outside, plus hundreds of indoor displays of new products, methods, technology, and trends. Cosponsors are the Virginia Forest Products Association and the Virginia Tech Cooperative Extension Service. Contact Mike Washko, exposition manager, at 804–737–5625 (info@exporichmond.com) or visit www.exporichmond.com for more information.

Variety of Projects Demonstrate Versatility of Small-Diameter Roundwood is the feature article for the Winter 2004 edition of *NewsLine*. Since small-diameter roundwood construction was showcased at the 2002 Winter Olympics in Utah, the Technology Marketing Unit at FPL has continued to work with communities and organizations on a variety of projects, including Navajo hogan-style houses in northern Arizona, a 32- by 64-ft park pavilion in Westcliffe, Colorado, and a 3,000 ft² library in Darby, Montana. Read more about these projects at www.fpl.fs.fed.us/newsline.htm and www.fpl.fs.fed.us/tmu/2003_Accomplishments.pdf. Several photos of the park pavilion and Darby Library are available at www.fpl.fs.fed.us/tmu/.

Chapter 3 of the Manual *Wood Decks: Material, Design, and Finishing* has been adopted by the Georgia Department of Community Affairs into the Georgia Residential Building Code. The chapter "Structural Design and Construction of Decks" was written by Robert Falk, a research general engineer at the USDA Forest Service Forest Products Laboratory in Madison, WI. This 94-page manual, containing more than 40 color photos, numerous tables, and more than 50 scale drawings of various construction details, was published by the Forest Products Society, Madison, WI. Copies are available for $19.95 each (plus shipping & handling) and can be ordered by calling 608–231–1361.

Proceedings from ScanTech 2003 and SawTech 2003 are now available from the Wood Machining Institute. Papers presented at ScanTech 2003 covered log scanning and process optimization; lumber and cut stock systems; and lumber surface measurements, defect detection, and grading systems. Fourteen papers covering sawmill production systems, new materials for saw blades and teeth, saw design and operation, and health and safety issues in wood processing were presented at SawTech 2003. Pricing information for each of the Proceedings is available by contacting Ryszard Szymani at 925–943–5240 or szymani@woodmachining.com.

Editor's Note: The *Forest Products Conservation & Recycling Review* is assembled and edited by Adele Olstad and John Zerbe of the FPC&R Technology Marketing Unit at the Forest Products Laboratory (FPL). *Review* contributions and correspondence may be sent to either Adele or John at the USDA Forest Service, Forest Products Laboratory, One Gifford Pinchot Dr., Madison, WI 53726–2398; e-mail: aolstad@fs.fed.us or jzerbe@fs.fed.us. For copies of FPL or North Central publications, contact FPL at (608) 231–9200.