

Urban Tree Utilization Resources

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Utilizing the Urban Forest: Turning Urban Trees into Wood Products Conference
May 16, 2008

Functional and beautiful wood comes from commercial forests – but it also comes from urban forests, through innovative partnerships and business ventures in local communities that provide a wide array of wood products. Yet the value of many urban trees is wasted, and they incur unnecessary costs when they are hauled to landfills or chipped into mulch. Utilizing the wood in urban trees can benefit local economies, reduce transportation and disposal costs, and support a positive relationship between people and the trees in their communities. North Carolina’s urban forests present the opportunity to find viable, sustainable, economically feasible ways to manage our natural resources.

Utilizing the Urban Forest is hosted and organized by Dr. Jana Carp of the Department of Geography and Planning at Appalachian State University with the support of the Community Woodlands

Alliance, NC State Cooperative Extension, Metropolitan Washington Council of Governments, and Maryland Department of Natural Resources. Conference organizing is funded by a grant from the USDA Forest Service Wood Education Resource Center to the Metropolitan Washington Council of Governments.

The conference is intended for municipal arborists, tree service operators, wood artisans, sawmill operators, private entrepreneurs, urban foresters, landfill managers, and active community members who care about the urban forest.



CONFERENCE SPONSORS

The Wood Education and Resource Center

The Wood Education and Resource Center, located in Princeton, W.Va., is a USDA Forest Service facility with offices, training facilities, and a rough mill. The WERC mission is to facilitate interaction and information exchange with the forest products industry to enhance opportunities for sustained forest products production in the eastern hardwood forest region of the United States. The Wood Education and Resource Center supports managerial and technical innovation to keep businesses competitive. It provides state-of-the-art training, technology transfer, networking opportunities, applied research, and information. WERC serves the primary and secondary hardwood manufacturing industries located in the 35 states of the eastern hardwood forest region.

WERC's primary goals are:

- Improve the knowledge, skills, and capacity of the forest industry management and workforce.
- Increase communication, cooperation, and collaborative problem solving within the forest products industry.
- Improve efficiency in forest product manufacturing and wood utilization.

Website: www.na.fs.fed.us/werc

The Metropolitan Washington Council of Governments

The Metropolitan Washington Council of Governments (COG) is a nonprofit 501(c)(3) organization formed in 1957 to serve the 21 local member governments surrounding our nation's capital, plus area members of the Maryland and Virginia legislatures, the U.S. Senate, and the U.S. House of Representatives. COG provides a focus and a forum for consensus building, policy-making, implementation, intergovernmental policies, plans, and programs. COG supports the region as an expert information resource for developing sound regional responses to such issues as environment, affordable housing, economic development, health and family concerns, human services, population growth, public safety, and transportation. Policies are set by the full membership acting through its board of directors, which meets monthly to discuss regional issues.

Website: www.mwcog.org

The Maryland Forest Service

The Maryland Forest Service restores, manages, and protects Maryland's trees, forests, and forested ecosystems to sustain our natural resources and connect people to the land. "It is the policy of the state to encourage economic management and scientific development of its forests and woodlands to maintain, conserve, and improve the soil resources of the state so that an adequate source of forest products is preserved for the people." [Section 5-602 of the Natural Resources Article, Annotated Code of Maryland]

Website: www.dnr.state.md.us/Forests

CONFERENCE SPONSORS

North Carolina State University Cooperative Extension

Extension Forestry's mission is to enable North Carolinians to make informed decisions concerning the management, enhancement, and enjoyment of their forest resources through research-based information and education. We support NC State's land grant mandate by maintaining a diverse extension and outreach program. We believe in sharing our knowledge with the people of North Carolina and in supporting the economic prosperity of NC communities. Extension Forestry works hard to make sure that the general public, landowners and natural resource professionals all have an opportunity to learn of new discoveries and techniques affecting their lives as soon as possible. We do this by sponsoring Extension Programs that reach people in a variety of different ways. These programs cover the spectrum of forestry and natural resource management, ranging from forest management and harvesting to environmental sciences, public education, wildlife control, urban forestry, community development and more. Visit the North Carolina State University Cooperative Extension website for more information.

Website: www.ces.ncsu.edu/forestry

Appalachian State University Department of Geography and Planning

As part of the College of Arts and Sciences, the Department of Geography and Planning promotes the understanding of spatial patterns within the physical and cultural systems of the earth and the role of community and regional planning in achieving a better life for people within those systems. The Department provides diverse undergraduate and graduate curricula that aid students in finding productive and meaningful places in society. In addition to providing instruction that is consistently ranked highly by students, Department faculty are dedicated to research and service at the University, regional, state, national, and international levels.

Website: www.geo.appstate.edu



Wood Education and Resource Center

U.S. Forest Service
 Northeastern Area State and Private Forestry
 301 Hardwood Lane
 Princeton, WV 24740
 Phone: 304-487-1510 FAX: 304-487-6661

WERC is a U.S. Forest Service facility that contains offices, training facilities, and a rough mill.

WERC'S MISSION is to foster interaction and information exchange with the forest products industry to enhance opportunities for sustained forest products production in the eastern hardwood forest region of the United States.

WERC'S VISION is to be a respected and sought-after source for essential hardwood manufacturing and utilization information.

WERC'S PRIMARY GOALS

- ▶ Improve the knowledge, skills, and capacity of the workforce and management within the forest products industry.
- ▶ Increase communication, cooperation, and collaborative problem solving within the forest products industry.
- ▶ Improve efficiency in forest products manufacturing and wood utilization.
- ▶ Promote the sustainable utilization of woody biomass for energy and value-added products.

WERC is focused on serving the primary and secondary hardwood manufacturing industries located in the 35 States of the eastern hardwood forest region. These include AL, AR, CT, DE, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, NE, NH, NJ, NY, OH, OK, PA, RI, SC, TN, TX, VA, VT, WI, and WV.

Visit the WERC Web site for additional information:
www.na.fs.fed.us/werc/

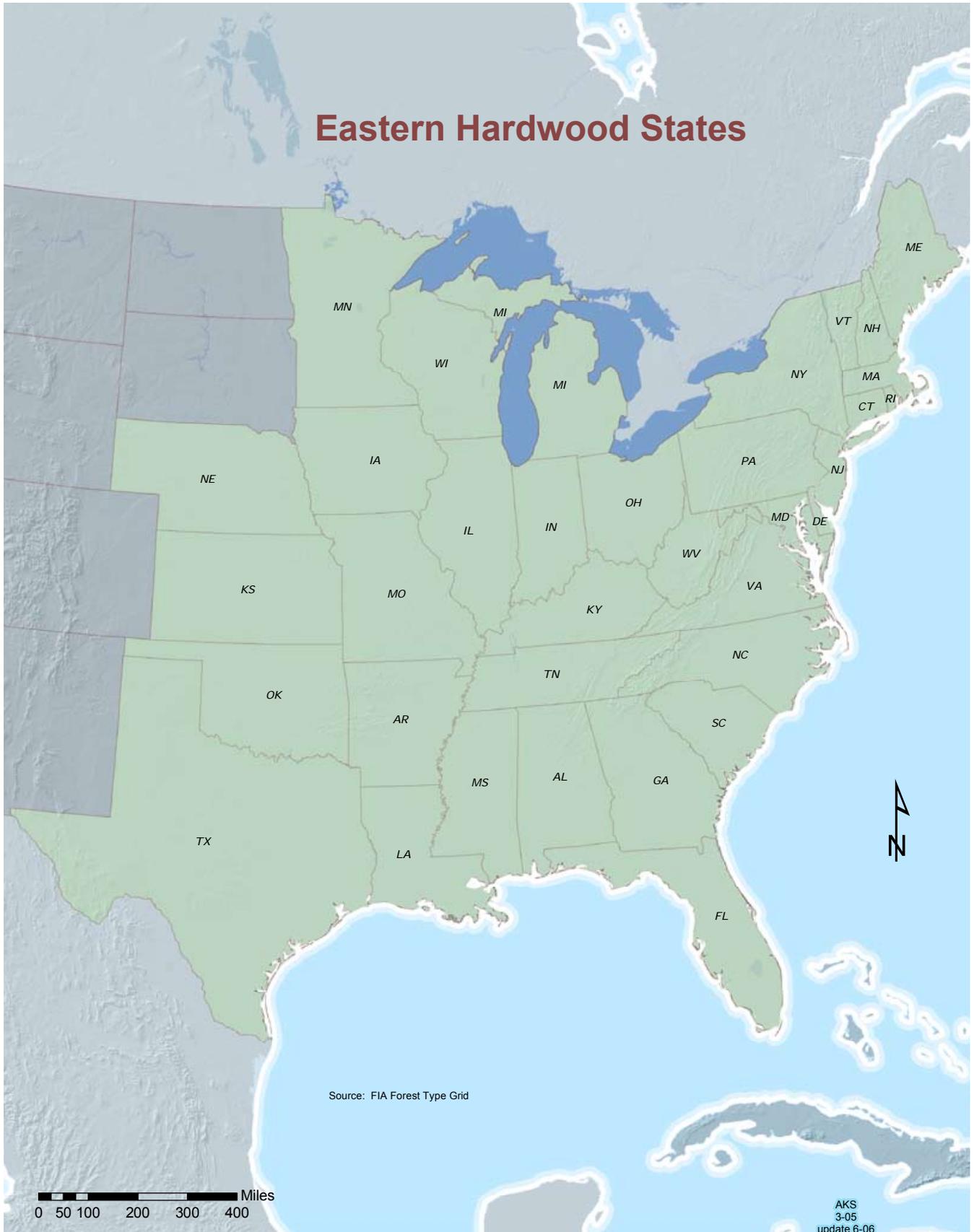
WERC'S CURRENT PERSONNEL

Steve Milauskas, Director, smilauskas@fs.fed.us
Ed Cesa, Deputy Director, ecesa@fs.fed.us
Lew McCreery, Biomass Coordinator, lmccreery@fs.fed.us
Linda Singleton, Management Analyst, lwsingleton@fs.fed.us
Debbie Hawkins, Office Manager, dhawkins@fs.fed.us
Carol Rhodes, Administrative Assistant, crhodes@fs.fed.us
Joe Branscome, Maintenance, jbranscome@fs.fed.us

ANNUAL WERC COMPETITIVE GRANTS

Projects focus on:

- ▶ Maintaining the economic competitiveness of primary and secondary hardwood industries. Examples include encouraging the adoption of new technology to improve competitiveness and profitability.
- ▶ Bringing information and technology about processing, marketing, and business-related skills to existing and emerging businesses that develop and manufacture wood products.
- ▶ Bringing information and technology to existing and emerging businesses about urban wood utilization, hazardous fuels reduction, utilization options geared to improving stewardship, forest health, or the use of low-value woody biomass.
- ▶ Developing technology and markets to address emergency issues (global or domestic), including: 1) phytosanitation of wood-packaging materials, firewood, and similar products to eliminate these pathways for the transport of insect and disease pests; and 2) development of markets for and ways to use unpredictable increases in the volume of urban and rural wood due to incidents such as new pest introductions (e.g., emerald ash borer) and weather events (e.g., tornadoes or ice storms).
- ▶ Increasing the sustainable use of woody biomass to meet our Nation's energy and raw materials needs. Examples include public/private partnerships for using woody biomass in heating and cooling, process energy, cogeneration, district energy systems, and solid and liquid fuel production. Projects may also develop or maintain local markets and forest industry infrastructure through the increased use of woody biomass for both energy and value-added products.
- ▶ Providing key information to address the economic, social, and ecological aspects of woody biomass production and use, including sustainable supplies, harvesting techniques, forest management, plantation development, and environmental implications.



CONFERENCE PROGRAM

The conference features a variety of perspectives on the current state of urban tree utilization, presentations by urban tree utilization businesses and cooperatives, a session on marketing strategies, networking opportunities, and an expert panel for a question-and-answer session.

Topics presented for discussion include issues that communities face with tree removal and disposal; ways to cut, mill and process urban trees safely and efficiently; how to successfully market urban tree products; and how to form effective partnerships necessary to identifying and recovering urban trees, processing the wood, and marketing urban tree products.

There is a display of wood products created by conference participants and a video loop featuring photographs of conference participants' work will run during the buffet lunch.

A field trip organized by Asheville Treecyclers Cooperative on Saturday, May 17, will visit the historic Biltmore Forest for a sawmilling demonstration and the Grovewood Gallery to see a range of handcrafted wood products.

CONFERENCE AGENDA

- 8:30 a.m. Coffee and Registration**
- 9:00 a.m. Welcome and Acknowledgements.**
Jana Carp, Dept. of Geography and Planning, Appalachian State University
- 9:10 a.m. *America's Urban Forest: An Underutilized Renewable Resource***
Sam Sherrill, School of Planning, University of Cincinnati, and Author
- 9:40 a.m. *National Capital Demonstration Program for Urban Waste Wood Recovery and Utilization***
Chris Holmgren, Woodright, Seneca Creek Joinery and Co-founder, Community Woodlands Alliance
Brian LeCouteur, Senior Environmental Planner and Urban Forester, Metropolitan Washington Council of Governments
- 10:30 a.m. Morning Break**
- 10:45 a.m. *Building a Local Network to Utilize Urban Timber***
Nathan Schomber, Woodsmith Portable Mill Service and founder, Asheville Treecyclers Cooperative
Matt Dufon, private consultant and administrator, Asheville Treecyclers Cooperative
- 11:35 a.m. *Marketing 101***
Dan Rider, Associate Director, Maryland Dept. of Natural Resources Forest Service
- 12:00 p.m. Buffet Lunch**
- 1:15 p.m. *Topical Discussions and Networking***
 Mark Megalos, Dept. of Forestry and Environmental Resources, NC Cooperative Extension
- 3:30 p.m. Afternoon Break**
- 3:45 p.m. *Panel Discussion and Response to Questions***
Robert Bardon, Dept. Extension Leader of Forestry and Environmental Resources, NC Cooperative Extension
Sam Sherrill, School of Planning, Univ. of Cincinnati and Author
Dan Rider, Associate Director, Maryland DNR Forest Service
Phil Araman, Research Project Leader and Scientist, USDA Forest Service Southern Research Station and Virginia Tech Wood Science and Forest Products Program
- 5:00 p.m. Adjourn**

CONFERENCE SPEAKERS

Philip A. Araman

Philip A. Araman is a Research Team Leader and Scientist with the USDA Forest Service Southern Research Station and an adjunct faculty member in Wood Science and Forest Products department at Virginia Tech. He and his research team are located the Brooks Forest Products Center at Virginia Tech. His project's research mission is to develop advanced tree evaluation and processing technologies, automated hardwood processing technologies, develop new or improved products made from low- and medium-grade hardwood sawtimber and nonselect species, and to develop effective wood product recovery, reuse, and recycling (<http://www.srs4702.forprod.vt.edu>). They have also conducted non-timber forest products research (<http://www.sfp.forprod.vt.edu>) and urban tree crown evaluations. Phil has extensive experience in pallet production, recovery, repair, and reuse, and in processing logs into lumber, and lumber into pallets, flooring, furniture and cabinet products, and in international trade of hardwood products.

Robert Bardon, Ph.D.

Dr. Robert Bardon has been a member of the North Carolina State University Department of Forestry and Environmental Resources since 1996 and currently is the Department Extension Leader. Dr. Bardon received his Doctor of Philosophy in Forestry (Forest Biology – Wood Science) from Iowa State University. He is a member of the North Carolina State University Academy of Outstanding Faculty Engaged in Extension. Dr. Bardon is a registered forester with the State of North Carolina and a certified forester with the Society of American Foresters. Dr. Bardon's professional interests are in non-industrial private forestry, wildland-urban interface, urban forestry, and extension education.

Matt Dufon

Matt Dufon has a B.S. in Environmental Studies and has spent the past few years as a working professional designing and implementing sustainability programs for the event industry both locally and internationally. Matt is a hobbyist sawyer in the Asheville area and works as a freelance sustainability consultant and independent contractor. He joined with the Asheville Treecyclers Coop early this year to aid in the development of the cooperative, to provide administrative assistance, and to help "Green" the process of harvesting urban timber.

Chris Holmgren

Chris Holmgren has been a carpenter and woodworking professional for the last 30 years. For the last 13 years he has been conducting green woodworking including making chairs using Eighteenth Century tools and techniques and hand carving Appalachian and Scandinavian bowls and spoons. Chris is the proprietor of Seneca Creek Joinery in Dickerson, Maryland where he continues his modern millwork and cabinetry business as well as running a small band saw mill and kiln. Seneca Creek Joinery is a vertically integrated woodworking business equipped to take logs from the stump to finished furniture, cabinetry, custom saw-milling and drying of lumber. Chris is a co-founder of the Community Woodlands Alliance and Seneca Creek Joinery is the demonstration model for CWA's wood utilization project. See www.woodsurgeon.com.

CONFERENCE SPEAKERS

Brian McCalley LeCouteur

Brian McCalley LeCouteur has worked as a Regional Urban Forester and Environmental Planner for the Metropolitan Washington Council of Governments (COG) since 1993. He holds a Masters in Urban and Environmental Planning from the University of Virginia, School of Architecture and a Bachelor of Arts in Geography from Mary Washington College. His horticultural and arboricultural knowledge is derived from many years of experience working alongside his father, Eugene H. LeCouteur, in their nursery and landscape contracting business in Fredericksburg, Virginia during the 1970's and 1980's. Brian facilitates issues among regional forestry professionals in Metropolitan Washington, DC and works to improve urban forest conditions in the Chesapeake Bay watershed by planting riparian buffer, developing forestry policy and urban tree canopy goals. Through the Met-ropolitan Washington Green Infrastructure Demonstration Project, Brian oversaw the production of the first regional green infra-structure GIS map series that provided comprehensive land cover data for the 3020 square mile metropolitan Washington region. Most recently, Brian has been managing a USFS project harvesting trees from the streets of urban and suburban Washington and diverting the saw logs from the landfill to the sawmill. For more information, please visit: <https://www.mwcog.org/environment/green>.

Dan Rider

Dan Rider is Associate Director of the Maryland Forest Service. His primary responsibilities are increased utilization and subsequent marketing of forest products. Although about half of his time is dedicated to policy issues affecting commercial aspects of forestry, Dan's passion is on-the-ground promotion of economic uses of locally produced wood. Maryland offers a diversity of forest opportunities, ranging from the wood-based rural economies to the untapped resources of the urban forest. Dan started his forestry career in 1987 in the private sector, earned his B.S. in Forest and Wildlife Management from Virginia Tech in 1991, and was a private forestry consultant prior to joining the Maryland Forest Service in 2003.

Nathan Schomber

Nathan Schomber, the son of a carpenter and wood craftsman, has been working with wood since childhood. Practically growing up a carpenter in the woodshop, he has a love for wood and trees. In combination with his natural appreciation of the outdoors, this has led Nathan to pursue study in wilderness skills and primitive technology. He has attended and taught at The Tracker School in New Jersey and California and graduated 36 levels of study over 8 years. Subsequently, he has worked as the Head Instructor at the Aboriginal Survival Arts Program (ASAP) in central Illinois for over 3 years, focusing heavily upon trees and woodworking. Nathan also worked as a woodshop teacher at Ranch Hope For Boys, a residential program for troubled youth.

He is also a carpenter, traditional bow maker, an artist working in wood carving, and a Woodmizer sawmill operator. Nathan owns and manages Woodsmith Portable Mill Service, LLC, based in the Greater Asheville area in North Carolina, and is also the founder of the Asheville Treecyclers Coop, a network of tree and wood products businesses dedicated to reutilizing currently wasted urban trees to their highest value uses. The ATC is developing a partnership with the Biltmore Estate to Treecycle their urban trees into wood products. Nathan lives with his expecting wife and 4 year old daughter in the mountains outside of Asheville, N.C.

CONFERENCE SPEAKERS

Mark Megalos

Mark Megalos is Assistant Professor and Extension Specialist for NCSU's Dept. of Forestry and Environmental Resources. His responsibilities cover forest management, reforestation, taxation and conservation opportunities on forested lands. Mark has 25 years of forestry experience in North Carolina. His work history includes outreach, Forest Stewardship and Forest Legacy coordinator, extension specialist and area agent for the NC Cooperative Extension Service. He's a wood recycler and obsessive carver when not doing gardening or home improvement.

Dr. Sam Sherrill

Sam Sherrill, Ph.D. (economics) is a professor in the School of Planning at the University of Cincinnati where he teaches courses in economics and methods of research and conducts research on ways to make the best use of urban trees once they come down. He is the author of *Harvesting Urban Timber: A Complete Guide* from Linden Publishers. His most recent research project was a survey among southwest Michigan businesses on the amount of wood residue they generated and whether the residue was re-used or treated as solid waste. Another part of this study, conducted by a David MacFarlane, a colleague at Michigan State University, estimated the saw log content of the greater Detroit urban forest.

Sam maintains a website, www.harvestingurbantimber.com, where saw mill owners and property owners can connect to pass on potential saw log quality trees.

He has given many invited presentations on the subject of harvesting urban timber, including the Tree Care Industry Association (with Steve Bratkovich), the Arbor Day Foundation, and before numerous woodworking groups. Sam's most recent talk was to the Parks and People Foundation in Baltimore. He has appeared on national television to promote this idea, including the PBS program *New Yankee Workshop*. Sam is a lifelong woodworker who has used urban trees as the sole source of lumber in his projects for over a decade. He works with his son, Carey, on individual commissions. His wife Pat is a pen turner and also uses urban wood.

URBAN TREE PRODUCTS

POSSIBLE USES FOR URBAN TREES

- Benches
- Book Cases
- Bureaus
- Cabinets
- Cabins
- Candle Holders
- Chests
- Chairs
- Charcoal
- Children's Rockers
- Crossbeams and Brackets
- Custom Chairs
- Custom Lumber
- Entertainment Centers
- Fences
- Fireplace Mantels
- Firewood
- Hand Carved Spoons
- Jewelry Boxes
- Lumber
- Mantel Slabs
- Molding
- Mulch
- Pallet Wood
- Park Benches
- Picnic Benches
- Post & Beams
- Railroad Ties
- Settees
- Sideboards for Dumptrucks
- Siding
- Slabs
- Stools
- Tables
- Tabletops
- Tool Boxes
- Trailer Decking
- Tree Houses
- Turned Bowls
- Utility Buildings

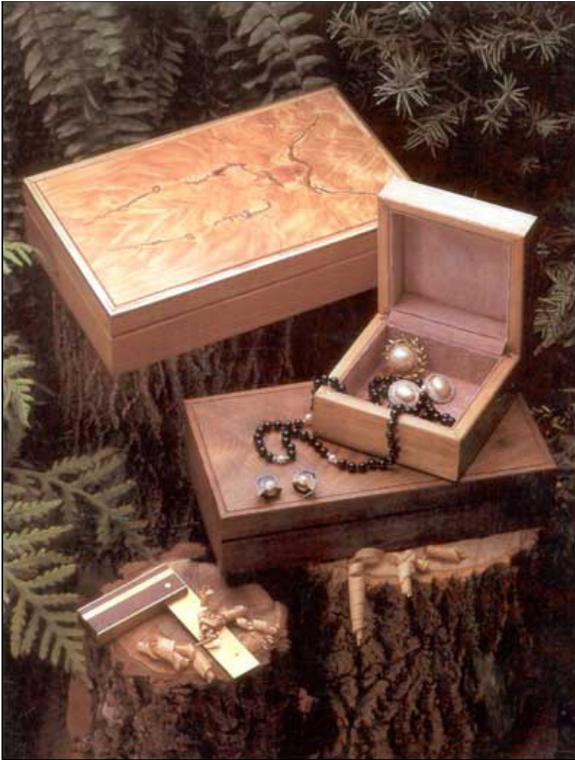
COMPANIES MAKING URBAN TREE PRODUCTS



Chris Holmgren
Seneca Creek Joinery, Dickerson, MD



URBAN TREE PRODUCTS



Greg Hessenthaler
Urban Forest Woodworks

Pacific Coast Lumber
San Luis Obispo, CA



Sam Sherrill
Cincinnati, OH



URBAN TREE PRODUCTS



Woodsmith Portable Mill Service
Asheville, NC



Pat Sherrill
Pat's Pens, Cincinnati, OH



Edwards Sawmill and Lumber
Iron Station, NC

URBAN TREE PRODUCTS

American Woodyards
Raleigh, NC



WOOD PRODUCTS ORGANIZATIONS – NORTH CAROLINA

HandMade in America

Based in the Blue Ridge Mountains, HandMade in America was founded in 1993 with a belief that economic revitalization wasn't necessarily tied to luring "modern" industry to the region but in making known the hidden heritage and craftspeople that are so vitally a part of Western North Carolina. Today, HandMade is a nationally recognized, multidimensional institution that has sparked initiatives and creative collaborations in education, small town revitalization and community development, economic development, environmentally sustainable strategies and enhanced opportunities for makers of the handmade object, heritage tourism, and incorporating crafts into building design and furnishing.

For Further Information, Contact:

HandMade in America

125 South Lexington Avenue, Suite 101

Asheville, NC 28801

Or

P.O. Box 2089 Asheville, NC 28802

Phone: 828.252.0121

Fax: 828.252.0388

Website: handmadeinamerica.org

North Carolina Arts Council

North Carolina had long been recognized for rich traditions in crafts, literature, historical drama, and music when, by executive order in 1964, Governor Terry Sanford created the North Carolina Arts Council to strengthen North Carolina's creativity, invention and prosperity.

Under Governor Dan K. Moore, the Arts Council became a statutory state agency in 1967. It operates today as a division of the North Carolina Department of Cultural Resources, the nation's first cabinet level state agency for the arts, history, and libraries. The mission of the Arts Council is to make North Carolina a better state through the arts. The Arts Council provides technical assistance, information resources, and over 1,000 grants each year to nonprofit organizations and artists. It has a 24-member board appointed by the Governor, a 26-member staff, and serves as the steward of state and federal funds appropriated for the arts.

For Further Information, Contact

North Carolina Arts Council

MSC #4632 Department of Cultural Resources

Raleigh, NC 27699-4632

Phone: (919) 807-6500 or (919) 807-6532

E-mail: ncarts@ncmail.net

Website: www.ncarts.org

WOOD PRODUCTS ORGANIZATIONS – NORTH CAROLINA

Piedmont Craftsmen Inc.

At the beginning of a new millennium the consumer market is dominated by mass-produced goods and computer-generated imagery, and our daily lives are filled with objects which have rendered themselves invisible by the very nature of their plastic perfection. There are still some individuals creating hand-wrought, beautifully designed and crafted objects, and there are people and organizations that celebrate the combination of spirit, craftsmanship, and aesthetic that go into the making of those objects.

Since 1963, Winston-Salem, North Carolina has been home to Piedmont Craftsmen, Inc., a guild founded by craft artists and collectors to honor the work of the hand. Today, Piedmont Craftsmen represents nearly four hundred of the region's most talented artisans. Exhibiting members are juried into the organization based on their skill, professionalism, quality, and originality. Their work includes fine handmade garments, jewelry, one-of-a-kind functional house wares and beautiful decorative objects.

For Further Information, Contact

601 North Trade Street
Winston-Salem, NC 27101

Phone: 336.725.1516

Fax: 336.722.6038

Website: www.piedmontcraftsmen.org

Southern Highland Craft Guild

In 1890 when Frances Goodrich, a Yale graduate, moved to Buncombe County, NC, to do missionary work for the Presbyterian Church, she could hardly have imagined what would eventually become of her "good work". She found a few women who were still weaving traditional coverlets in wool and cotton, and from these associations Goodrich's idea of a cottage industry that would assist mountain families grew. Alland Cottage Industries, which she founded in 1897, in Madison County, NC, would ultimately become Alland Craft Shop. Goodrich moved the business to downtown Asheville in 1908 and from her College Street headquarters, she would network with other leaders of the Southern Arts and Crafts movement. In 1928, many of them met at Penland School of crafts and the idea of the Southern Highland Craft Guild was formed.

For Further Information, Contact

PO BOX 9545
Asheville, NC 28815

Phone: 828.298.7928

Website: www.southernhighlandguild.org

WOOD PRODUCTS ORGANIZATIONS – NORTH CAROLINA

Sustainable Furniture Council

The Sustainable Furniture Council is a non-profit industry association founded at High Point, NC in October 2006 to promote sustainable practices among manufacturers, retailers, and consumers alike. The SFC recognizes the overwhelming scientific consensus that our world is experiencing dangerous global climate change. SFC members acknowledge the tremendous urgency, and will take immediate steps to minimize carbon emissions, waste stream pollutants, un-recyclable content and primary materials from unsustainable sources from any product platform under our control.

SFC members will utilize Life Cycle Assessment as the best method for analyzing the environmental impact of their products, and a verifiable chain of custody as the only acceptable method for tracking wood flow.

SFC members support the triple bottom line of PEOPLE - PLANET - PROFITS and will lead the industry in developing awareness of best practices throughout their supply chains. Members will accomplish this goal by increasing their purchases from suppliers that show continual improvement toward meeting our high standards.

For Further Information, Contact

PO Box 205

Chapel Hill NC 27514

Phone: 919.967.1137

www.sustainablefurniturecouncil.com

URBAN TREE PRODUCTS PUBLICATIONS

Utilizing Municipal Trees: Ideas from Across the Country

By Stephen M. Bratkovich

This USDA Forest Service 2001 publication shows how municipal tree removals can be utilized for traditional wood products by presenting 16 successful projects from around the country. These case studies are organized by the different types of participants: state and regional partnerships, municipalities, tree service firms, entrepreneurs, and sawmills. (Several of these are included in the next section of this resource binder.)

The complete publication can be downloaded at:

<http://www.na.fs.fed.us/Spfo/pubs/misc/utilizingmunitrees/index.htm>

“Carving Niche Markets For Damaged Urban Trees”

By Stephen Bratkovich

A Forest Service staff member reports how millions of cubic yards of woody residues in America’s cities are being used to launch companies and save taxpayers disposal costs.

This article was adapted from Stephen M. Bratkovich’s book, *Utilizing Municipal Trees: Ideas from Across the Country*. He was formerly with the Northeastern Area State and Private Forestry division of the USDA Forest Service and now works privately.

For the complete article, visit: http://www.jgpress.com/IBArticles/2002/JF_24.htm

Recycling Municipal Trees: A Guide for Marketing Sawlogs from Street Removals to Municipalities

By Ed Lempicki and Ed Cesa

The premise for writing this guide came from a USDA Forest Service Rural Development through a Forestry project titled, “Municipal Forest Products Marketing Service.” The New Jersey Division of Parks and Forestry, Forestry Services administered the project, in 1991. The goal of the project was to provide marketing and technical assistance to New Jersey municipalities in recycling street tree removals. It was found that opportunities to produce and merchandise sawlogs from street tree removals exist. These opportunities can generate income for municipal tree management budgets and provide a wide variety of other benefits. The methods for merchandising street tree sawlogs are described within this guide. If you have a street tree disposal problem, the ideas presented here may provide a solution.

To download the publication, visit: http://www.fs.fed.us/na/morgantown/frm/cesa/rmt/rmt_index.html

Harvesting Urban Timber: A Guide to Making Better Use of Urban Trees

By Sam Sherrill

Three to four billion board feet of potential lumber is being fed either directly or indirectly into landfills throughout the United States each year. This book explains the importance of harvesting urban trees and how to do so. Case studies illustrate how some cities and counties have reduced waste through the use of urban timber for various projects. Explained in detail are felling, safety, converting trees to sawn lumber, how to hire a sawyer, how to season the wood, sawing for figure, and what types of trees are worth harvesting. Also described are the various uses for the timber, including use by the home craftsman or to build park benches or bumper strips. Each alternative use is illustrated through case studies of several municipalities and their respective programs of urban timber utilization.

For Further Information on Publication, visit: <http://harvestingurbantimber.com/HUTbook.html>

URBAN TREE PRODUCTS PUBLICATIONS

“Quantifying Urban Saw Timber Abundance and Quality in Southeastern Lower Michigan, US”

By David W. MacFarlane

There is a growing need for society to use resources efficiently, including effective use of dead and dying trees in urban areas. Harvesting saw timber from urban trees is a high-end use, but currently, much urban wood ends up in landfills or is used for wood chips or biomass fuel. To assess the general feasibility of harvesting urban wood, a regional estimate of urban saw timber quantity, quality, and availability was developed for a 13-county area in southeastern lower Michigan, U.S. Conservatively, over 16,000 m³ (560,000 ft³) of urban saw timber is estimated to become available each year in the study area from dead and dying trees, enough to supply the minimum annual needs of five small sawmills. The quality of wood in urban softwoods was generally low but comprised only a relatively small portion (10%) of urban wood. Wood quality of urban-grown hardwoods was comparable to that found in forests in the region, although the absolute volume was nine times less. Although there are potential concerns with harvesting urban trees for saw timber such as low availability and poor wood quality, the results of this study suggest that many of them may be unfounded.

To download the publication, visit:

http://www.fs.fed.us/psw/programs/cufr/products/1/psw_cufr705_SawTimberinSoMich.pdf

“Enjoy Local Trees Indoors: Wood Waste Becomes Beautiful, Functional Art”

By Kathy Johnston

The cabinets are made not of standard maple or oak, but of a locally grown sycamore tree removed from Phyllis Madonna’s yard in a SLO neighborhood. Rather than hauling it off to the landfill, wood specialist Don Seawater of Pacific Coast Lumber took the massive tree to his Prado Road property to join a jumbled pile of logs destined for a new life as functional art.

For the complete article, visit: <http://www.newtimes-slo.com/index.php?p=showarticle&id=2466>

Power Point presentations in PDF from the Forest Products Society’s 2006 Smallwood Conference

“Niche Marketing Strategies for Products From Small Diameter Timber – Using Natural Charcoal as a Case Study”

To view the PowerPoint, visit: <http://www.forestprod.org/smallwood06hammett.pdf>

“Internet Sale of Wood Products”

To view the PowerPoint, visit: <http://www.forestprod.org/smallwood06holmes.pdf>

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS NORTH CAROLINA

American Woodyards, Custom Cut Lumber

American Woodyards, LLC is a full-service locally owned woodyard. We opened in 1994 buying delivered pulpwood and saw timber from a variety of suppliers, including grading and clearing contractors, tree services, landscape companies, and homeowners. This wood is then separated according to size and grade and sold through one of our many outlets including mills, craftsmen, woodworkers, and the general public. The lumber is hand graded by our staff on-site to ensure a quality product. We offer firewood, custom cut lumber, flooring, mantel slabs, custom finished mantels, and furniture slabs to our customers. We believe that we provide a beneficial service to our community by purchasing products that might otherwise end up in our landfills.

For further information, contact:

5199 Hillsborough St.

Raleigh, NC 27606

Phone: 919.851.0073

Website: <http://www.americanwoodyards.com/>

Asheville Treecyclers

Asheville Treecyclers is a cooperative organization based within the Greater Asheville area. The primary purpose of Treecyclers is to provide the resources and infrastructure necessary for facilitating the cooperative recycling of wasted urban logs into valuable lumber, timbers and finished wood products in a way that all parties involved benefit. Because 3 to 4 billion board feet of potential lumber end up in landfills each year across the nation, we see this as an opportunity to significantly reduce landfill green waste and to recycle an urban green resource currently being wasted into something unique and valuable.

Asheville Treecyclers is developing a partnership with the Biltmore Estate to Treecycle their urban trees into wood products.

For further information, contact:

Nathan Schomber / Matt Dufon

Woodsmith Portable Mill Service

P.O. Box 1529

Leicester, NC 28748

Phone: 828.450.1375

E-mail: n.schomber@treecyclers.org / m.dufon@treecyclers.org

Website: www.treecyclers.org

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS NORTH CAROLINA

Edwards Sawmill & Lumber

We specialize in providing the highest quality lumber for woodworkers of all calibers but cater to artisans, craftsmen and professionals. Come on out to the farm and visit. We can also “Treecycle” your tree into a beautiful, usable product.

Sawing – Grade or Quarter sawing costs more.

Kiln Drying – (>25% MC) stock

Molding – Short run (< 1000 square feet) custom jobs only.

Equipment implemented include a Woodmizer LT40HD thin kerf bandmill, Lucas Mill Dedicated Slabber, Northland Kiln and Logosol 4 sided Planer molder for complex and or small molding jobs. I “treecycle” all varieties of wood for customers providing an alternative outlet for trees that have fallen or become diseased. Ask your local arborist or tree service to bring it to me to make you something beautiful.

For further information, contact:

5028 Reinhardt Circle

Iron Station, NC 28080

Phone: 704.258.8985

E-mail: kedwards@sawmillnc.com

Website: www.sawmillnc.com/

H & W Custom Cut Lumber and Mobile Sawmill

Turn your trees into valuable lumber with our mobile sawmill. Get the lumber you need for a fraction of the cost the big stores charge. With our mill we have the capacity to cut logs up to 31” in diameter X 20’ long. We can cut anything from 24”X 24” down to 1/16” veneer. Trailer Decking, Fences, Siding, Post & Beams, Fireplace Mantels, Sideboards for dump trucks and much more. We can cut hardwood and softwood alike.

Available products include:

- Pole Barns
- Horse Stalls
- Hardwood Trailer Decking
- Post and Beams
- Dimensional Lumber Cut to Order

For further information, contact:

10800 Waxhaw Hwy.

Waxhaw, NC 28173

Phone: 980.721.7954

Website: <http://woodbutchernc.tripod.com>

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS
NORTH CAROLINA*Slater Industries Demolition Landfill*

The Slater landfill and recycling operation primarily receives brush, stumps, logs and concrete. The source of the woody material typically is from tree service firms and land clearers. Because of their furniture backgrounds, the Slaters have an eye for wood and hate to see good logs go to waste or to the chipper. Because the chip market in their area is weak, they decided to purchase a portable sawmill to convert landfilled logs into usable lumber products.

For further information, contact:

Joe Slater, Frank Slater

5334 Shallowford Rd.

Lewisville, NC 27023

Phone 336.721.5199

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

Able Tree Service

Jim Cook, owner of Able Tree Service in Missoula, created a database of artists, complete with information on preferred species. He supplies artists with free wood of the preferred species from his tree removal projects. Artists have used his removed trees to make carousel horses, furniture and wooden bowls.

For further information, contact:

Jim Cook
Able Tree Service
300 South Garfield #4
Missoula, MT 59801
Phone: 406.549.9310

California Department of Forestry and Fire Protection (CDF)

The California Dept. of Forestry and Fire Protection loans portable sawmills to municipalities for converting trees into value-added lumber products. A partnership with the California Integrated Waste Management Board is funding portable dehumidification dry kilns, typically used in conjunction with the mills.

For further information, contact:

Glenn Flamik
Urban and Community Forestry Program
Dept. of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460
Phone: 916.651.6423
E-mail: glenn.flamik@fire.ca.gov
Website: www.fire.ca.gov

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

California Hardwood Producers

With a focus on hardwoods and specialize in those native to California, California Hardwood Producers produce hardwood products like flooring, moulding, lumber, slabs, beams and timbers, and so on with their own sawmill and processing facilities. They also carry recycled materials from deconstructed buildings and manufacture products from trees that have been removed from urban forests.

Over the years they have supplied a variety of wood products to fit many different needs. With onsite milling and processing capability they can manufacture both standard and custom dimension products. Their sustainable wood products are used in furniture making, cabinet making, toys, decorating your home and whatever you might think up.

For further information, contact:

1980 Grass Valley Highway
Auburn, CA 95603

Phone: 530.888.8191

Fax: 530.888.8199

E-mail: woodguys@californiahardwood.com

Website: californiahardwood.com

Cincinnati Park Board

A fallen-down cherry tree in Cincinnati, Ohio served as the inspiration for Harvesting Urban Timber, an effort started by amateur woodworker Sam Sherrill. A pilot project initiated by Sherrill and a colleague was publicized by Popular Woodworking magazine and local newspapers, and directly supported by Wood-Mizer Products, Inc., which donated a portable sawmill, and the Cincinnati Park Board, which cut select logs into proper lengths and loaded them onto trucks. The project links tree owners who want to convert trees into furniture with local woodworkers.

For further information, contact:

Willie F. Carden Jr.,
Director of Parks
Parks Department
950 Eden Park Drive
Cincinnati, Ohio 45202

Phone: 513.352.4080

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS

OTHER AREAS

CitiLog

Pioneered by Stubby Warmbold, CitiLog uses a combination of salvaging/urban logging, horse logging methods through our independent affiliate Buck, Bill & Will's Horse Logging, and FSC Chain of Custody wood to produce high-quality custom millwork. We are industry leaders, and one of the few companies that is totally vertically integrated. That means CitiLog can remove trees from your site, process, mill, and ship them back to you as doors, moldings, floors, and cabinetry for your building.

CitiLog products made from our salvaged/recycled wood are certified by the Rainforest Alliance's SmartWood Program which guarantees that the product you order is created from sustainable sources and all wood products are made utilizing environmentally-friendly methods. We are also a member of the U.S. Green Building Council, and most of our products can be made to follow LEED guidelines as salvaged or recycled. In addition, we have FSC Chain of Custody, and can produce our products from FSC certified wood. CitiLog also provides documentation and/or chain of custody papers with every order so you don't have to spend precious time calculating and tracking down paperwork.

CitiLog supports skilled artisans and small-scale production in local communities. As an urban-based business, CitiLog provides jobs for inner city youths who work in the collection, warehousing, and distribution of logs and wood products. Products and projects provided by CitiLog include historical restoration, cabinets/casework, molding/millwork, and flooring.

For further information, contact:

New Jersey Office:

P.O. Box 685

Pittstown, NJ 08867

Phone: 908.735.8871

E-mail: info@citilogs.com

Philadelphia SawMill:

c/o MCIDC Plaza / 6395 S.R. 103 North

Lewistown, PA 17044

Phone: 717.242.2762

Website: www.citilogs.com

Community Woodlands Alliance

Chris Holmgren and Troyt York founded the nonprofit Community Woodlands Alliance in July 2006. Near Dickerson, Maryland, at Holmgren's Seneca Creek Joinery, the CWA has developed a vertically integrated waste wood resource development center. It has in place the technology, infrastructure and logistics capability to perform every aspect of wood production including timber harvesting, raw materials preparation, manufacturing and fabrication, physical distribution and marketing. Public and private woodland owners and managers and tree services bring trees lost to storms, disease and urban expansion to the center for processing. Custom saw milling, kiln drying and related lumber preparation services are available to those with special requirements. Raw materials received are processed into firewood, lumber or finished products and sold.

For further information, contact:

Chris Holmgren, Proprietor

19701 Peach Tree Road

Dickerson, MD 20842

Phone: 301.972.7453 or 800.972.7453

Fax: 301.407.0369

E-mail: woodsurgeon@starpower.net

Website: www.woodsurgeon.com

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

Green Waste Recycle Yard

The Green Waste Recycle Yard diverts urban logs from landfills and prepares them as a feed-stock for mill operators in making dimensional lumber products and creates usable mulch products for various landscape and construction projects.

For further information, contact:

P.O. Box 2377

Berkeley, CA 94702

Phone: 510.527.8733

Fax: 510.549.3965

Website: www.greenwasterecycleyard.com

Lompoc, California

The city of Lompoc uses old hardwood trees to make durable park benches, an improvement over easily damaged pine benches. Using a portable sawmill loaned by the California Dept. of Forestry, Lompoc Parks and Urban Forestry Manager Cindy McCall coordinates the milling of leftover logs to supply high quality hardwood for city projects. Ash trees have been used for picnic tables and flooring, and milling the wood has saved the city nearly \$40,000 in tipping fees. McCall has also supplied Pacific Coast Lumber with urban wood.

For further information, contact:

Cindy McCall

Parks and Urban Forestry Department

100 Civic Center Plaza

P.O. Box 8001

Lompoc, CA 93438-8001

Phone: 805.737.0595

E-mail: cmccall@ci.lompoc.ca.us

Website: www.cityoflompoc.com/departments/parks_rec/index.htm

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

Pacific Coast Lumber

We are a company dedicated to producing eco-friendly and valuable products from trees which would otherwise go to waste; we salvage wood from trees which are deemed economically non-viable as a lumber resource and turn them into functional art. Pacific Coast Lumber is the recognized leader in recycling of local green waste from trees. All of our products are created from trees we have salvaged from a variety of sources—site clearance, storm-downed, dead or dying trees and hazardous trees to name just a few. By harvesting this lumber source and turning it into useable products, we are able to utilize a waste product that would otherwise go to a landfill.

For further information, contact:

445 Prado Rd. Bldg. #T3
San Luis Obispo, CA 93401

Phone: 805.543.5533

E-mail: info@pacificcoastlumber.com

Website: www.pacificcoastenterprises.com

Seneca Creek Joinery

Seneca Creek Joinery prides itself on using traditional skills of the wood craftsman to create individual furniture pieces, each of which is a work of art and will become a treasured possession. Located near Dickerson, Maryland, about 30 miles west of Washington, DC. Seneca Creek Joinery houses the Community Woodlands Alliance (CWA). The CWA is a vertically integrated waste wood resource development center. It has in place the technology, infrastructure and logistics capability to perform every aspect of wood production including timber harvesting, raw materials preparation, manufacturing and fabrication, physical distribution and marketing. Public and private woodland owners and managers and tree services bring trees lost to storms, disease and urban expansion to the center for processing. Custom saw milling, kiln drying and related lumber preparation services are available to those with special requirements. Raw materials received are processed into firewood, lumber or finished products and sold. Seneca Creek Joinery creates Windsor chairs as well as many other styles of custom furniture and cabinetry.

For further information, contact:

Chris Holmgren, Proprietor
19701 Peach Tree Road
Dickerson, MD 20842

Phone: 301.972.7453 or 800.972.7453

Fax: 301.407.0369

E-mail: woodsurgeon@starpower.net

Website: www.woodsurgeon.com

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

Stranger Furniture

William Stranger, founder of Stranger Furniture in Pasadena, California, has been building fine wood furniture since 1987. Trees from all over the world grow in Los Angeles and William supports urban salvage which makes use of wood that would otherwise be wasted as well as providing a unique resource for unusual and beautiful lumber. Other sources include rural salvage from the west coast and the north east; river and lake recovered logs; recycled construction timber; lumber from forests certified as well managed by the Forest Stewardship Council. His products include tables and cabinets made from reclaimed Douglas Fir, furniture from river-recovered Heart Pine, a bed made of twigs and branches salvaged from Stranger's own backyard, and cabinets made from bamboo and formaldehyde-free panels.

For further information, contact:

William Stranger

3202 East Foothill Blvd. #6H

Pasadena, CA 91107

Phone /Fax: 626.405.0927

E-mail: ws@strangerfurniture.com

Website: www.strangerfurniture.com

Terra Mai

TerraMai was founded on a commitment to conservation. The use of reclaimed wood helps preserve the world's remaining forests and also combats global warming. TerraMai has reclaimed more than 1 million board feet of wood since 1991. Much of this material was otherwise destined for landfills and burn piles throughout the U.S and abroad. All of our woods are reclaimed and all are Forest Stewardship Council (FSC) certified. Beyond offering only recycled products, TerraMai is committed to sustainability for all aspects of our operation. We are currently examining ways to offset our shipping and manufacturing and otherwise neutralize our carbon footprint. Firing our kiln and heating our mill shop with wood waste generated by our remilling process is just one example of how TerraMai is looking for innovative solutions to our energy challenges. We also pay to have our excess mill waste chipped and sent to area co-generation plants.

TerraMai provides distinctive, one-of-a-kind wood products for premiere commercial and residential projects throughout the world. Our products include flooring, siding and paneling, decking, beams and lumber and custom items to suit your design and building needs.

For further information, contact:

1104 Firenze St.

McCloud, CA 96057

Phone: 530.964.2740

Toll Free: 800.220.9062

Fax: 530.964.2745

E-mail: info@terramai.com

Website: www.terramai.com

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS
OTHER AREAS*Treecyclers*

Treecyclers, LLC is a small, family owned business that started with a single idea written down on a Taco Bell Napkin. We've grown dramatically since that day, from a concept into a Tree Company that takes full service to a whole new level, for our clients as well as the trees. Too many trees wind up in the landfill. That's such a waste of valuable resources! Just as aluminum soda cans and plastic bottles can be recycled, we figured out that urban trees can be recycled too! Some of the most beautiful lumber we've ever seen has come from trees taken from yards and streets! We live to serve. To us, that means serving you, our client, serving the urban forest, serving the great green earth, and serving God. Grant us the opportunity to show you firsthand the difference between Tree Recycling and the "other" type of tree company. We're sure that you'll be impressed.

For further information, contact:

Prescott Office:
24815 North Prairie Way
Paulden, AZ 86334

Phoenix Office:
3801 West Tierra Buena Lane
Phoenix, AZ 85053

E-mail: info@treecyclers.com

Website: www.treecyclers.com

Urban Forest Woodworks

George Hessenthaler started a wood utilization business to keep Salt Lake city's shade trees (walnut, ash, locust, sycamore, maple, catalpa and chestnut) from being discarded at the landfill. Urban Forest Woodworks produces medium-and high-end jewelry and corporate boxes. Hessenthaler finds that gift store owners are receptive to the idea of selling products made from urban trees and are eager to display the brochures that describe the environmental friendliness of the products. He estimates that he has salvaged more than 250,000 board feet from landfills in 12 years of business.

For further information, contact:

George Hessenthaler
Urban Forest Woodworks
1065 West 600 North
Logan, UT 84321

Phone: 435.752.7268

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

Urban Tree Salvage

With our large concrete jungles in direct competition with our urban forests, we are only just now becoming aware of utilizing our waste products to the utmost. In an era when we are recycling everything, why not recycle city trees? The end of a city trees life usually involves a chipper or woodstove. Not a suitable ending for such a valuable natural resource. A better use for these wonderful trees would be to turn them into usable products such as lumber and furniture. With urbanization, trees reaching maturity, insects and disease and storm damage, there are approximately 9000 trees removed each year from the Greater Toronto Area, with their waste becoming firewood and mulch. We have set sights to reduce the amount of wood waste reaching landfills and urban fireplaces. Using hardwood lumber processed from salvaged city trees lessens the amount of wood harvested from the natural growing environment.

We are striving to change these ways by milling and kiln drying our fallen urban trees and selling them back to the marketplace as usable lumber. The goal is to provide the consumer with an environmentally friendly option when purchasing quality lumber, which in turn, helps sustain our natural environment. Every tree recovered through Urban Tree Salvage potentially saves one tree removed from the natural environment.

For further information, contact:

19A Malley Rd.

Scarborough, Ontario Canada M1L 2E4

Phone: 647.438.7516 or 647.438.7518

Website: urbantreesalvage.com

Wausau, Wisconsin

Blaine Peterson, the city forester for Wausau and park forester for Marathon County, utilizes wood from tree removals in city forests and on county parklands. Logs not sold to paper mills for pulpwood or for saw logs are cut into firewood and sold at two county park campgrounds. Remaining wood is chipped and used for landscaping projects, erosion control, and mulch for dust control at a pit mine. Peterson trades lumber for labor and negotiates with local sawmills to process municipal wood for city projects in exchange for a portion of wood as payment.

For further information, contact:

Blaine Peterson

9000 Pardee St.

Wausau, WI 54401

Phone: 715.261.1558

E-mail: bwpeterson@mail.co.marathon.wi.us

URBAN TREE UTILIZATION – BUSINESSES AND ORGANIZATIONS OTHER AREAS

West Coast Arborists, Inc.

The company, which employs more than 350 people, has annual tree care contracts with 90 southern California municipalities. The California Dept. of Forestry loaned a portable sawmill to the company in 1999 to demonstrate municipal wood utilization and to mill hardwood lumber from logs that traditionally would have been either sent to a landfill, chipped or converted to firewood. The high quality of the lumber and regional interest in recycled and value-added products led the company to purchase its own equipment.

For further information, contact:

Andrew Trotter

West Coast Arborists, Inc.

2200 E. Via Burton St.

Anaheim, CA 92806

Phone: 714.991.1900

E-mail: atrotter@wcainc.com

Website: www.wcainc.com

Wood Education Resource Center

The Wood Education and Resource Center, located in Princeton, West Virginia, is a USDA Forest Service facility with offices, training facilities, and a rough mill. The WERC mission is to facilitate interaction and information exchange with the forest products industry to enhance opportunities for sustained forest products production in the eastern hardwood forest region of the United States.

The Wood Education and Resource Center supports managerial and technical innovation to keep businesses competitive. It provides state-of-the-art training, technology transfer, networking opportunities, applied research, and information.

WERC serves the primary and secondary hardwood manufacturing industries located in the 35 states of the eastern hardwood forest region.

For further information, contact:

301 Hardwood Lane

Princeton, WV 24740

Phone: 304.487.1510

Fax: 304.487.6661

Website: www.na.fs.fed.us/werc/

URBAN TREE UTILIZATION
PUBLICATIONS

“California Urban Woody Green Waste Utilization”

By Tim R. Plumb, Marianne M. Wolf, and John Shelly

When urban trees are damaged or dead, their disposal can be a big financial burden for a homeowner or responsible governmental agency. Traditionally viewed as waste, much of this material has been historically dumped in landfills. Some of the larger material has been used for firewood, and some has been chipped or ground for mulch. More recently, there has been a growing awareness of the tremendous potential value of the larger woody material (sawlogs) for lumber production. Although concern about reducing the amount of solid green waste going to landfills was the major catalyst for conducting this study, identifying the size and potential value of this urban tree resource for solid wood production may be even more important.

For the complete article, visit: <http://www.ufe.calpoly.edu/files/ufeipubs/TechReport8.pdf>

“Community and Urban Forest Inventory and Management Program”

By Norman H. Pillsbury and Samantha J. Gill, Ph.D.

The Community and Urban Forest Inventory and Management program (CUFIM) is one more step in answer to the call for improved management and sustainability of California’s urban forests. This report presents an Excel-based computer program that can be used to setup and maintain a tree inventory and database, and to evaluate the urban forest in quantitative terms including volume and value. It is the hope of the authors that this effort will help urban communities take the next step toward sustainability of the urban forest resource.

For the complete article, visit: http://www.ufe.org/files/ufeipubs/CUFIM_Report.pdf

Harvesting Urban Timber: A Guide to Making Better Use of Urban Trees

By Sam Sherrill

Three to four billion board feet of potential lumber is being fed either directly or indirectly into landfills throughout the United States each year. This book explains the importance of harvesting urban trees and how to do so. Case studies illustrate how some cities and counties have reduced waste through the use of urban timber for various projects. Explained in detail are felling, safety, converting trees to sawn lumber, how to hire a sawyer, how to season the wood, sawing for figure, and what types of trees are worth harvesting. Also described are the various uses for the timber, including use by the home craftsman or to build park benches or bumper strips. Each alternative use is illustrated through case studies of several municipalities and their respective programs of urban timber utilization.

For further information on publication, visit: harvestingurbantimber.com/HUTbook.html

North Carolina State University Extension Forestry, Website and publications

This Website provides information and resources that cover the spectrum of forestry and natural resource management, ranging from forest management and harvesting to environmental sciences, public education, wildlife control, urban forestry, community development and more.

To view, visit: www.ces.ncsu.edu/forestry

URBAN TREE UTILIZATION
PUBLICATIONS

A Planning Guide for Small and Medium Size Wood Products Companies, 2nd Edition
By Jeff Howe and Steve Bratkovich

This 2005 USDA Forest Service publication includes chapters on vision, strategic planning, marketing, operating plans, financial plans, organizing a company, and creating a business plan. The planning guide is based on research studies in Maine and Minnesota that focused on the successful characteristics of small and medium size wood products companies.

The complete document can be downloaded at: www.na.fs.fed.us/spfo/pubs/misc/keys/wp_planning_guide.pdf

“Urban Timber’s Value Overlooked by Homeowners, Builders”
By Katherine Salant

The number of hardwood trees cut every year by municipalities and private homeowners is huge. If the logs were sawn into boards instead of being mulched or tossed into a landfill, the volume, in board feet, would be equal to about two-thirds the amount of hardwood lumber produced annually in the United States, said Stephen Bratkovich, a forest products specialist with the U.S. Department of Agriculture’s Forest Service in St. Paul, Minn.

For the complete article, visit: www.doityourself.com/stry/urbantimber

“Urban Tree Utilization and Why It Matters”
By Dr. Steve Bratkovich

It’s estimated that today there are nearly 4 billion urban trees¹ in the U.S., with another 70 billion trees growing in metropolitan areas². As urban land in the U.S. expands, so do the urban forests. Urban land in the lower 48 states increased from 2.5% of total land area in 1990 to 3.1% in 2000, an area about the size of Vermont and New Hampshire combined. Researchers from the U.S. Forest Service project that urban land in the coterminous U.S. will nearly triple in size to over 8% by 2050, an area larger than the state of Montana. Utilization of urban trees for wood and paper products is still in its infancy. However, the idea is drawing more attention from researchers, community officials, arborists, tree care firms, and wood-using industries including bio-energy producers.

To view the full article, visit: www.dovetailinc.org/reports/pdf/DovetailUrban0108ig.pdf

URBAN TREE UTILIZATION PUBLICATIONS

“Communities Thrive on Trees” (AG-677)

This brochure describes the economic, environmental, and health benefits that urban trees provide to a community. It provides a list of organizations to contact for more information about urban forestry.

To view, visit: www.ces.ncsu.edu/nreos/forest/pdf/ag/ag677.pdf

“Construction and Tree Protection” (AG-685)

This publication describes tree protection strategies that builders and developers can use before, during, and after construction to conserve healthy trees. Communication action to encourage tree protection and reduce the risk of injuring or losing valuable trees is highlighted.

To view, visit: www.ces.ncsu.edu/forestry/pdf/ag/ag685.pdf

“Developing Successful Tree Ordinances” (AG-693)

This publication discusses how communities use tree ordinances as tools to protect trees, preserve green space, and promote healthy, managed urban forests. To protect trees and prevent their loss in the urban environment, communities need to understand tree ordinances, their limitations, and their proper implementation.

To view, visit: www.ces.ncsu.edu/forestry/pdf/ag/ag693.pdf

“Ordinances, Laws, Regulations, and Programs Affecting Forestry in North Carolina”

The website provides a searchable database of local, state, and federal government regulations that may impact natural resource management for communities and counties in North Carolina.

To view, visit: www.ces.ncsu.edu/forestry/ordinance

“Practicing Forestry Under Local Regulations” (WON-41)

This publication provides guidance on practicing forestry under local government regulations.

To view, visit: www.ces.ncsu.edu/nreos/forest/pdf/WON/won41.pdf

“Who is Responsible for the Trees? A Citizen Guide to Trees in the Community” (AG-696)

This publication provides guidance on who is responsible for the maintenance and care of public and private trees in a community.

To view, visit: www.ces.ncsu.edu/forestry/pdf/ag/ag696.pdf

“Zoning and Land Use Regulation of Forestry” (WON-43)

This publication provides information on county and municipal planning jurisdictions, components of a zoning ordinance, and where to go for more information about local regulations.

To view, visit: www.ces.ncsu.edu/nreos/forest/pdf/WON/won43.pdf

URBAN TREE UTILIZATION ADDITIONAL RESOURCES

North Carolina Department of Environment and Natural Resources Division of Forest Resources – Urban Forestry

NCDFR's Urban and Community Forestry program promotes the management of urban trees in North Carolina. Urban trees can be individual trees along a street, scattered trees within a park, or a private or public forested area affected by urban and suburban surroundings.

For further information, contact:

Michael Mann - Timber Utilization specialist

Phone: 919.733.2162, ext. 255

E-mail: Michael.Mann@ncmail.net

Barry New

Head- Technical Development Unit

Phone: 919.733.2162, ext. 249

E-mail: Barry.New@ncmail.net

Leslie Moorman

Urban Forestry Specialist

Phone: 919.733.2162

E-mail: Leslie.Moorman@ncmail.net

Website: www.dfr.state.nc.us/urban/urban_forestry.htm

North Carolina Urban Forestry Council

The North Carolina Urban Forest Council consists of individuals, citizen groups, nonprofit organizations, businesses and agencies from around the state that share an interest in community and urban forestry. We are many different voices protecting trees where we live, work and play. NCUFC is a nonprofit organization which helps communities strengthen the efforts of local groups by serving as a resource, a forum for networking and discussion and an advocate of the urban forest. The Council seeks to encourage and support these communities in their urban forest management efforts.

NCUFC hosts conferences and workshops across the state for training and networking opportunities. We also co-sponsor conferences with others in the green industry. Our members promote the benefits of urban forest management and healthy community forests. We educate elected officials and decision-makers about important issues affecting the future of trees in North Carolina's communities.

For further information, contact:

PO Box 25852

Winston-Salem, NC 27114-5852

Phone: 336.774.0215

Fax: 336.774.0215

E-mail: NCUFC@aol.com

Website: www.ncufc.org

URBAN TREE UTILIZATION ADDITIONAL RESOURCES

Parks and People

Since 1984, Parks & People Foundation has worked to improve the quality of life in Baltimore's neighborhoods. Our staff, volunteers and partners in the community have developed innovative solutions to issues facing our city including the restoration of our neighborhoods and their natural resources as well as the academic enrichment and motivation of our children.

In order to realize our vision of a healthy environment where people live, work, learn and play, we have formed a strategy targeting two major fields of endeavor: Great Parks, Clean Streams & Green Communities – Helping to improve the physical, social and environmental quality of neighborhoods through greening activities and forming networks among communities to sustain natural resources. Motivating Youth – Programs nurturing children and supporting communities by working together to provide enriching activities for youth.

The Parks & People Foundation conference in Baltimore in October 2007 was the “Urban Wood Waste Utilization Venture Forum” to encourage sustainable business opportunities through the utilization of urban wood waste. It was sponsored by the USDA Forest Service, Northeastern Area.

For further information, contact:

Stieff Silver Building
800 Wyman Park Drive, Suite 010
Baltimore, MD 21211

Phone: 410.448.5663

Fax: 410.448.5895

E-mail: info@parksandpeople.org

Website: parksandpeople.org

Society of Municipal Arborists

Founded in 1964, the SMA is an organization of municipal arborists and urban foresters. Our membership also includes consultants, commercial firms and citizens who actively practice or support some facet of municipal forestry.

For further information, contact:

E-mail: UrbanForestry@prodigy.net

Website: www.urban-forestry.com

URBAN TREE UTILIZATION ADDITIONAL RESOURCES

Southern Appalachian Center for Cooperative Ownership

An Asheville-based consulting firm that helps people set up worker-owned businesses.

For further information, contact:

Joe Hill

12.5 Wall St., Suite D.

Asheville, NC 28801

Phone: 828.232.0632

E-mail: joehill@mindspring.com

TimberBuySell.com

TimberBuySell.com is an online “Marketplace for Forest Resources” that includes several categories of news items from the U.S. and Europe including biomass, forest stewardship, wood utilization, urban forestry, sustainable forestry, success stories, wildfire equipment, land use, and more.

Website: www.timberbuysell.com

Tree People

TreePeople is a nonprofit organization that has been serving the Los Angeles area for over three decades. Simply put, our work is about helping nature heal our cities. We offer sustainable solutions to urban ecosystem problems, focusing on three areas:

1. Training and supporting communities to plant and care for trees
2. Educating school children and adults about the environment
3. Working with government agencies on critical water issues

For further information, contact:

12601 Mulholland Drive

Beverly Hills, CA 90210

Phone: 818.753.4600

Fax 818.753.4635

E-mail: info@treepeople.org

Website: www.treepeople.org/

URBAN TREE UTILIZATION ADDITIONAL RESOURCES

Urban Forest Ecosystems Institute

They are based in the College of Agriculture at California Polytechnic State University, San Luis Obispo, California.

The Urban Forest Ecosystems Institute (UFEI) was developed by the Natural Resources Management Department faculty to address the increasing need for improved management of the urban forests in California.

The purpose of the institute at Cal Poly is to provide a center for: applied research, extension and technology transfer, and community service and outreach programs assisting landowners and public agencies in improving the management of urban forests. The scope of UFEI ranges across the full spectrum of forest settings -- from the inner-city forests to remote semi-developed forests. The institute is designed to work in co-operation with other universities, government agencies and even private consulting firms. Project work is accomplished through an interdisciplinary approach with the NRM Department representing the core group of disciplines at Cal Poly. Once fully implemented, the Urban Forest Ecosystems Institute will be an asset not only to Cal Poly, but to all of the communities that utilize this timely new resource.

For further information, contact:

Dr. Richard Thompson, Director

Dan Turner, Executive Director

Cal Poly State University UFEI-NRM Department

San Luis Obispo, CA 93407

Phone: 805.756.2898

Fax: 805.756.1402

E-mail: ufeipolymail.calpoly.edu

Website: www.ufeipolymail.calpoly.edu

PROCESSING URBAN TREES SAWMILLING RESOURCES

NCSU Wood Products Extension

NCSU Wood Products Extension offers educational programs for the primary manufacturing wood products industry in North Carolina with emphasis on sawmills. Major program areas include log breakdown and lumber optimization, quality control, thin kerf sawing, equipment and mill layout, and lumber drying. Portable and small scale sawmilling.

For further information, contact:

Joseph Denig, Department Extension Leader
Wood Products Extension

Phone: 919.515.5582

Fax: 919.515.8739

E-mail: joe_denig@ncsu.edu

NCSU Wood Products Extension offers educational programs for the secondary manufacturing wood products industry in North Carolina. Major program areas include rough mill or lumber cut-up optimization, wood gluing, automated and CNC wood manufacturing processes, and factory-home manufacturing efficiency.

For further information, contact:

Dr. Phil H Mitchell, Wood Products Extension Specialist
Wood Products Extension

Phone: 919.515.5581

Fax: 919.515.8739

E-mail: phil_mitchell@ncsu.edu

The NCSU Extension Project, "Under Utilized Hardwood Species Project: Growing Markets for Seven Minor Eastern Hardwood Species," concerns forest management for under-utilized species and offers other information concerning wood processing and wood products such as modeling software for product design.

For further information, contact:

Harry Wade Watt, Extension Associate
Wood And Paper Science

Phone: 704.880.5034

Fax: 704.876.0030

E-mail: harry_watt@ncsu.edu

PROCESSING URBAN TREES SAWMILLING RESOURCES

Independent Sawmill and Woodlot Management Magazine

Independent Sawmill & Woodlot Management is North America's leading how-to magazine for private woodland owners and in-dependent forest products producers. *Sawmill & Woodlot* provides the information small forest products businesses need to make decisions about their woodlands operations every day.

For further information, contact:

PO Box 408

Belfast, ME 04915

Phone: 207.338.0300

Fax: 207.338.0600

Toll free: 888.290.9469

Website: <http://www.sawmillmag.com>

Harvesting Urban Timber: A Guide to Making Better Use of Urban Trees

By Sam Sherrill

Three to four billion board feet of potential lumber is being fed either directly or indirectly into landfills throughout the United States each year. This book explains the importance of harvesting urban trees and how to do so. Case studies illustrate how some cities and counties have reduced waste through the use of urban timber for various projects. Explained in detail are felling, safety, converting trees to sawn lumber, how to hire a sawyer, how to season the wood, sawing for figure, and what types of trees are worth harvesting. Also described are the various uses for the timber, including use by the home craftsman or to build park benches or bumper strips. Each alternative use is illustrated through case studies of several municipalities and their respective programs of urban timber utilization.

For further information on publication, visit: harvestingurbantimber.com/HUTbook.html

PROCESSING URBAN TREES SAWMILLING RESOURCES

“Use of Urban and Development Site Trees for Lumber”

By Daniel Cassens and Rita McKenzie

In the past, urban trees weren't usually marketable to traditional sawmills and veneer manufacturers because of the relatively small volumes of wood available at any one location and because of the potential to hit embedded objects that damage sawmill equipment. Often buildings, landscaping, and electric lines were damaged when trees were felled, or buried pipes and septic systems were damaged when heavy equipment was used to remove the logs. Until recently, these serious issues have nearly always made the risk of urban tree utilization too high for any potential return. In the last several years, however, portable sawmills have been developed that can process even a single tree in urban as well as forested settings.

For the complete article, visit: www.ces.purdue.edu/extmedia/FNR/FNR_93.pdf

Web forums for woodworkers and sawmillers:

LumberWorks Forum

Website: www.lumberworksforums.com

North Carolina Woodworker

Website: www.northcarolinawoodworker.net

Forum accessible at: sawmillandtimberforumcom.smfforfree4.com

PROCESSING URBAN TREES WOOD DRYING RESOURCES

“Air Drying of Lumber” USDA Forest Service

This report describes how lumber can be air-dried most effectively under outdoor conditions and illustrates the principles and procedures of air-drying lumber that were developed through field investigations and observations of industrial practices. Particular emphasis is placed on the yarding of lumber in unit packages. Included are topics such as why lumber is dried, advantages and limitations of the drying process, properties of wood in relation to drying, layout of the drying yard, piling methods, causes and remedies of air-drying defects, and protection of air-dried lumber.

To view the full article, visit: www.fpl.fs.fed.us/documnts/fplgtr/fplgtr117.pdf

“Drying Hardwood Lumber” By Joseph Denig, Eugene M. Wengert, and William T. Simpson

Drying Hardwood Lumber focuses on common methods for drying lumber of different thickness, with minimal drying defects, for high quality applications. This manual also includes predrying treatments that, when part of an overall quality-oriented drying system, reduce defects and improve drying quality, especially of oak lumber. Special attention is given to drying white wood, such as hard maple and ash, without sticker shadow or other discoloration. Several special drying methods, such as solar drying, are described, and proper techniques for storing dried lumber are discussed. Suggestions are provided for ways to economize on drying costs by reducing drying time and energy demands when feasible. Each chapter is accompanied by a list of references. Some references are cited in the chapter; others are listed as additional sources of information.

To view the full article, visit: www.fpl.fs.fed.us/documnts/fplgtr/fplgtr118.pdf

“Drying Native Lumber” Vermont Department of Forest, Parks, and Recreation

Every year, many landowners utilize the services of portable sawmill operators to process logs harvested from their property. In some cases this wood is to be used for on-site building projects, and in others it is destined to be sold to generate income. While green wood may be acceptable for some uses, it will shrink and possibly warp as it dries. If lumber is to be used for furniture or inside homes, it must be dried before use. Unfortunately, even lumber which has been properly sawn, can lose its value, simply because of defects caused by improper drying techniques. Checking, warping, cupping and staining (caused by microorganisms or chemical reactions in the wood) can all be caused by poor drying.

For the complete article, visit: www.vtfpr.org/pdf/drylumber.pdf

PROCESSING URBAN TREES WOOD DRYING RESOURCES

“Processing Trees to Lumber for the Hobbyist and Small Business”

By Eugene M. Wengert and Dan A. Meyer

The hobbyist or small business owner can save a great deal of money and realize a greater sense of achievement if projects are made from lumber sawn and dried “in house” rather than from purchased lumber. This publication presents the designs for a simple solar kiln; explains the process of obtaining logs and sawing them into lumber; explains the necessary steps in preparing lumber for drying; and offers advice on maintain-ing optimum lumber drying rates.

For the complete article, visit: owic.oregonstate.edu/solarkiln/plans.htm

URBAN TREE PESTS AND DISEASES

Southeast Michigan Resource Conservation and Development Council

The RC&D Council currently is assisting communities and businesses in addressing the Emerald Ash Borer infestation in Southeast Michigan in a positive way, by implementing several grants from the USDA Forest Service. Efforts focus on recycling and developing value-added products from trees removed as part of EAB eradication efforts, and include: demonstration projects, training sessions, an inventory program, and education and outreach efforts.

ASH Utilization Options Project

Southeast Michigan Resource Conservation and Development Council

The Emerald Ash Borer (EAB) is a destructive, exotic pest of ash (*Fraxinus* species) in the United States. Ash is an economically important tree species in the eastern U.S. An EAB infestation is underway in southeastern Michigan and significant ash mortality is occurring.

The Michigan Department of Agriculture (MDA) is planning to remove dead, dying and healthy ash within a 2,500 square mile area in order to eradicate this pest. As a result of this eradication process, significant volumes of wood fiber will be created. MDA is operating ash disposal sites where infested and non-infested ash is processed to eliminate potential breeding and feeding material for EAB. Ash that does not reach a value-added market will be sent to a landfill.

There are several existing markets for material harvested during the eradication process such as industrial biomass fuel and land-fill cover. Smaller markets exist for commercial landscape mulch, wood pulp chips and solid wood products. New markets may also be available for such products as chips for sewage sludge composting, or as feedstock for creation of pyrolysis oils (used as heating oil, a carrier for creosote treating, or as a feedstock for the production of various wood chemicals).

The Southeast Michigan RC&D Council was approached by the USDA Forest Service Economic Action Program to implement a grant to show there can be some economic benefit from the EAB problem and demonstrate markets for the removed wood material. The Council submitted a \$420,000 grant proposal to the Forest Service in the fall of 2003, and the proposal was approved for funding shortly thereafter. The short-term goal of this proposal is to demonstrate how the woody material (logs, limbs and bark) created in implementing the quarantine can be recycled into products, thus reducing the amount of material requiring disposal. This will reduce local disposal costs and in turn reduce the costs of quarantine implementation. The long-range goal is to develop local infrastructure that enables the recycling of all woody material created in caring for the urban and suburban forests of the region. Developing this system will create both economic and environmental benefits in the region.

For Further Information, Contact:

Jessica Simons, Natural Resource Specialist, Southeast Michigan RC&D Council

7203 Jackson Road

Ann Arbor MI 48103-9506

Phone: 734.761.6722, ext. 105

Fax: 734.662.1686

E-mail: jessica.simons@semircd.org

Website: www.semircd.org/ash/ or semircd.org

URBAN TREE PESTS AND DISEASES

Power Point presentation in PDF from the Forest Products Society's 2006 Smallwood Conference
"Controlling Invasive Species Through Utilization"

To view the PowerPoint, visit: www.forestprod.org/smallwood06becker.pdf

"Utilization Options for Decadent Eastern Hemlock Timber"

By Matthew Winn

The hemlock woolly adelgid (*Adelges tsugae* Annand) is a non-native pest that is decimating the eastern hemlock (*Tsuga cana-densis* L.) population in the forests of the eastern United States. Nearly one third of the area inhabited by native hemlocks in the

Central Hardwoods region is infested with the insect. Once a tree is heavily infected, it is estimated that tree death usually occurs within three years. The majority of the current research effort focuses on preventing the spread of the adelgid. Unfortunately, the damage is already done in many areas and little research has been done on examining the utilization potential for the dead hemlocks. The purpose of this study is to examine the current markets for hemlock, determine at what stages of decline hemlock wood can still be used for various products, determine product yield lost when processing dead material, and to make management and harvesting recommendations based on the findings.

For the complete article, visit: www.srs4702.forprod.vt.edu/pubsubj/pdf/07t4.pdf

OTHER URBAN WOOD UTILIZATION

Auburn Enterprises LLC.

Since 1995, the Auburn team have been leaders in developing practical solutions for improving the economic and environmental performance of the forest products industry. It's comprehensive approach has involved a variety of disciplines in a strategy to push the envelope on better utilizing already harvested wood fiber resources. Their unique approach, creativity, diligence, performance, and consistent delivery of positive solutions have been rewarded by a number of awards, recognitions, patents and grants from private foundations, state and federal agencies, economic development entities, trade associations, industry members and corporations from around the country.

Ultimately, the team's goal has been to mainstream the reality that "WOOD" is the most environmentally friendly building and manufacturing material on this planet (see the "Why Wood" section), and that more products should be made from this clean and renewable natural resource, as long as our forests are managed in a sustainable manner.

For further information, contact:

P.O Box 285

Auburn, Maine 04212-0285

Phone: 207.946.3420

Website: www.auburnenterprises.com

Converting Used Pallet Deckboards into Solid Strip Flooring

Pallets are recovered from landfills and pallet recyclers, dismantled, and parts are sorted. Damaged material is sent to a grinder and converted to mulch. Undesirable and low-grade wood goes back into pallets, while flooring material is sent to the chop-saw for processing. Resulting blanks are kiln-dried, molded, and finished. While 150,000,000 pallets are discarded at landfills each year, almost 300,000,000 pallets are recovered by pallet recyclers. The end value of the material could increase by 10 times if used for flooring.

For further information, contact:

USDA Forest Service

Southern Research Station

1650 Ramble Road

Blacksburg, VA 24060

Phone: 540.321.5341

E-mail: paraman@vt.edu

Website: www.srs4702.forprod.vt.edu

OTHER URBAN WOOD UTILIZATION

North Carolina Department of Environment and Natural Resources Division of Pollution Prevention and Environmental Assistance

To protect the environment and conserve natural resources by providing technical assistance on the elimination, reduction, reuse and recycling of wastes and pollutants. Their primary goals are: Use a systems approach to promote the elimination, reduction, reuse, recycling and proper management of wastes; Maintain a high level of operational efficiency and strive for excellence in customer service.

“Value-Added Opportunities for Recycled Wood”

By Urs Buehlmann

Download article at: www.p2pays.org/ref/20/19143.pdf

For further information, contact:

1639 Mail Service Center Raleigh, NC 27699-1639

Phone: 919.715.6500 or 800.763.0136

Fax: 919.715.6794

Website: www.p2pays.org/main/

Recycling Pressure-treated Wood from Spent Residential Decks

An estimated one billion board feet of spent CCA (aka Chromated Copper Arsenate) treated wood was removed from residential decks in 1999, about 40% of the annual treated wood consumption by this market. Only 5% of a demolished CCA treated deck is currently recovered and reused, although as much as 85% may be reusable. Potential products include: pallets, deck components, outdoor furniture, and exterior architectural wood products.

For further information, contact:

Forest Products Conservation Research Unit
U.S. Forest Service Southern Research Station

Phone: 540.321.5341

E-mail: paraman@vt.edu

OR

Center for Forest Products Marketing and Management, Virginia Tech

Phone: 540.231.5876

E-mail: cfpmm@vt.edu

OTHER URBAN WOOD UTILIZATION

Urban Wood Pallet Recycling

Instead of landfilling used and broken wood pallets, they can be repaired, disassembled for use in flooring and paneling, or ground for mulch, animal bedding, and fuel pellets. In 1999, 233,000,000 pallets were recovered, repaired, rebuilt, and sold to pallet users. This saved the equivalent of 23,500,000 hardwood trees and 11,500,000 softwood trees.

For further information, contact:

USDA Forest Service
Southern Research Station
1650 Ramble Road
Blacksburg, VA 24060

Phone: 540.321.5341

E-mail: paraman@vt.edu

Website: www.srs4702.forprod.vt.edu

Waste Reduction Partners: Land-of-Sky Regional Council

Waste Reduction Partners, a team of highly experienced volunteer engineers, architects, and scientists, provides WNC businesses and industries with no-cost waste and energy reduction assessments and technical assistance. Their mission is to work for a sustainable economy, healthy environment, and a better quality of life by helping WNC businesses, industries, institutions, and government entities reduce waste and utilize natural resources efficiently.

“Western North Carolina’s Wood Waste Biomass Supply Survey Results: 2007”

Download report at:

www.landofsky.org/downloads/WNC%20Wood%20Waste%20Biomass%20Survey%202007.pdf

For further information, contact:

Land-of-Sky Regional Council
25 Heritage Dr,
Asheville, NC 28806

Phone: 828.251.6622

Fax: 828.251.6353

E-mail: wrp@landofsky.org

Website: www.landofsky.org/wrp

OTHER URBAN WOOD UTILIZATION

Forest Products Society

Supporting information exchange on the use of wood and wood-fiber resources, the Forest Products Society (FPS) provides its members and others in the forest industry a variety of publications and conference opportunities for furthering member research and goals. Through its sections and chapters and technical interest groups, FPS links an international network of scholars and industry professionals. The close linkage with research enables the industry to gain the competitive advantage essential in this current intensively globalized economy. For over 50 years, FPS has served the industry and its members' needs and will continue to offer leading-edge information on forest products research for the 21st century. FPS is organizing Smallwood 2008 and Bioenergy & Wood Products conferences.

For further information, contact:

2801 Marshall Court
Madison, WI 53705

Phone: 608.231.1361

Fax: 608.231.2152

Website: www.forestprod.org

Forest Products Society 2006 Smallwood Conference

PowerPoint presentations in PDF given at the conference.

“Development of a Biomass Co-Generation Facility at Warm Springs Forest Products”

To view the PowerPoint, visit: www.forestprod.org/smallwood06potts.pdf

“Heating Saint Paul with Wood Waste”

To view the PowerPoint, visit: www.forestprod.org/smallwood06burns.pdf

“Hurricane Rita Damage Assessment, Salvage Recovery, and Wood Utilization”

To view the PowerPoint, visit: www.forestprod.org/smallwood06carraway.pdf

“Mississippi Post-Hurricane Katrina Biomass Summit”

To view the PowerPoint, visit: www.forestprod.org/smallwood06mordica.pdf

Recycling Discarded Pallet Parts into “Green” Flooring in N.C.

By Phil Araman, Joe Pryor, Dave Lowles, and Urs Buehlmann

Download at: www.forestprod.org/smallwood06araman1.pdf

Utilizing Timber Damaged by Two Hurricanes and Related Recovery Efforts”

To view the PowerPoint, visit: www.forestprod.org/smallwood06dehoop.pdf

OTHER URBAN WOOD UTILIZATION

“Successful Approaches to Recycling Urban Wood Waste”

By Solid Waste Association of North America

This report presents eight case studies of successful urban wood waste recycling projects and businesses. These studies document the success of recovered products such as lumber and lumber products, mulch, boiler fuel, and alternative cover for landfills. Overall, wood waste accounts for about 17% of the total waste received at municipal solid waste landfills in the United States. In 1998, the amount of urban wood waste generated was more than 160 million tons, with 29.6 million tons available for recovery. Similarly, in 1998, new construction in the United States generated 8.7 million tons of wood waste, with 6.6 million tons available for recovery; demolition waste generated 26.4 million tons of wood waste, with 9 million tons available for recovery. The case studies were selected on the basis of the following criteria: an emphasis on partnerships among communities, businesses, governments, and non-governmental organizations; efficient use of funds; sustained creation of enterprise; and a high benefit/cost ratio.

Download article at: <http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr133.pdf>

NC Biomass Trader

NC Biomass Trader is North Carolina's marketplace for biomass, bio-based feedstocks, and bio-based energy products and fuels. This exchange service is designed to provide a marketplace for biomass materials that can be used in bio-based manufacturing, converted to energy, or used in energy generating processes or technologies.

For further information, contact:

1340 Mail Service Center

Raleigh NC 27699-1340

Phone: 919.733.1907 or 800.662.7131 (NC only)

Website: www.ncbiomasstrader.com

OTHER URBAN WOOD UTILIZATION

TimberBuySell.com

TimberBuySell.com is an online “Marketplace for Forest Resources” that includes several categories of news items from the United States and Europe including biomass, forest stewardship, wood utilization, urban forestry, sustainable forestry, success stories, wildfire, equipment, land use, and more. The site also includes a comprehensive listing of forest resources events.

Website: www.TimberBuySell.com

USA Biomass Power Producers Alliance

The USA Biomass Power Producers Alliance (USABPPA) is an association representing about 80 biomass-fueled power plants across sixteen states. USABPPA members are the plant owners and operators whose fuels come from the forestry, agricultural, and urban wood waste sectors. Collectively, the 41 member companies represent approximately 1,100 MW of generating capacity.

The USA BPPA also represents developing biomass power, and issues important to the future of the biomass renewable power industry. To this end, we encourage project developers, equipment suppliers, support vendors, and others interested in our industry to join us either as full members or as associates.

For further information, contact: cspc@shasta.com

Website: www.usabppa.com