

GREEN HORIZONS

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Pioneer Forest: A leader in uneven-aged management

by Hank Stelzer, Extension Forester

For more than half a century, the team at Pioneer Forest, a large, privately-owned forest located in the heart of the Missouri Ozarks, has worked to restore more than 146,000 acres of the region's woodlands. From the beginning, founder Leo Drey challenged forest owners and managers to think in long-range terms about forests, their management, and the many public benefits forests provide. University of Missouri studies have confirmed positive management results through Drey's use of uneven-aged forest management using single-tree selection harvests.

In July of 2004, Leo and his wife, Kay, donated Pioneer Forest to the L-A-D (Leo A. Drey) Foundation to ensure that the forest will continue to be managed through environmentally sound and sustainable practices, the largest private gift of its kind in Missouri history. "I have been privileged to have had such good people to work with over the years," Drey said. "I am pleased that the Foundation will continue to manage the forest just as I have done."

The following article discusses the successful forest management system utilized at Pioneer Forest. (cont. next column)



Forest manager Terry Cunningham talks about uneven-aged management with forest landowners during Pioneer's "Keeping the Forest" field day.

Single-Tree Harvesting

Approximately every 20 years, or when a particular stand achieves a closed canopy and the trees show signs of slower growth, trees are selectively harvested at Pioneer Forest. This allows for the periodic removal of some of the growth. Growth per acre has **increased nearly four-fold** and standing volume per acre **has tripled**, all while harvesting timber from the forest using
(cont. page 2)

25th Annual Missouri Tree Farm Conference set for February 25-26

Several changes are in store for those attending the Silver Anniversary of the Missouri Tree Farm Conference, February 25-26. First, the conference is returning to Columbia with the beautiful Stoney Creek Inn hosting this year's event. The wilderness theme hotel is located just south of the MU football stadium on Providence Road. Secondly, the informal landowner exchange returns to the Friday evening social. Last, but not least, a single-track format will allow all participants to hear all of the presentations.

The conference will kick off this year with a Friday afternoon indoor workshop on estate planning. Owners of forestland are faced with many difficult issues when it comes to estate planning. While taxes and the law must be considered in any plan, the most difficult issues have nothing to do with Uncle Sam. Professor Bill Hoover, from Purdue University, will provide an introduction to this often overlooked aspect of owning forestland. Dr. Hoover will discuss the temporary phase-out of the federal estate tax and the need to develop plans that take into account the possibility that the phase-out will not be made permanent.

Dr. Hoover will also discuss the impact of the federal gift tax which is not being phased out. Most importantly, he will discuss the importance of adequately incorporating in your plan the abilities and desires of your heirs. The tax and practical aspects of conservation easements will be reviewed for landowners considering the permanent protection of their land from development.

Everyone is invited to attend the Friday evening social where landowners will gather to share what has worked, as well as what has not, when it comes to managing their woodlands.

Saturday, conference attendees will learn some (cont. page 3)

Pioneer Forest leads in uneven-aged management (cont. from page 1)

an uneven-aged management system. Choosing trees to harvest is as simple as cutting the worst trees and leaving the best within each diameter or product class. In addition to size, variables considered when deciding which trees to harvest include poor form, vigor, disease, and damage. Proper spacing of tree canopies is as important as spacing of the tree trunks on the ground in order to ensure healthy, vigorous growth of the remaining trees.

Harvests remove 12-15 trees per acre or 40% of the standing volume. The result is that as many or more trees of all sizes and age classes are left standing as were cut during the harvest. Uneven-age management allows for the retention of a forest on every acre, even immediately after harvest. Careful marking, cutting, and skidding **is absolutely essential** to protect standing trees as cut logs are hauled out of the woods.



Uneven-aged management allows for retention of a forest, even immediately after a harvest as shown above.

Continuous Forest Inventory

Pioneer Forest managers collect intensive forest inventory data on 486 permanent plots every five years. These permanent plots are subject to the same kind and intensity of treatment (including harvesting) as applied to the forest surrounding them. This continuously updated data set, now nearly 50 years old, provides one of the most interesting long-term records on the dynamics of growth and development for a forested landscape in the Ozarks. The inventory was improved in 1992 by measuring all trees between 1.5 and 5.0 inches dbh (diameter at breast height, or 4.5 feet) and collecting regeneration data on seedlings. The data clearly show that managing a forest by the single-tree selection harvest technique can be successful over long periods of time in the Missouri Ozarks.

Spreading the Word

Pioneer personnel are eager to take visitors on a walk through their woods so folks can see for themselves that this management technique does work. This fall they hosted a two-day workshop in Salem, MO and over 150 people from across the Midwest attended.

Value Missouri and “Green” Wood

Pioneer Forest has been nationally recognized as a working forest using environmentally responsible forest management. Combining their earth-friendly philosophy with Show-Me pride, Pioneer Forest has worked with Value Missouri, a private sector forest stewardship group, and Smith Flooring of Mountain View, Mo., to produce some 1.5 million board feet of Value Missouri

flooring that has since found its way into many homes across the state. The Forest Stewardship Council (FSC), the most stringent program recognizing sustainable management and guaranteeing “green” or environmentally friendly wood products for consumers, certified Pioneer Forest in 2003. Once again Pioneer is teaming up with Smith Flooring and soon consumers across the country will have the opportunity to purchase the first FSC-certified wood products from Missouri’s forests. And it all started with one individual back in 1951 when he saw value in Missouri’s cutover and abused forests.

To learn more about Pioneer Forest, visit their website, www.pioneerforest.com. Value Missouri is online at www.valuemissouri.com.



Top: Logs harvested in 2001 from Pioneer Forest were processed into flooring (bottom) at Smith Flooring as part of Value Missouri’s pilot project in marketing “green” wood from the Show-Me State.

North Arkansas Forestry Conference, March 23-26, 2005

The North Arkansas Forest Landowner Training Conference will be held in Batesville, Arkansas, March 23-26, 2005. The biennial training event hosted by the Ozark Woodland Owners Association (OWOA) and supporting agencies, provides forest landowners and other forestry professionals a period of intensive training on techniques of forest management and forest products marketing. Presentations on pine and hardwood forest management, wildlife and conservation management, utilization of GPS and other technologies, and familiarization with forest product markets and marketing techniques will be provided. All presentations will be supported by a wide array of forest equipment and service providers displaying their forest management product and service lines.

Attendees may learn more about the conference or request registration information by visiting the OWOA website at: www.ozarkforestry.org, or by calling conference project volunteer Ron Bell (870)793-4379.

The ABC's of Profitable Forest Management workshop, April 9

Sponsored by the Southwest Missouri RC&D and USDA Natural Resources Conservation Service, this workshop on April 9 is designed for landowners who want to know more about caring for and improving the profitability of resources from their land. Free lunch will be served to all who register by the deadline of March 31st.

The ABC's of Profitable Forest Management

Saturday, April 9, 2005 (registration 8:30-9:00 a.m.)

Workshop: 9:00 AM – 4:30 PM

Rain date (same time): April 16, 2005

Where: 3 miles east of Goodman in McDonald County, Missouri
On Long Valley Ranch – C Highway

Sessions will include:

1. Name that tree – tree ID for beginners.
2. Adding value with timber stand improvement – practice your skill at selecting crop trees to manage for profit.
3. Identifying tree maturity -- improving your bottom line with the right harvest.
4. Tour a selective harvest completed in 1994.
5. Directional felling demonstration by a trained logger/landowner.
6. Chainsaw chain maintenance short course for do-it-yourselfers. (ICE Company – Stihl dealers, Anderson, MO)
7. Government cost-share programs: profitable water quality protection along streams.
8. Planting tree seedlings for profit and enjoyment.

For more information contact: Skip Mourglia, Consulting Forester/ USDA, NRCS Forester, Southwest Missouri RC & D, at (417)-732-6485 or email skip.mourglia@mo.usda.gov.

Tri-State Forest Landowner Conference, April 2, 2005

The annual Tri-State Forest Stewardship Conference April 2, 2005 at the Grand Theatre in Keokuk, Iowa, will address landowner concerns and questions about private forest management in the states of Missouri, Illinois and Iowa.

This year's program consists of four themes across five concurrent sessions: Agroforestry, Woodland Management, Forest Health and Community Forestry, and Wildlife. Agroforestry topics include specialty wood products, silvopasture, woody florals, alley cropping and a special market report on eastern red cedar. Woodland management will have presentations on tree identification, crop tree release, marketing your trees, chain saw safety and income tax and your trees. Forest health and community forestry topics will include stem girdling roots, how to promote good community forestry, insect watch list, disease watch list and what to do about wilt diseases. Wildlife sessions will focus on encouraging non-game species on your land, backyard birding, pond management, agroforestry practices for game birds, and chronic wasting disease update.

Advanced registration before March 25 is encouraged and is \$35 per person. After March 25, registration will be \$40. For registration information, contact Julie Rhoads, University of Missouri, 203 ABNR Building, Columbia, MO 65211, at (573)882-3234, or email rhoadsj@missouri.edu. For program information, contact Hank Stelzer, extension forester, at (573) 882-4444.

Tree Farm Conference (cont. from page 1)

key aspects relating to reforesting their land; from selecting the right species for the right location to what exotic invasive plants threaten their survival once they are planted. Participants will also learn how to turn an average oak or walnut into a potentially high-value tree through proper pruning.

Following a lunch where outstanding Tree Farmers and Tree Farm inspectors are recognized for their stewardship efforts, participants will receive a forest health update.

The conference will conclude with an interactive forum on habitat restoration efforts for bringing back the Bobwhite quail. Cutting timber, burning, disturbing the soil, renewing vegetative succession are all activities to which quail responded to favorably in the past. Producing quail habitat today demands the same approaches. So, if you want to hear the familiar call of the Bobwhite on your property once again, this forum is for you.

All Green Horizon recipients should have received a brochure by now. If you have not, or would like more information, contact Glenda Fry at the Missouri Forest Products Association, (573) 634-3252 or glenda@moforest.org.

New approaches to logging in Ozark region evaluated at workshop; mechanized thinning trial demonstrated

Sustainable forest management is possible only through a collaboration of landowners, foresters, loggers, and mill operators. The Missouri Department of Conservation (MDC) and the Eastern Ozarks Forestry Council (EOFC) are jointly sponsoring a trial at the Coldwater Conservation Area near Greenville, Mo. (northern Wayne County) to identify which conventional or mechanical technologies can increase the profitability of thinning young and old Ozark hardwood stands, particularly mechanized thinning. Equipment used in the trial was demonstrated recently at an Oct. 30th landowner workshop.

“Thinning is expected to improve forest health and productivity, create new employment and marketing opportunities, and a more mechanized approach should increase operator safety,” said Pete Becker, Eastern Ozarks Forestry Council (EOFC) research coordinator. “The profitability and environmental impacts of mechanized thinning are also being evaluated through this study.”

In addition to mechanical thinning, operators demonstrated wheeled and tracked harvesters and grapple skidders, a feller buncher, a forwarder and a portable sawmill at a workshop on Oct. 30th at the Coldwater Conservation Area. The workshop was well-attended by landowners, foresters, loggers, land managers and mill operators seeking to learn more about profitable forest management.

Attendees at the workshop viewed stands harvested by the equipment to see its impact on soil and trees, and foresters explained how trees were selected for removal or retention as crop trees (see related article below).

During the implementation phase of the MDC / EOFC study, each type of logging technology was performed on three 4-acre replicate plots. Criteria evaluated included productivity, costs, damage to residual trees, soil disturbance and soil compaction. Findings compiled from the mechanized thinning trial and field study will be presented in the spring 2005 issue of Green Horizons.

A Better Way To Thin

According to MDC Resource Forester Jason Jensen, tree size is often mistakenly equated with age, but in Ozark forests pole-sized oaks are typically just as old as the largest trees. Some people think that removing large trees will release the “young poles,” but these often fail to show a growth response.

Unfortunately, the smaller, inferior trees are often the ones left to provide the next crop. Harvesting under this type of system is referred to as high grading. Many forestry professionals believe that this is an unsustainable system.

“How many ranchers sell off their most productive animals and

rebuild their herd from the leftovers?” asks Cape County Extension Agronomist Gerald Bryan. “It doesn’t make any better sense to do this with trees.”

Jensen notes that smaller trees are often the same age as the larger trees but are smaller in diameter due to the position of their crown. Harvesting these small trees salvages trees that would either die or never grow into a valuable crop tree.

“Removing some crowded trees frees those left to expand their crowns and increase both wood and acorn production. Deer, turkey, and other wildlife like those acorns,” says Jensen.

Jensen believes that this type of thinning will improve forest health and productivity, and create new employment and marketing opportunities.

“A more mechanized approach should also increase operator safety,” adds Jensen.



Left: The Barda QC 1400 feller buncher, designed by DAVCO Manufacturing, features a multi-tree cutting layout that decreases cycle times compared to single tree cutting systems.



Below: A Baker 3667 portable band saw was demonstrated at the workshop.

Landowners can now post their timber sale announcements online



The Missouri Forest Products Association has recently launched an online forum where landowners can announce their pending timber sale. Anyone can view pending sales by visiting the Association's website at www.moforest.org/timbersale.php. The system is designed to be easy. An individual goes to the MFPA website and posts their sale. After it is posted, the sale will be added to the current list and all MFPA members will be automatically notified of the new posting. This direct marketing tool has the potential to greatly increase the number of bids received. Basic information requested to post your sale online includes address, email, species, estimated volume, county location, number of treated acres, and a bid deadline. For more information contact MFPA Communications Coordinator Rodric Bradford at (573) 634-3252 or rodric@moforest.org.

Basis and Tax Records

Part of the price you receive from a timber sale is taxable income, but part is also your investment (i.e. your basis) in the timber sold. Allocate your total costs of acquiring purchased forestland – or the value of inherited forestland – among land, timber, and other capital assets as soon as possible. Adjust your basis up for new purchases or investments and down for sales or other disposals.

When you sell your timber, you can take a depletion deduction equal to (adjusted basis ÷ total timber volume just before sale) x (timber volume sold). Good records include a written management plan and a map of your woodlands. Keep records that support current deductions 6 years beyond the date the return is due. Keep records of your basis 6 years beyond your period of ownership. Report adjustments to basis and timber depletion on IRS Form T (Timber), Part II. For more 2004 tax tips, visit www.timbertax.org.

UMCA hosts Mushroom Workshop; draws attendees from four states

Approximately 75 land and forest owners, mushroom producers and mushroom hobbyists attended the Specialty Mushroom Workshop on Dec. 3 and 4th in Columbia, Mo., hosted by the Center for Agroforestry. Discussion topics included truffle, shiitake, stropharia and oyster mushroom cultivation, marketing strategies, winter production and log preparation. Tours of the mushroom research area at the Horticulture and Agroforestry Research Center in New Franklin, MO., and a specially prepared gourmet wine and food tasting were also featured. Mushroom cultivation is a profitable component of the agroforestry practice of forest farming, and one element of the Center's research programs toward identifying profitable options for land and forest owners.

The Bid Box

This past October, a timber sale in Franklin County advertising 815 mixed hardwood trees totaling approximately 108,000 board feet (Doyle Tree Scale), with 75% of the volume in white or red oak, yielded the following four bids:

\$27,777.77
\$26,250.00
\$26,000.00
\$18,680.00

A 50% difference between the high and low bids! Bid prices will vary based on a number of factors like how important is the sale to maintain mill inventory, distance from mill, or harvesting equipment. These and other factors come into play when the buyer is preparing their bid. But, remember you will not know if it's a fair price if you do not know what you are selling. So, make the investment, call a professional forester and have him or her paint mark which trees need to be harvested and prepare an inventory of your sale trees. For a forester nearest you, contact the Missouri Department of Conservation (573) 751-4115, www.conservation.state.mo.us/forest/myforester-search.html, or the Missouri Consulting Foresters' Association (573) 443-3977, www.missouriforesters.com.



Participants at the Specialty Mushroom Workshop observe logs inoculated with shiitake spawn at the HARC mushroom research site.

The University of Missouri Center for Agroforestry facilitates one of the nation's leading research programs for truffles, shiitake and morel mushrooms, based at the Horticulture and Agroforestry Research Center in New Franklin, Mo.

National Farmers Union co-sponsors agroforestry management workshop; portable sawmill, windbreaks, nut orchards explored

According to a recent forestry report, less than six percent of all private landowners in the U.S. have forest management plans, most of them farmers with 25 to 200 acres of woodlands.

Citing this need for woodlot management, the National Farmers Union (NFU) recently co-hosted a series of agroforestry workshops, including one in Missouri on Oct. 30th at the University of Missouri's Southwest Research Center in Mt. Vernon, Mo.



Andy Thomas, left (in hat), discusses improved varieties of walnuts, pecans, hickories and paw paws at the University of Missouri Southwest Research Center in Mt. Vernon, Mo., during the Oct. 30th agroforestry workshop.

Co-organized by the Kansas Farmers Union (KFU), Missouri Farmers Union (MFU) and the University of Missouri Center for Agroforestry, more than 40 landowners attended the event that highlighted trees as a sustainable economic resource. Workshop topics included integrating forestry management on the farm; nuts as a growing market; lease hunting as an additional income source; non-timber products and marketing and managing a woodlot. Discussion areas focused on helping farmers turn their woodlots into sustainable, productive acres.

There is a need for woodlot management," said NFU President Dave Frederickson. "The opportunity also exists to take better care of forests as well as for landowner cooperation to increase economic, recreational and other benefits."

Skip Mourglia, USDA NRCS forester, presented on the topic of lease hunting and how it can be useful in the mix of forest/wildlife management solutions. A sample lease agreement and guidelines for identifying safety issues were included. Mourglia also presented information of the benefits of forest management.

"With proper forest management, a landowner can increase his or her return from 3.1% to 6.0% on an oak forest, with only 30 harvestable crop trees per acre," she said. Tours of research plots and private woodlots allowed participants to see first-hand how to manage their woodlots. The group first toured a low-maintenance, fast-establishing windbreak designed to provide wind protection for cattle in less than 10 years. The triple-row red cedar/white pine windbreak uses 3-gallon Root Production Method® container trees with 10-year landscape fabric for weed control. (RPM® is a trademark of Forrest Keeling Nursery, <http://www.fknursery.com/>)

The next tour stop featured the Southwest Research Center nut orchards, which include 800 grafted trees. Participants examined nut harvesting equipment and compared improved varieties of walnuts, pecans, hickories and paw paws. The final tour featured a walk through a forest on the Baugh family farm to discuss which management activities should be implemented for optimal profit and sustainability.

A Wood-Mizer, or portable sawmill, was demonstrated at the family farm of Will Baugh, who operates a Wood-Mizer business to serve area land and forest owners. The family custom saws individual land and forest owners' logs at their farm site on a regular basis. They also manufacture value-added products, such as interior hardwood trim, moulding and products for the cabinet industry, though the family's primary business is servicing Wood-Mizer band sawmills, from ordering parts to band sharpening.



Skip Mourglia "thumps" a tree to detect the presence of internal rot and decay.

Baugh explained that most wood the business cuts comes from logs people bring to them. The family is not yet harvesting trees from their own forest, but may accomplish this in the near future.

"Landowners interested in marketing lumber from their own forest thinnings should do plenty of market research and identify their target markets before they decide to invest in the capital equipment needed to

harvest the trees, transport them to a mill, or to purchase a bandmill," recommends Mourglia. "Many landowners already own a sizeable tractor, a chainsaw or two, and heavy duty farm trucks."

During the workshop, the Wood-Mizer sawmill was set up outside under a protective roof, and participants watched as the bandmill sawed an oak log, then toured both the (next page)

National Farmers Union Hosts Agroforestry Workshop (cont.)

Wood-Mizer solar kiln and the more traditional forced air kiln. “The temperature difference under the heavy plastic walls of the solar kiln was quite apparent -- much warmer,” observed Mourglia.

Mourglia calls the Baugh forest a good example of an uneven-aged forest condition consisting of three distinct age classes. The lack of any oak regeneration (seedlings on the forest floor) is a result of the heavily shaded over-story, and the needed removal of mature black oaks will allow more sunlight to reach the forest floor to promote oak seedling development. The sustainable management of this uneven-aged system requires that new trees are established as some are being harvested. Part of the forest stocking must be in seedlings, which may provide insurance against weather events like tornadoes.

Participants were shown tree characteristics to aid in deciding which young trees should be removed or retained in a timber stand improvement operation. The discussion also examined how to identify trees that have been suppressed too long to be successfully released by timber stand improvement. These low-quality trees can be cut and allowed to resprout. The fast-growing resprouts, which originate from the existing root system, can eventually be thinned to the best single stem.

During the tour of one 40-acre parcel of the Baugh family farm, attendees also explored the damage cattle have made to forested areas and considerations for fencing cattle away from the forest. Examples of erosion occurring where cattle have access to a woodland drainage area were presented, and attendees received a first-hand look at mature 24-inch diameter oaks as well as young, immature oaks.

As noted by MFU President Russ Kremer, there is great and untapped potential in rural America for family farmers to look into establishing new markets or a new enterprise for the trees on their farms.

“Seventy-one percent of the nation’s timberland is in private

hands,” said Kremer. “Missouri has 284,000 non-industrial private forest landowners. For those who value forest land, water quality and wildlife habitat, this workshop was an opportunity for landowners to learn how to add value to their forests.”

Skip Mourglia, Consulting Forester/ USDA NRCS Forester, can be contacted at (417) 235-7760.

For more information about Wood-Mizer usage or service, contact Will Baugh at (417) 466-9500 or email at wbaugh@woodmizer.com. The Missouri Farmers Union is online at <http://missourifarmersunion.org/>



Above: Landowners examine the cut surface of a log processed through a Wood-Mizer portable sawmill.

Right: Skip Mourglia, USDA NRCS forester, discusses the low-maintenance, fast-establishing Robert Karr windbreak demonstration area.



Left: Andy Thomas discusses nut processing equipment used at the Southwest Research Center.

Landowner Spotlight: Landowner produces, markets “garbage” wood with portable saw mill and kiln

Paul Easley of Moweaqua, Ill., will tell you that there is money to be made in sawing and selling wood that to others, is waste. Wood byproducts, including those usually left in the woods following Timber Stand Improvement (TSI), can readily become a supply for pen blanks, bowl blanks, or other craft wood projects that do not require the typical boards sold by larger mills.

Easley has established a successful business during the past 18 years, utilizing a portable sawmill and a dehumidification dry kiln. His retail store, Oak Leaf Wood 'N Supplies, sells retail hardwoods, imported lumber, hand tools, and woodworking supplies to customers across the U.S. and overseas, in addition to the value-added wood products that are sawed, dried, planed and shaped on-site – with a list of products including cabinet and furniture-grade lumber, carving stock, mantles, gun stock blanks and ball point pen stock. Easley is also producing lower-grade wood products, including planking for bridges, oak flooring, stock for trailer beds and grade stakes.

“There’s an unbelievable amount of products that can be made from wood,” Easley said. “I didn’t reinvent the wheel; I just went after the markets for products that are already out there.”

When Paul and his wife, Kathy, purchased their farm, many of the trees were dying and needing to be culled, an “old growth” forest. However, Easley believed there had to be a wiser use for the trees that needed removed than trash wood or firewood. “It’s nice to feed mother earth, but why not take the natural resource of the dying trees and cut it into some usable product?” Easley said. “There’s a tremendous amount of material that gets thrown away that can be sawed out and made into usable products.”

This became the driving force for Easley to pursue purchasing a portable saw mill, then later, a dry kiln system to add value to the wood. “I went to find someone to buy some of my logs and found that they had no value and that I was too small a harvester to deal with on a commercial level, so I bought my own saw mill.”

Today, Easley continues to practice selective harvesting, removing undesirable species from his woodlots for processing into value-added products, then replacing them with new trees. “Eventually, we’ll have even growth and some very high quality trees. It’s the proper thing to do when you’re working in a small woodlot like this,” he said.

Approximately 20 percent of the wood processed into value-added products is removed from Easley’s acreage, with the remaining 80 percent harvested from urban contractors who would otherwise have to take their logs to a landfill.

“It’s staggering when you consider that half of the forest land in the state of Illinois is on row crop farms – becoming the back forty acreage that nobody looks at like it’s an asset,” Easley said.

“I venture to say that if half of the forest and land owners in Illinois would look at their wooded areas like they were a crop with value, and market some of these materials, they would not only supplement their family farm but in some cases, it could be the salvation of the family farm.”

To ensure a continual supply of the raw materials needed for a growing value-added business, Easley developed a distributorship for the saw mill

company he purchased his own mill from. Soon the entrepreneur was marketing and selling portable sawmills in the region and purchasing all or part of the lumber produced by his customers. The Easleys also began to recover wood that would otherwise be buried in landfills, for which contractors had to pay a price for disposal. Once the word traveled that he was seeking this wood most people considered trash, Easley found himself with a tremendous amount of supplies to work with. “I can go in, and depending on the species, I can take what is left after a commercial harvest and make as much off of it as you can with the logs that were removed,” he said.

(next page)



Above: Paul Easley surveys his collection of blanks, which includes a supply for high-end and lower-grade wood products.

Left: Using a band sawmill, Paul processes wood others might consider trash into value-added products on his farm.



Landowner Spotlight (cont.)

“It’s all in the way you cut it, the way you market your product. A lot of things you might find here you wouldn’t think there is a market for, until we produce something out of it.”

For example, Easley received two large walnut crotch pieces, dumped by a tree service. After making one pass through the saw mill, Easley was astounded at the beautiful natural feathering on the pieces, excellent material for gun stock blanks. Using a digital camera, he photographed the feathering and emailed this with a description to several possible buyers across the country. Immediately a buyer from Tennessee who makes free-formed tables contacted Easley with measurements for cuts he wanted and instructions to ship it immediately. The material that had been on the ground eight hours previously was on its way to Tennessee, and Paul had received \$800.

“Keep it small, keep it simple, and don’t buy any more equipment than it takes to get the job done,” suggests Easley. “Then go to work, do the job with a smile on your face and be enthusiastic about your product. If you’re willing to do that, and talk with your customer, you can succeed. We’re living proof.”

Paul Easley is chairman of the Illinois Tree Farm Committee and is a featured speaker at the Tri-State Forest Conference, April 2, Keokuk, Iowa (See back page for details).

More information about his business is available on the new DVD of agroforestry practices, produced by the University of Missouri Center for Agroforestry. To purchase a DVD, see information on back page.

Eastern Ozarks Forestry Council wins Earth Team Award

The Eastern Ozarks Forestry Council (EOFC), a volunteer organization bringing together a diverse list of forestry resources from the southeastern Ozarks region of Missouri, was recently awarded with an Earth Team Award from the Natural Resources Conservation Service (NRCS).

The Council was established to address issues and trends affecting Eastern Ozark rural communities, people and lifestyles affected by woodland management and marketing strategies. Representatives from government entities, universities, private industry, private consultants and landowners serve on the council.

Goals of the organization include increasing the knowledge of landowners and communities about the value of forest products to the region, sustainable forest management, woodland products marketing and development, best management practices and harvesting techniques.

Individuals can apply to become Earth Team volunteers, or apply as a group, as did the EOFC. Earth Team groups or individuals, NRCS employees/field offices, and RC&D councils are eligible for Earth Team award nominations. The Earth Team is a

volunteer program of the NRCS, designed to expand the services offered by the organization and help carry out its mission. The program began in 1982 with 327 volunteers and has grown to include more than 30,000 volunteers today.

Award nominations span the entire state of Missouri and are voted upon by a state award selection committee, appointed by the state NRCS volunteer coordinator.

The EOFC Earth Team received the award for their assistance with the Big Springs RC&D and NRCS in promoting sustainable forest management. Their Council’s efforts included sponsoring outreach events, information booths, field days, workshops and a mechanical thinning study between the EOFC and the Missouri Department of Conservation to identify which conventional or novel technologies can increase the profitability of thinning young and old Ozark hardwood stands.

The EOFC Earth Team will now advance to the regional competition, made up of six states. Upon earning a winning title at the regional competition, they progress to the National Earth Team competition.

For more information, visit www.morcd.org/bsrcd/ or call (573) 323-8496. To learn more about the Earth Team program, visit www.nrcs.usda.gov/feature/volunteers/.



The Eastern Ozarks Forestry Council receives its Earth Team award. From left: Roger Hansen, NRCS state conservationist; Gerald Bryan, EOFC chairman; Stan Murray, EOFC secretary; Peter Becker, EOFC volunteer; and Jeff Lamb, NRCS Area 5 Earth Team Volunteer Coordinator.

Second annual Missouri Chestnut Roast celebrates National Chestnut Week with record attendance

Vivid leaves, a chill in the air, football, and of course, roasted chestnuts – these are the elements that celebrate the best of fall in mid-Missouri, especially as the annual Missouri Chestnut Roast rapidly becomes a community favorite.

Nearly 3,000 people enjoyed samples of some of the best of Missouri’s agricultural bounty at the second annual Missouri Chestnut Roast on Oct. 16th -- from crisp local wines and sweet Missouri-grown pecans, to black walnut ice cream, homemade pepper jelly and of course, hot roasted chestnuts.

Held annually at the Horticulture and Agroforestry Research Center (HARC), New Franklin, Mo. during the conclusion of National Chestnut Week, Oct. 10-16, the Roast is a key event designed to generate awareness for this unique tree nut. During the mid-1800s, the native American chestnut was one of the most important forest trees along the coast from Maine south to Georgia and from the Piedmont west to the Ohio valley. The nuts were a significant component of eastern rural economies, with truckloads of the glossy brown nuts sold for roasting on the streets of many cities. However, sometime during the late 1800s, a blight accidentally imported from Asia began to infect the trees and eliminated 99.9% of the American chestnut timber resource in the United States by 1950.

At the University of Missouri Center for Agroforestry, researchers are conducting one of the nation’s most significant programs for evaluating cultivars of the Chinese chestnut species, a smaller tree that can successfully produce large quantities of sweet-tasting chestnuts in Missouri and other regions of the Midwest. Nut tree researchers hope to establish the Chinese chestnut as a profitable agricultural opportunity for Missouri landowners and are conducting comprehensive market research studies in addition to cultivar research.

In addition to chestnuts, the annual event also raises awareness for black walnut and pecan, offering nutritional information, recipes and a variety of Missouri-made nut products to visitors. This year, complimenting the popular treat of free fresh roasted chestnut samples was hearty chestnut soup, made with chestnuts harvested from the research farm. Two Midwestern chestnut growers were kept busy during the entire festival selling the mild, sweet-tasting nuts to curious visitors.

Guided bus tours of key projects on the 660-acre HARC site, including experimental black walnut, Chinese chestnut and fruit tree orchards, offered an up-close view of agroforestry practices. New this year in the exhibit tent was a chestnut cooking demonstration with Craig Cyr, executive chef and owner of Cherry Street Bistro and Wine Cellar. Chef Cyr prepared a series of gourmet chestnut dishes while more than 200 guests looked-on, asking questions and sampling the dishes, many eating chestnuts for the first time.

“We’re excited about the consumer interest emerging for these nuts and for the production of value-added products, such as jellies and candies that contain the nuts,” said Julie Rhoads, event

coordinator.

Another new addition this year were exhibits of River Hills and landscape art by local artists. New activities at the Children’s Tent included chestnut necklace-making and a chestnut toss game, popular alongside the interactive farm display and corn-grinding activities. Guided tours of the 1819 Thomas Hickman House, one of the oldest brick homes still standing in Missouri, were another highlight.

Rose-Marie Muzika, associate professor, University of Missouri, attended the Chestnut Roast with her daughters. “Children of all ages could choose from a range of educational and fun activities to occupy them,” she said. “But the best part of the event for all age groups was the opportunity to enjoy a beautiful October day and great Missouri-made agricultural products outside in the river hills.”

For more information about the annual Missouri Chestnut Roast visit www.centerforagroforestry.org. Next year’s Chestnut Roast is set for Saturday, Oct. 29th.



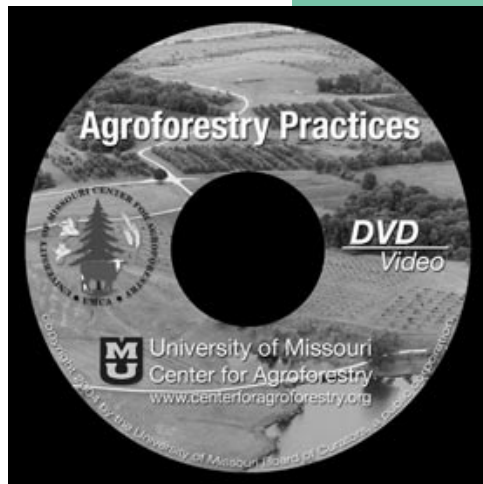
Top: Charles NovoGradac, known as “Chestnut Charlie” from Lawrence, Kan., sells fresh chestnut products to visitors.

Bottom: Gourmet chef Craig Cyr prepares chestnut dishes for a crowd of nearly 200 guests, who received samples of each dish.

The Back Page: Take It Easy With De-icers

Nearly all ice melters are salts. They work by keeping water from freezing when the temperature is less than 32° F. This is great to keep sidewalks, driveways and streets safer. But, these same chemicals can poison your favorite trees if you are not careful. Once the salt crystals have done their job, the resulting salt water solution can either be splashed onto your tree or enter through the roots via runoff.

In both cases the tree's health is compromised. Stunted and deformed growth can occur and leave the tree vulnerable to insect attack and disease development. Over time the salts can accumulate in the soil to the point where the trees dies. So, to help protect trees in areas close to sidewalks and driveways, choose from these alternatives: abrasives land sand or cinders, and bio-degradable de-icers.



New Agroforestry DVD Available!

The Center for Agroforestry recently completed a DVD integrating the four previously produced videos on the agroforestry practices of alley cropping, windbreaks, riparian forest buffers and silvopasture with the fifth practice, forest farming. The new section shows examples of successful forest farming operations, including shiitake mushrooms, pine straw, woodland wildflowers, medicinal plants and high value wood blanks, along with tips for marketing forest farming products.

Each DVD is \$10 and can be purchased with a check to the University of Missouri. Send payment, quantity requested and the name and address of recipient to:

University of Missouri
Center for Agroforestry
ATTN: DVD
203 ABNR
Columbia, Mo. 65211

For more information, contact UMCA at (573) 884-2874 or email umca@missouri.edu.

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Forestry Fact:

Percentage of family owned forests in Missouri by site:

Acreage	Percent of landowners
1-9	6%
10-49	23%
50-99	21%
100-499	37%
500-999	7%
1000-4999	3%
5000+	3%

Source: 2003 U.S. Forest Service National Woodland Owner Survey

Revised Publication Schedule:

Green Horizons should reach your mailbox on the 21st of January, April, July and October. Send newsletter information by the 15th of the month preceding publication to: Rachel McCoy, 203 ABNR, University of Missouri, Columbia, MO., 65211.

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Calendar of Events

Jan. 28-29, 2005: Missouri Farmers Union Annual Convention, “Embracing Our Rural Heritage.” Glasgow, Mo. Topics include workshops on entrepreneurship and community development, in addition to keynote speakers. For more information, visit www.missourifarmersunion.org; or call (573) 659-4787.

Feb. 2-4, 2005: Missouri Natural Resources Conference, Tan-Tar-A Resort, Osage Beach, Mo. Session topics include quail and grassland bird conservation, Ozark stream assessment, groundwater resources and threats, landscape modeling and Missouri forest inventory and analysis. For more information, visit www.mnrc.org or call Renee Cook, USDA-NRCS, at (636) 922-2840 ext. 3.

Feb. 4-5, 2005: Missouri Nut Growers Winter Business Meeting and Nut Show, Nevada, Mo. Nut evaluations, technical presentations and the annual business meeting will be included. For more information, contact Norval Netsch at (660) 647-3367.

Feb. 11-12, 2005: Conservation Federation of Missouri Conference, Lodge of Four Seasons, Lake of the Ozarks, Mo. Sessions topics include deer and wild turkey, forestry, rivers and streams, waterfowl, water resources, sportsmen’s rights and natural history. For more information, call (800) 575-2322 or visit www.confedmo.org/.

Feb. 25-26, 2005: 25th Annual Tree Farm Conference, Stoney Creek Inn, Columbia, Mo. Program includes discussions on woodland estate planning, selecting the right tree species, invasive plants, pruning high-value forest trees and a forest health update. Register online at www.mofrest.org/treefarm/conference.htm; or contact Glenda Fry at the Missouri Forest Products Association, (573) 634-3252 or email glenda@moforest.org. Additional information on page 3.

March 19, 2005: Options for Small Acreages Seminar & Trade Show, Lebanon, Mo. For more information, call (417) 532-7126.

March 23-26, 2005: North Arkansas Forestry Conference, Batesville, Ark. See page 3 for details.

April 2, 2005: Tri-State Forest Stewardship Conference, Grand Theater, Keokuk, Iowa. The conference will address landowner concerns and questions about private forest management in the states of Missouri, Illinois and Iowa. For registration information, contact Julie Rhoads, UMCA, at (573) 882-3234 or email rhoadsj@missouri.edu; for program information, contact Hank Stelzer, extension forester, at (573) 882-4444 or email stelzerh@missouri.edu. Additional program and registration information on page 3.

April 9: The ABCs of Forest Management Workshop, McDonald County, Mo. See page 3 for details.