

# GREEN HORIZONS

Vol. 14 No. 1

Growing Tomorrow's Future Today

Winter 2010

## Trees Tell Their Story

Michelle Hall, MU Center for Agroforestry

How do you determine whether an historical cabin still has original building materials from the early 1800s or whether completely new materials were used when it was reinforced more than a century later?

Well, if you're Rich Guyette and Mike Stambaugh of the University of Missouri department of forestry, you'd look no further than the logs holding the cabin together. Guyette, forestry research professor, and Stambaugh, forestry research associate, are experts in dendrochronology, or tree-ring dating, and perform analysis, along with three technicians and a group of students, on log samples from across the country in their MU lab.

The case of the Hickam House at Rock Bridge State Park is one that hits close to home. Stambaugh and his wife were married at the cabin in 1999. Ten years later, the question of the age of the cabin's pieces was raised. The deteriorating condition of the cabin will soon make it unsafe for visitors, and park officials plan to tear it down if the testing shows no historical materials are still present. Although the building materials are in question, it is believed the cabin rests on the original 1830s site.

Stambaugh had a professional – and personal – interest in clarifying the dates.

So one drizzly day in October, Stambaugh and Guyette took samples from a range of logs at the Hickam House,



Mike Stambaugh shows the collection at the MU Tree Ring Laboratory. The lab houses wood samples of all different types and ages from around the country. One sample (larch tree) collected from northern Missouri dates back 22,500 years.

both inside and outside the one-room structure. They used an archaeological drill bit to procure cigar-sized cores, drilling to the middle-most ring, or pith, to get the best sample. In some spots they were able to take cross-sections from the ends of logs. (cont. pg. 9)

## Preserving the Family Forest: Dogwood Case Study - Part II

Kirk Fine, Missouri Tree Farmer and Financial Planner

*Material discussed herewith is meant for general illustration and/or informational purposes only. Please note that individual situations can vary. This information is not intended to be a substitute for specific individual tax, legal or investment planning advice.*

First and foremost, I would like to apologize for not completing my installment for the fall issue. As you may have read, I lost my father unexpectedly and was pre-occupied with handling his estate issues and had to put the article on hold. I'd like to thank all of you who let me know my family was in your thoughts and prayers.

I had intended to make this issue about the planning that Mr. and Mrs. Dogwood needed to (cont. pg. 10)

### In this issue:

Trees Tell Their Story	1
Preserving the Family Forest	1
Jose Heads MU Center for Agroforestry	2
The Carbon Corner	3
Missouri Tree Farm Celebrates 60 Years	4
Jacoby Family Recognized	5
Trees and Stormwater BMPs	6
Timber Tax Update: Form 1099-S	7
Online Decision Models for Nut Trees	7
The Toolbox	8

# Shibu Jose Heads MU Center for Agroforestry

Michelle Hall, MU Center for Agroforestry

The University of Missouri Center for Agroforestry has a new leader.

Shibu Jose, Ph.D., has become director of the Center, effective Nov. 1. Upon previous director Gene Garrett's retirement Dec. 31, Jose assumed the endowed professorship, the H. Gene Garrett Chair of Agroforestry. Garrett will continue on at MU as superintendent of the Horticulture and Agroforestry Research Center and professor emeritus of forestry.



"MU is fortunate to have recruited an eminent scholar of Dr. Jose's caliber," said Mark Ryan, director of the MU School of Natural Resources. "He is uniquely qualified to build upon the great success of Dr. Garrett and the Center for Agroforestry."

Jose comes to MU from the University of Florida in Gainesville, where he served as a professor of forest ecology with the School of Forest Resources and Conservation and held affiliate faculty status in the School of Natural Resources and the Environment, and the soil and water science department.

"The University of Missouri Center for Agroforestry has been a global leader in agroforestry research, teaching and technology transfer," Jose said. "It is my great honor and privilege to serve as the Director of the Center and assume the Endowed Professorship upon Dr. Garrett's retirement."

Jose received his B.S. in forestry from Kerala Agricultural University, India, and his M.S. and Ph.D. in forest science from Purdue University.

He is the author of more than 80 refereed articles and has edited six books. His work has been presented at more than 150 regional, national and international conferences, including several invited speeches and keynote addresses.

Jose's research program has the overarching goal of identifying and quantifying key ecological processes and interactions that define ecological sustainability. He examines

how resource availability and disturbances influence ecosystem structure and function in agroforests, natural forests and plantation forests. He uses the ecological information in designing agroforestry systems and restoring degraded and damaged ecosystems. Over the past 20 years Jose and his research team have conducted studies in the U.S., Australia, Costa Rica, Belize, Bangladesh and India.

He is Editor-In-Chief of *Agroforestry Systems*; Associate Editor, *International Journal of Ecology*; and Associate Editor

(former Editor), *Journal of Forestry*. He currently serves as a Division Deputy Coordinator of the International Union of Forest Research Organizations (IUFRO). He has served as Chair of the Cultural Diversity Committee of the National Society of American Foresters (SAF), member of the Forest Science and Technology Board of SAF, Chair of the National Agroforestry Working Group, Chair of the Applied Ecology Section of the Ecological Society of America (ESA), council member of ESA and board member of the Southeastern Chapter of Society for Ecological Restoration.

Jose's awards and honors include Faculty Award of Merit by Gamma Sigma Delta, the Honor Society of Agriculture; Stephen Spurr Award by the Florida Division of the Society of American Foresters (SAF); Award of Excellence in Research by the Southeastern SAF; National Leadership Award by the National SAF; and Aga Khan International Fellowship. Most recently, he spent six months in Bangladesh as a Fulbright Scholar conducting teaching and research.

Contact Jose at 573-882-0240 or [joses@missouri.edu](mailto:joses@missouri.edu). His profile is available at <http://www.centerforagroforestry.org/personnel/index.asp#Jose> **GH**

*The University of Missouri Center for Agroforestry, established in 1998, is one of the world's leading centers contributing to the science underlying agroforestry. Find the Center online at <http://www.centerforagroforestry.org>*

# The Carbon Corner: From Feast to Famine

Hank Stelzer, MU Forestry Extension

*In trying to find the right words to explain the current state of affairs with respect to carbon offsets, I came across an article by Matt Smith and Jon Pomp of FORECON Eco-Market Solutions, LLC, that appeared in the Forest Landowners Association's Nov/Dec issue of Forest Landowner. With their permission, here is the gist of the article.*

If you have been wondering what has been happening with “the carbon credit thing” lately, you are not alone. Over the past few years, forest landowners and managers have been bombarded with information about the emerging markets related to forest carbon sequestration. Recently, however, the excitement and the message on forest carbon markets has changed significantly, leaving many wondering what is happening, whether or not this new market is or was real, and what they should or should not be doing now and in the future.

Carbon offset market development in the U.S. has included multiple overlapping efforts, including voluntary markets like the Chicago Climate Exchange (CCX), voluntary standards or protocols like the Voluntary Carbon Standard (VCS), as well as emerging regulatory markets like those developed in California (CAR) and the northeast (RGGI). This rapidly evolving market has spurred a new age of innovation, investment and debate.

As exciting as these developments have been, real opportunities for forest landowners have been quite variable, with the keys to success lying in details that are mired in policy jargon and fine print of carbon program and/or market rules. In addition, realizing income from carbon depends heavily on numerous factors including a landowner's willingness to both commit to positive sequestration through growth for some period of time and to employ forestry activities that were additional to their previously chosen management regime.

## The Feast

Over the past few years, the CCX has represented the most forestry-friendly, low-cost and well-defined carbon reduction program in the U.S. As such, most of the program promotion to private forest landowners has been for CCX-approved pooled projects, such as those available from groups like FORECON EcoMarket Solutions, LLC, The Delta Institute, The National Carbon Offset Coalition, as well as others. With historic CCX market prices averaging near \$3.50 and spiking at more than \$7 per tonne in July 2008, many of the early forestry projects provided positive

financial results for landowners. As a result, project developers and forest landowners alike were encouraged at the prospect and benefits of this exciting new market.

## The Famine

Then right on the heels of this boom came the bust: the global economic crisis of late 2008. As a result of this crisis, carbon programs and offset credits became somewhat of a feel-good luxury item that would have to take a back seat to survival measures for many emitters.

It was also around this time that many sectors began placing the newly-developed forestry offset protocols of the Climate Action Reserve (CAR), the VCS, and others on a pedestal as higher in quality than the CCX. Many of these groups and individuals felt that these protocols provided them with the long-lasting vision of quality climate benefits they were searching for from an offset because their protocols were much more rigorous (and restrictive) than those of other programs like the CCX.

The expansion of the market space to include CAR, VCS and other programs combined with the economic crisis, concerns related to the emerging federal program, and the lack of a long-term commitment from the CCX would significantly change the market-wide outlook for 2009. As a result, prices have plunged dramatically with CCX prices currently trading around \$0.15 per tonne, while VCS and CAR credits have been relatively stable at between \$4 and \$10 per tonne. The current economic realities for the CCX has led to a virtual standstill in interest from forest landowners in offset project development from the private sector, while interest in other markets and/or programs is stable or even increasing.

## The Future

It appears that the market is currently stuck in a “pre-regulatory rut.” Until there is clear understanding of what will and will not be allowed under the eminent federal cap-and-trade program, little forward momentum is expected in the forest offsets sector. We have essentially entered a somewhat painful transition period from the open voluntary markets to a defined regulatory market in the U.S.

What will it take to return to the growth phase of the carbon market? First, the adaptation of a federal program. Second, an announcement from the CCX on its continuation as a market past 2010. Third, an improved **(cont. pg. 8)**



# Missouri Tree Farm Celebrates 60 Years

Fred Crouse, Missouri State Tree Farm Committee

Saturday, Oct. 24, 2009, more than 80 people commemorated the 60th anniversary of the Tree Farm Program in Missouri. It was only fitting that the celebration take place on the Shannondale Tree Farm, the oldest continuously owned Tree Farm in the state.

The highlight of the morning's indoor session was a series of reflections by three of the Rev. Vincent Bucher's children on what life was like on the Shannondale property in the 1930s and 1940s. Shannondale was established by the United Church of Christ with the Rev. Bucher serving as its first pastor. It was through his efforts to demonstrate good forest stewardship to local landowners that Shannondale became one of the first Tree Farms back in 1949. The children's stories helped connect all those in attendance with what had been accomplished on the property over the many years of ownership by the Church.

During lunch, awards were presented. Regional Tree Farm winners were announced: Leroy Jackson, Randolph County; Rick Nickelson, Callaway County; Dwight & Barb Ittner, McDonald County; Dan Jarvis, Iron County; and Jacoby Land & Timber, Wright County. Jacoby Land & Timber was recognized as the 2008 Missouri Tree Farmer of the Year.



Mike Gaskin talks about forest management at one of the afternoon field stops.

Inspecting foresters were also recognized and rewarded for their efforts inspecting the Tree Farms in Missouri.

The John P. Slusher Award is awarded to a professional forester who has served the Tree Farm Program. This year's recipient was Gary Smith, District Forester with the Missouri Department of Conservation. Gary has worked for more than 35 years with the Tree Farm Program and the award was a fitting tribute to

his tireless efforts.

The Fred Bergman Award was presented to John Keesey posthumously. Mr. Keesey, Consulting Forester, had worked many years with Shannondale assisting them in their forest management efforts. In memory of John and his long-standing association with Shannondale, a burr oak tree (donated by fellow Tree Farmers Scott Brundage and Jeremy Wilson) was planted on the grounds prior to the Saturday event.

Afternoon activities took full advantage of the beautiful October day with field site visits highlighting proper timber harvesting, wildlife management, best management practices and Shannondale's facilities. **GH**

## Keep Your Management Plan Current

How should forest management plans be updated to ensure they are still eligible under the Tree Farm program? A plan is as useful as it is current, but what does it mean to have a management plan that is "...active, adaptive, and embodies the owner's current objectives?" (See AFF Standards of Sustainability; Standard 3, Indicator 3.1.2).

A plan update can be as informal as a dated handwritten note in the margin indicating you have completed a management activity or a short amendment describing why you have chosen to have deferred the activity.

More formal updates may be needed as landowner management objectives change or if all activities prescribed in the plan are completed. Remember to always include a date in any updates and initial or sign the update.

Tree Farm inspectors should encourage landowners to review their plans on a regular basis. A management plan should be used as a living guide for the landowner, so make sure it isn't hidden away and forgotten in a drawer somewhere. So, where is your management plan and is it up to date? **GH**

# Jacoby Family Recognized as 2008 Tree Farmer of the Year

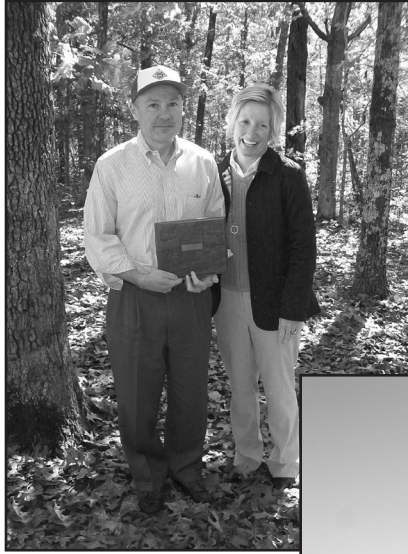
Fred Crouse, Missouri State Tree Farm Committee

Robert Jacoby and family were recognized as the 2008 Missouri State Tree Farmers of the Year at the Shannondale Tree Farm Day in October. The Wright County property has been owned and managed by the Jacoby family since 1950 and became a certified Tree Farm in 1990.

Their stated objective is to manage the forest, wildlife, soils and water resources to the maximum potential and productivity.

The Jacoby's prefer uneven age forest management having selectively harvested trees on 407 acres of the 1,045-acre farm. But, they also have employed even age management techniques, such as shelterwood and clearcut, when warranted. Walnut trees have been pruned and released, timber stand improvement conducted on 75 acres of hardwood stands, and 64 acres of old fields reforested with a variety of species selected to fit the various soil types involved. In addition, more than four miles of access trails, with erosion control structures, have been installed. All of these land/forest management activities have been tempered to reflect their goals in maintaining and/or improving water quality in the Whetstone Creek watershed and the smaller Dove Creek drainage.

They also have created small clearings around fishless ponds, established 28 food plots, restored a 13-acre savanna, and created travel corridors for wildlife. All of these activities show how dedicated the Jacoby Family is to managing their natural resources wisely and why they are deserving of the recognition of Tree Farmer of the Year. **GH**



**Left:** Robert Jacoby and his wife, Laine, were honored as Missouri's Tree Farmers of the Year for 2008 at the Shannondale Tree Farm celebration.

**Below:** Several old fields were reforested with species adapted to the site, such as native shortleaf pine on this exposed, south-facing hillside.



**Left:** The Jacoby family has established more than four miles of access roads and firebreaks to facilitate management activities.

**Below:** Small clearings around numerous ponds on the Jacoby farm greatly improve habitat for multiple wildlife species.





# Trees and Stormwater BMPs

Hank Stelzer, MU Forestry Extension

**S**tormwater BMPs are Best Management Practices that communities can adopt to mitigate stormwater runoff and the effects of harmful chemicals that they may contain. They can be grouped into five categories and trees can be used in each category.

**Wet Ponds** are constructed stormwater retention basins designed to retain a permanent pool of water. They are generally located in the flow-path of the runoff. The wet pond provides for sedimentation, which removes metals, nutrients, sediments and organics from stormwater. Biological uptake of pollutants and nitrogen is provided by vegetation in and around the pond. Wet ponds are suitable for sites with high nutrient loads.

Examples of trees suited for wet ponds would be red buckeye, buttonbush, burr oak and baldcypress.

**Wetlands.** Actually, we are talking about constructed wetlands when talking about stormwater BMPs. Directing stormwater to natural wetlands damages the hydrology and functioning of the wetland. Like their natural counterparts, constructed wetlands offer aesthetic qualities, wildlife habitat, erosion control and pollutant removal. They may be used alone or in conjunction with other BMPs. It is very important that a sufficient supply of water be provided to ensure proper functioning of the wetland.

Pawpaw, green hawthorne, winterberry holly and black gum are just a few examples of tree species that can be established in constructed wetlands.

**Infiltration Basins** take advantage of existing permeable soils to provide groundwater recharge. The runoff is captured and allowed to infiltrate into the ground and be lost to evapotranspiration. Pollutants are removed as water flows through the soil and are exposed to bacterial action. Vegetation planted in these basins takes up nutrients and their roots provide arteries for stormwater to permeate the soil for groundwater recharge.



*Bioretention basins are designed to absorb runoff from impervious surfaces such as roadways and parking lots.*

Flowering dogwood, persimmon, hophornbeam and chinquapin oak can be successfully planted in infiltration basins.

**Surface Filters** (including pocket sand filters) include a permeable medium such as sand for stormwater quality control. They can be used in areas with low soil infiltration rates, high evapotranspiration rates and hotspots.

The planting soil layer may not include significant clay content that would hinder infiltration and help retain moisture for plant growth. So, “dry site” tree species like serviceberry, scarlet oak, blackgum and shortleaf pine are in order for these areas.

**Bioretention Areas** are attractive landscaping features planted with perennial native plants. They are designed to absorb runoff from impervious surfaces such as roofs and parking lots. These BMPs can be used in settings from residential landscapes to “big box” sites, or anywhere in between. They should not be confused with rain gardens promoted for homeowner installation, which are beneficial but do not involve rigorous engineering to meet stormwater standards. Bioretention areas are generally designed with underdrains.

They are full of water during storms and dry out between rain events. So, trees planted in these areas need to tolerate both extremes. Musclewood, redbud, witchazel and white oak are good choices for bioretention areas. **GH**

In addition to stormwater BMPs, trees affect sidewalks, streets and other community features. To encourage thoughtful consideration of both trees and community infrastructure, the Missouri Community Forestry Council’s 17th Annual Conference, “Integrating Trees into Municipal Infrastructure” is scheduled for March 16-18, 2010, in Chesterfield, Mo. For more information, see pg. 12, contact Donna Baldwin (573) 751-4115 x3111 or go online to [www.mocommunitytrees.com/conference.html](http://www.mocommunitytrees.com/conference.html)

## Timber Tax Update:

# Form 1099-S Now Required for Lump Sum Sales

Hank Stelzer, MU Forestry Extension

New rules for reporting of lump-sum timber sales went into effect May 28, 2009. Prior to this new regulation, only pay-as-cut timber sales were subject to Form 1099 reporting. The IRS cited two reasons for this mandatory reporting: (1) the IRS “has found some taxpayers under-reporting income from lump-sum or outright sales of timber,” and (2) the IRS said the disparate treatment of lump-sum and pay-as-cut timber transactions is not sound tax administration.

TD 9450 outlines the changes to Treasury Regulations §1.6045-4. This section is amended to require purchasers of standing timber in a lump-sum transaction to report the sale or exchange of the timber to the IRS using **IRS Form 1099-S** (Proceeds from Real Estate Transactions) and to provide the completed form to the seller. The Internal Revenue Code (IRC) section 6045(e)(2) now requires the issuance of this informational form to timber sellers due to the amendment of paragraphs (b)(2)(i)(E), (b)(2)(ii) and (c) (2)(i)

of the treasury regulation section 1.6045-4 for sales or exchanges of standing timber for lump-sum payments completed after May 28, 2009. **The Form 1099-S is to be provided to the seller by January 31 of the year following the sale and to IRS.**

**Example:** Show-Me Timber Tree Farm hires a consulting forester to cruise and conduct a lump-sum sale by sealed bid of 50 acres of timber. The successful buyer bids \$100,000 for the timber. The closing date (timber deed executed and delivered) occurs on June 29, 2009, and a check for \$100,000 is delivered to the seller on the same date. The successful **buyer must now issue an IRS Form 1099-S to Show-Me Timber by Jan. 31, 2010.** The date of June 29, 2009, is placed in Box 1 and the amount of \$100,000 goes in Box 2. The description of the timber goes in Box 3 and relevant details for Filer and Transferor are placed in the appropriate boxes. See [http://www.irs.gov/irb/2009-24\\_IRB/ar06.html](http://www.irs.gov/irb/2009-24_IRB/ar06.html) for more information. **GH**

## Planting Nut Trees?

# Check out an Online Model to Help Make the Hard Decisions

The University of Missouri Center for Agroforestry is launching an online Chestnut Financial Decision Model and an upgraded Black Walnut Financial Decision Model.

These interactive tools will help those thinking about planting trees make decisions about spacing, fertilizing, buying equipment, harvesting, etc. Each decision made in the Excel file changes the long-term profitability. Potential growers can see how each decision affects their bottom line – or doesn't affect it as much as they might have thought.

Right now the Chestnut tool is going through “sensitivity testing” to make sure all of the bugs are worked out. A test version will be available online at <http://www.centerforagroforestry.org/profit/index.asp#edible>

Feel free to make comments or ask questions about the model to Larry Godsey, MU Center for Agroforestry Economist, at [godsey1@missouri.edu](mailto:godsey1@missouri.edu) or 573-884-3216.

The new Black Walnut version will be available online at <http://www.centerforagroforestry.org/profit/index.asp#black>

This model is in addition to the current one – the new one focuses more on nut production while the older version is for those more interested in timber production.

In addition, Godsey has a decision model on Pine Straw in the works. All the tools will be online, as available, at <http://www.centerforagroforestry.org/profit/index.asp> **GH**

# The Toolbox

Hank Stelzer, MU Forestry Extension

Just like home repairs, certain woodland jobs can be accomplished quickly and efficiently if the right tool is used. Over the next few issues of *Green Horizons*, we will highlight several of the most common tools that woodland owners may need or come in contact with while managing and caring for their woodlands. While every woodland owner does not necessarily need all the tools discussed, many could benefit by adding some of these tools to their toolbox. Knowing something about them will improve communication with foresters and loggers. Ready? Let's begin!

## Professional Foresters

Without a doubt, a professional forester is the most valuable "tool" in the box. A professional forester is someone who has a degree from an accredited forestry school and maintains his or her professional credentials through continuing education and experience. Professional foresters include resource foresters with the Missouri Department of Conservation (MDC), foresters with the USDA Natural Resources Conservation Service (NRCS), and private consulting foresters. They often can provide you with options you never considered and help you improve your management, inventory your woodlands, provide maps, recommend forestry practices, provide cost share and technical assistance, and in the case of consulting foresters, help you sell your timber. The primary source of foresters for Missouri woodland owners are the MDC [www.mdc.mo.gov/forest/contacts/](http://www.mdc.mo.gov/forest/contacts/) or the Missouri Consulting Foresters Association [www.missouriforesters.com/](http://www.missouriforesters.com/)

## Compass

While most woodland owners will not get lost on their property, a compass will allow you to determine the aspect of a slope, the bearing or azimuth of a property line, and the direction of a road or trail. This information can be very useful in communicating with those working on your property, including foresters, loggers and contractors. A compass can also be important in an emergency. A cheap compass is often all that is necessary and can be purchased for \$15 to \$50.

## Flagging

Colored flagging can be used for a large number of forestry-related tasks, including marking crop trees, temporary boundary marking, delineating trails and potential location of activities, and anything else of interest that will need to be located again. Flagging comes in rolls made either of vinyl, which will last a couple of years, or a biodegradable material that lasts about a year. Vinyl flags come on metal wires that can be stuck in the ground. These flags are great for marking small plants of interest in the forest or during tree planting in fields. Both flags and flagging can be written on with a permanent marker, and purchased from local hardware stores as well as mail order forestry supply companies, such as Forestry Suppliers ([www.forestry-suppliers.com/](http://www.forestry-suppliers.com/)) or Ben Meadows ([www.benmeadows.com/](http://www.benmeadows.com/))

*In the next issue, we will add diameter tapes, scale sticks, and increment borers to the toolbox. GH*

---

## Carbon Corner (cont. from page 3)

synergy amongst carbon program rules, such as uniform definitions on additionality, permanence and leakage.

So, what is the forest landowner to do in the meantime? It goes without saying that this is a time of cautious optimism. In fact it is hard to argue with a position to "wait and see" what the Feds deliver on in 2010 or 2011 before moving ahead with a forest offset project.

Currently, the CCX is still the most forestry friendly program, and although prices are exceptionally low right now, interested landowners willing to take some risk still have

this option. With this in mind, the risks involved must be fully understood before embarking on CCX project development and market entry. The most financially attractive opportunities for forestry offset projects appear to be with programs like the VCS and CAR. However, these programs are more cost intensive and restrictive, and also require longer-term commitments when compared to the CCX.

Every forest landowner situation is unique. It goes without saying that you should carefully weigh your decisions regarding project development, market entry and investment in the realm of carbon. GH



## Trees Tell Their Story (cont. from front page)

“A cross-section is better than a core,” Guyette said. “There might be markers on rings that don’t go all the way around.” Cores contain only a small part of each ring.

Next up, back at the lab – Stambaugh and colleagues mounted and sanded each piece of wood, then measured each ring. Patterns will be run against a master tree-ring chronology pattern, compiled after surveying many logs from the same area.

“We look at the number of rings and how they vary,” Guyette said. Climate influences tree growth – in a wet year, a tree will make a fatter ring. In a drought, the year’s ring will be narrow.

The outside-most ring, of course, tells when the tree was cut.

“Tree rings can only fit one pattern in time,” Stambaugh said. “There’s really no error in it – if it’s not obvious, we won’t date it.” A certain number of rings – at least 60 or 70 – is necessary to definitively establish a tree’s place in time.

So far, Stambaugh said, he can tell all of the logs he sampled at the Hickam House were cut the same year – probably from the same forest. He is hoping a frost ring found about six years into the trees’ life will make the samples dateable.

Stay tuned! **GH**

*The MU Tree Ring Lab works on five to 10 projects at any given time, Stambaugh said. They can help forest managers see how much injury burning does to a tree – how much “product” they are losing by participating in a burn program. They study climate change and climate cycles. They can tell how long a tree can last after being cut down – and it’s much longer if it falls in water rather than on the forest floor. They can see when mass erosions occurred by looking at rock injuries to trees. They can date archaeological pieces in historical buildings, as with the Hickam House.*

*“Anything that influences a tree – if it leaves a mark – we can date it,” Stambaugh said.*

*To learn more about MU’s Tree Ring Laboratory, including projects, publications and a slide show, visit their Web site at <http://web.missouri.edu/~guyetter/>*



**Above:** Mike Stambaugh drills outside the Hickam House to obtain a core sample. **Above right:** Stambaugh places a core sample into a bag with Rich Guyette’s help. **Right:** Stambaugh looks at a cross-section taken from the house in the MU Tree Ring Laboratory.

*The MU Tree Ring Laboratory is in the news frequently. Some links and information about recent projects:*

### **A WATERY CARBON BANK**

This study about the carbon storage of oak in streams was published in the journal *Ecosystems*; news articles highlighting the research were published by Nature (<http://www.nature.com/nature/journal/v454/n7201/index.html>) and other online news sources.

### **MYSTERY OF INFAMOUS ‘NEW ENGLAND DARK DAY’ SOLVED BY TREE RINGS**

This study was initially published in the *International Journal of Wildland Fire*, (<http://www.publish.csiro.au/nid/115/issue/3790.htm>). Later a news feature was done by *wired.com* ([http://www.wired.com/science/discoveries/news/2008/05/dayintech\\_0519](http://www.wired.com/science/discoveries/news/2008/05/dayintech_0519)). Since then it has been picked up by many news sources including Discovery Channel, Science, NASA and Yahoo News.

### **PERFECTLY PRESERVED LOG CABIN DISCOVERED NEAR WILDCAT DEN**

This project involved dating of an Iowa cabin in Muscatine County that received local (<http://www.muscatinejournal.com/articles/2008/05/23/news/doc483798f65a662647261830.txt>) and national press. The logs had scars that will provide some of the first information about Iowa historic fire frequency.

## Preserving the Family Forest (cont. from front page)

put in place for a smooth transition to the third generation. However, Mr. and Mrs. Dogwood also lost his father since the last installment which provides us with an opportunity to evaluate the effectiveness of their plan.

As you may recall, in the first part of this case study, I discussed the transition planning and tools that the Dogwoods had in place to make the transition smooth at his dad's death. It consisted primarily of an Irrevocable Trust in which his dad's share of the farm was to be held. Unfortunately, as is the case with many trusts I have encountered, the Dogwoods did not understand, and the attorney did not communicate, that the assets to be placed in the trust actually had to be re-registered to the trust. Too many times, an individual will have a trust drafted and never complete the process by registering assets into the trust.

A trust is simply a stack of legal paperwork creating an entity. That entity can "own" assets and remove them from a person's estate, but ONLY if the owner constructively transfers ownership to the trust. The attorney drafting the trust should provide the individual with directions on how to register the assets as well as assist in designating specific assets to be transferred. It appears that this did not happen for the Dogwoods.

So the planning they thought they had in place was not complete and the transition process has become much more complicated than they expected. As a result of not registering the farm in the trust, the Dogwoods found that they would be required to file additional paperwork with the state at a cost of \$5,200 in attorney fees. Talk about rubbing salt in the wound! Mr. Dogwood's dad passed away in March 2009 and, as of the writing of this article, the estate has not been completely settled.

Another unexpected issue arose once the Dogwoods began trying to settle the estate. The state in which the farm is located has a State Estate tax of 7 percent of any value over a \$338,000 exemption. As you might expect, the value of his dad's 215-acre ownership interest and home will exceed this exemption, so additional expenses will be incurred with this tax. This issue emphasizes the need to include a "local" CPA and financial planner in your transition planning. Had this been done, the resources to pay the tax may have been established through life insurance or other liquid assets. Fortunately for the Dogwoods, Federal Estate tax exemptions should be high enough in 2009 to preclude any taxes at the federal level.

Those of you planning for a smooth transition of your woodlands should keep the following checklist in mind:

1. *Develop a "team" consisting of local professionals (attorney, CPA, financial planner, insurance agent, consulting forester);*
2. *If a trust is involved, transfer registration to that trust as soon as possible;*
3. *Plan for estate settlement costs;*
4. *Include estate preservation tools such as Long Term Care and life insurance in your plan.*

In the next installment we will get back on track and begin a discussion of the Dogwood's plan for the transition to the third generation. We've learned a lot over the past year and will be applying those lessons to the plan. **GH**

### 2010 TREE FARM SHOWCASE EARLY ALERT

The 2010 Tree Farm Showcase (formerly the State Tree Farm Conference) will be Saturday, April 10, on the Nussbaum Tree Farm in Cape Girardeau County. The day's activities will start with indoor sessions at the MU Extension Center in Jackson. Following a catered lunch, participants will travel to the Nussbaum Tree Farm where they will have the opportunity to see the results of several forest management practices. In addition, the Nussbaums have kept excellent harvest records that show money can grow on trees! Details are still being finalized. For the latest information visit the Forestry Extension Web site at [www.snr.missouri.edu/forestry/extension](http://www.snr.missouri.edu/forestry/extension)

# The Back Page

## Deadlines for Newsletter Submissions

Spring Issue: March 15  
Summer Issue: June 15  
Fall Issue: September 15  
Winter Issue: December 15

**GH Online:** Find *Green Horizons* on the Internet at <http://agebb.missouri.edu/agforest/index.htm> or <http://snr.missouri.edu/forestry/extension/>

## E-mail or Snail Mail?

Would you rather receive Green Horizons electronically? E-mail us at [hallmich@missouri.edu](mailto:hallmich@missouri.edu) or [stelzerh@missouri.edu](mailto:stelzerh@missouri.edu) and we will add you to our listserv. Be sure and send your full name and address so we can take you off the snail mail list.

## Will the Bid Box Ever Return??

The sun is not the only thing that has gone south for the winter. Consulting foresters continue to report limited timber sale activity. Some markets, such as walnut lumber/veneer and white oak staves, are improving; but, even those are spotty across the state. So, continue to check with your local forester for market conditions in your region.

## New Agroforestry e-Newsletter

The MU Center for Agroforestry has launched a monthly e-newsletter for landowners, natural resource professionals and anyone else interested in what the Center has been up to. It focuses on Center affiliates and staff and recognizes awards and honors and discusses research, outreach and impact of the Center. To see the first two issues, go to <http://www.centerforagroforestry.org/pubs/action/archive.asp>; to subscribe, send an e-mail to [hallmich@missouri.edu](mailto:hallmich@missouri.edu).

## Editorial Contributors



Missouri Chapter Walnut Council



## Green Horizons Editorial Board

Hank Stelzer, Co-Editor, Green Horizons,  
MU Forestry Extension  
(573) 882-4444

Michelle Hall, Co-Editor, Green Horizons,  
MU Center for Agroforestry  
(573) 882-9866

Shibu Jose, Director,  
MU Center for Agroforestry  
(573) 882-0240

Shelby Jones, President, Missouri  
Consulting Foresters Association  
(573) 635-4598

Steve Westin, MDC Forest  
Stewardship Program  
(573) 522-4115, ext. 3118

Steve Jarvis, Executive Director,  
Missouri Forest Products Association  
(573) 634-3252

Clell Solomon, Missouri Christmas Tree  
Producers Association  
(660) 273-2368

Wally Brumfield, Chair,  
Missouri Tree Farm Committee  
(573) 634-3252

Harlan Palm, Chair,  
Missouri Walnut Council  
(573) 882-1402

## Contact GH

Send story ideas, address changes and subscription requests for Green Horizons to:

Hank Stelzer  
Green Horizons  
University of Missouri  
203 ABNR  
Columbia, MO 65211

e-mail: [stelzerh@missouri.edu](mailto:stelzerh@missouri.edu)

## UNIVERSITY OF MISSOURI Extension

Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. Dr. Michael Ouart, Vice Provost and Director, Cooperative Extension, University of Missouri, Columbia, MO 65211. \* University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age, disability or status as a Vietnam era veteran in employment or programs. \* If you have special needs as addressed by the Americans with Disabilities Act and need this publication in an alternative format, write ADA Officer, Extension and Agricultural Information, 1-98 Agriculture Building, Columbia, MO 65211, or call (573) 882-7216. Reasonable efforts will be made to accommodate your special needs.







University of Missouri  
Center for Agroforestry  
203 ABNR  
Columbia, MO 65211

NON-PROFIT  
U.S. Postage

**PAID**  
University of Missouri

---

## Calendar of Events

---

**Feb. 5-6, 2010: Missouri Nut Growers Nut Show and Annual Meeting, Nevada, Mo.** The Missouri Nut Growers will meet at the Home Economics Building, Vernon County Fairgrounds, Nevada, Mo. The fairgrounds are located adjacent to Rt. 71, about a half mile south of its intersection with Rt. 54.

**March 16-18, 2010: Missouri Community Forestry Council, 17th Annual Conference, Doubletree Hotel, Chesterfield, Mo.** The theme of the conference will be "Integrating Trees into Municipal Infrastructure." Experts from Missouri and around the country will provide the latest information on community forestry topics. Keynote speaker is globally recognized John Ball, Ph.D., Professor, South Dakota State University. Thursday's tour will include a stop at the new Citygarden site in downtown St. Louis, an innovative 2.9-acre urban oasis of plantings and sculptures on the Gateway Mall that represents a \$30 million investment in urban greening. This year's conference focus is on trees and municipal infrastructure, making it of interest to municipal, commercial and consulting arborists as well as professionals in the field of public works, engineering, landscape architecture and planning. For more information, go to <http://www.mocommunitytrees.com/conference.html>

**April 10, 2010: 2010 Tree Farm Showcase, Nussbaum Tree Farm/MU Extension Center, Cape Girardeau County, Mo.** The 2010 Tree Farm Showcase (formerly the State Tree Farm Conference) will be held Saturday, April 10, on the Nussbaum Tree Farm in Cape Girardeau County. The day's activities will start with indoor sessions at the MU Extension Center in Jackson. For the latest information, visit the Forestry Extension Web site at [www.snr.missouri.edu/forestry/extension](http://www.snr.missouri.edu/forestry/extension)