

ALABAMA'S

# TREASURED

FORESTS

A Publication of the Alabama Forestry Commission

*Spring 2013*

# Alabama Certified Prescribed Burn Manager

## 2013 Training Schedule

**Who should take the Alabama Certified Prescribed Burn Manager (CPBM) Certification Course?** All forest landowners, foresters, wildlife biologists, consultants, contractors, or agency personnel who are interested in the use of prescribed wildland fire as a management tool and seeking certification should attend. Out-of-state participants are welcome.

**Who should take the Alabama Certified Prescribed Burn Manager (CPBM) Re-certification Workshop?** Any currently Alabama-Certified Prescribed Burn Manager who needs the required 6 CEUs every five years for re-certification should attend.

- These CPBM courses and workshops are sponsored and funded by the Alabama Forestry Commission.
- Instructors are Kent Hanby, RF, CF, CPBM, and John Stivers, RF, CF, CPBM.
- Details about the Alabama Forestry Commission's Alabama Certified Prescribed Burn Manager program may be found at [www.forestry.alabama.gov/PrescribedBurnCertification.aspx](http://www.forestry.alabama.gov/PrescribedBurnCertification.aspx) for certification and [www.forestry.alabama.gov/prescribed\\_burn\\_manager\\_re.aspx](http://www.forestry.alabama.gov/prescribed_burn_manager_re.aspx) for re-certification.

### CERTIFICATION (4-day course)

**August 5 - 8, 2013** (Monday – Thursday)

Auburn University  
School of Forestry & Wildlife Sciences  
Auburn, Alabama

Check-in at 7:30 a.m. – Room 1101  
Registration is limited to 30. To register, send an e-mail with subject "Auburn Course registration" to Kent Hanby at [kent@rxfire.net](mailto:kent@rxfire.net) – include full name, employer or landowner status, address, e-mail address, phone number, and session name. There is no fee for the course. Lodging and meals are on your own. Parking is available in the parking deck across the street from the school; check in at the Parking Office in the south end of the parking deck. Approximately 20 RF and SAF CFEs will be awarded for this course.

**September 24 - 27, 2013** (Tuesday – Friday)

Magnolia Branch Wildlife Reserve  
Atmore, Alabama  
([www.pcicie.com/westminster/business\\_hours.html](http://www.pcicie.com/westminster/business_hours.html))

Check-in at 7:30 a.m.  
Registration is limited to 30. To register, send an e-mail with subject "Magnolia Course registration" to Kent Hanby at [kent@rxfire.net](mailto:kent@rxfire.net) – include full name, employer or landowner status, address, e-mail address, phone number, and session name. There is no fee for the course. Lodging and meals are on your own. Approximately 20 RF and SAF CFEs will be awarded for this course.

### RE-CERTIFICATION (1-day workshop)

**September 11, 2013** (Wednesday)

Lakepoint Resort State Park Lodge  
Eufaula, Alabama  
8:30 a.m. to 4:30 p.m.

*(In conjunction with the Annual Meeting of the Alabama Prescribed Fire Council on Tuesday, September 10)*

Registration limited to 50. To register, send an e-mail with subject "Lakepoint Workshop registration" to Kent Hanby at [kent@rxfire.net](mailto:kent@rxfire.net) – include full name, employer or landowner status, address, e-mail address, phone number, and session name. Approximately 6 RF and SAF CFEs will be awarded for this workshop, satisfying the CPBM five-year 6-hour continuing education requirement.

**September 17, 2013** (Tuesday)

Solon Dixon Forestry Education Center  
Andalusia, Alabama  
([www.sdfec.auburn.edu/index.html](http://www.sdfec.auburn.edu/index.html))  
8:30 a.m. to 4:30 p.m.

Registration limited to 50. To register, send an e-mail with subject "Dixon Workshop registration" to Kent Hanby at [kent@rxfire.net](mailto:kent@rxfire.net) – include full name, employer or landowner status, address, e-mail address, phone number, and session name. Lunch will be on site at \$7.50. Approximately 6 RF and SAF CFEs will be awarded for this workshop, satisfying the CPBM five-year 6-hour continuing education requirement.

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**On the Cover:**  
Spring has finally arrived when Southern crab apple trees bloom with gorgeous, fragrant masses of pink and white flowers throughout most of the Deep South. Story on page 32.

*Photo by Fred Nation*



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# Leaving the Stress Behind



*By Charles E. Wise, Registered Forester/Work Unit Manager  
Alabama Forestry Commission*

**L**ined with neatly-pruned sawtooth oaks and natural grasses, covered in white gravel, the long winding driveway stretches for a quarter of a mile. It's obvious that you're entering a special place. In fact, anywhere you look on the Osborn property . . . the wildlife openings, green with cool season plantings . . . the miles of fire breaks and well-maintained access roads . . . the areas that have been prescribed burned . . . the wildlife viewing houses . . . all speak volumes without words as to how much this landowner cares. The old adage "actions speak louder than words" is certainly appropriate here.

John Osborn grew up working on his family farm in Hackneyville, Alabama. Looking for opportunities, he joined the Navy and was trained as an electrician. Using those skills, he came back to Alabama after completing his enlistment and began a long career with US Steel in Birmingham. As often happens with people who grow up on a farm, the land always called to him. Over the years, he spent much of his spare time caring for the family farm. After his parents passed away, the land was divided between the brothers and sisters. Purchasing his sisters'

acreage in 1990, he continued caring for this 91 acres in Tallapoosa County. Then during the 90s, a purchase of 200 acres, an adjacent 30-acre tract, and another 40-acre parcel (all in Clay County) brought the total acreage to 361.

One rather unique feature about the Osborn property is that it is bordered by three other certified TREASURE Forests. A friendship with TREASURE Forest landowners Jerry and Genelle Brown translated into a transfer of knowledge for the Osborns. Throughout the 90s, they implemented forest management practices and the property was certified as a TREASURE Forest in 2001 and a Tree Farm in 2005. However, their work did not stop there. Educating others about TREASURE Forest became a goal for John and Regina. Their TREASURE Forest has served as an integral part of several landowner tours. They have hosted "Step Outside" events for the Becoming an Outdoor Woman program, and high school students have also held "survival camp" onsite. These environmental education efforts, along with the continued implementation of sound stewardship practices, culminated in the couple receiving the 2007 Helene Mosley Memorial TREASURE Forest Award.

Leaving the stress behind them for the country life that John knew growing up, the Osborns eventually retired in 2008 and built a house on the Clay County tract. “We work harder now,” he said, “but it is more enjoyable and my blood pressure is a lot better.”

The only drawback to rural living is the long distance they must travel to buy groceries. Regina commented, “We just have to plan better now!”

### Accomplishments

The Osborns determined that their primary forest management objective was wildlife, with timber being secondary. As with other TREASURE Forest landowners, their list of accomplishments is long toward the achievement of those objectives.

Approximately 36 acres in wildlife openings are maintained in a variety of cool and warm season herbaceous cover. Another 14 acres in food plots are seasonally planted in clover, wheat, chufa, and peas. More than 13 acres were planted in mast-producing sawtooth oaks. Chinese chestnuts, pear trees, and apple trees have also been planted for wildlife. A 30-acre tract of mature hardwoods also contribute to the habitat diversity.

To produce quality bucks on the property, deer harvest is regulated through the Deer Management Assistance Program. Observation and shooting houses are maintained for viewing and hunting.

A 3-½ acre fishing pond, rebuilt and stocked with bream, bass, and catfish, has provided many hours of fun and relaxation for family and friends.



Photo by Nick Jordan

Over 5.6 miles of fire breaks and 2.5 miles of access roads (with water bars and drainage ditches) are maintained. To assist in the conservation of soil and water, 14 culverts were also installed on the access roads, and streamside management zones (SMZs) are maintained throughout the property.

Back in 1986, the first trees planted by the Osborns were loblolly pines. The timber on this 36-acre stand has now been thinned twice, and given a mid-rotation release and fertilization as well. The latest planting was nine acres of longleaf pine in 2007. Prescribed burning is conducted in the pine stands to maintain aesthetics and enhance wildlife habitat as well.

Throughout our discussion, there were two things that brought a gleam to Mr. Osborn’s eye. One was when he talked about the

*(Continued on page 6)*

Photo by Nick Jordan



# Leaving the Stress Behind

*(Continued from page 5)*

new barn. Salvaging some beetle-infested trees, he had them sawn into lumber that was used to build this barn. It houses not only the farm equipment, but also his collection of antler mounts from deer he's harvested over the years. However, it is not really what is *inside* the building that holds the most meaning for Osborn. "It's knowing that I grew the trees, harvested those trees, and utilized them on my own property that makes me proud," said John.

The other instance, and perhaps the most telling about both John and Regina Osborn, is when they talked about their children and grandchildren, nieces, and nephews coming to visit the farm. "We thoroughly enjoy having them here. They ride the ATV, watch the deer and turkey, and get a feel for working the land."

Sitting at the dinner table, enjoying coffee and cookies as we concluded our interview, a most appropriate thing took place. It seemed as if an exclamation point was naturally placed after the couple's list of achievements when, through the picture windows, we watched as two deer and four turkeys entered a food plot some 300 yards below. Once again, no words were needed. 🙏

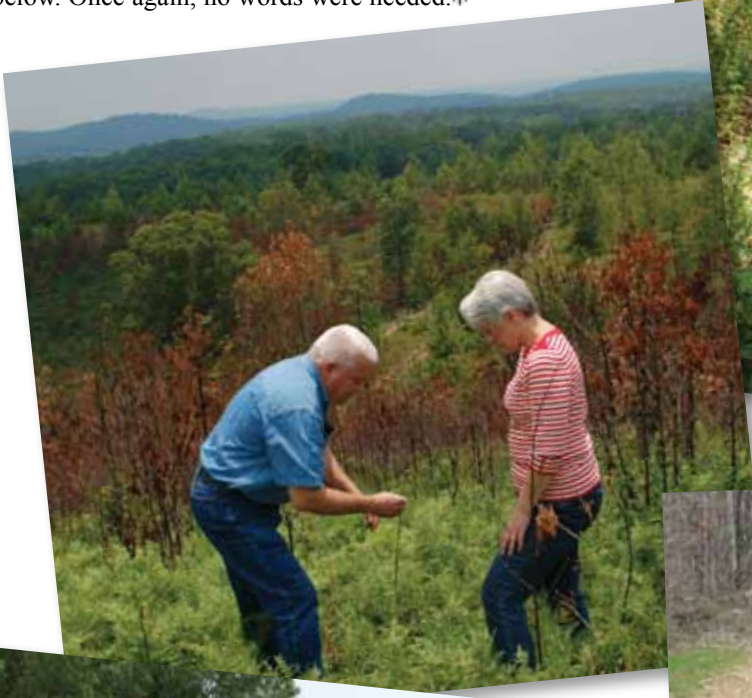


Photo by Nick Jordan

# TWO YEARS AND **60,000** TREES LATER

## An Update on the Alabama Tree Recovery Campaign

*By Clifford Hawkins, Community Development Coordinator  
and Matthew McCollough, Urban Forestry Coordinator  
Alabama Forestry Commission*

Following the devastating tornadoes of April 2011 that battered numerous Alabama communities, the Alabama Tree Recovery Campaign was launched as a collaborative effort between the Alabama Forestry Commission (AFC) and the Arbor Day Foundation. Its purpose was to support recovery and help restore the tree-lined streets, shaded parks, and beautiful neighborhoods that had always been part of Alabama, as they were before the storms. The ultimate goal of this large-scale, multi-year initiative was to bring the state's community forests back to their previous beauty and strength.

The Alabama Tree Recovery Campaign attracted tremendous support from across the nation and globe. In the first year of the program, over \$60,000 was raised through individual citizens, private foundations, and corporate donations. As a result, the AFC and the Arbor Day Foundation distributed 30,000 tree seedlings to 16 communities in February of 2012. They included Cordova, Cullman, Fyffe, Glen Allen, Hanceville, Ider, Jasper, Lakeview, Oakman, Ohatchee, Pleasant Grove, Reform, Shiloh, Sipsey, Tuscaloosa, and Vance.

Year two of this campaign proved successful as well. Utilizing funds that were raised in 2012, the AFC was able to distribute an additional 30,000 trees throughout the state, ultimately benefiting 18 communities. Realizing that the loss was felt everywhere and did not stop at the edge of the city limits, the AFC opened these giveaways not only to people living in the affected communities, but also to everyone in those coun-

ties. In February 2013, seedling giveaways were conducted in the following ten counties: Butler, Elmore, Franklin, Jackson, Limestone, Madison, Marion, Marshall, Tallapoosa, and Winston.

A vital ingredient in the success of seedling distribution is always the volunteers. Teaching a community to draw from its citizens leads to more community involvement and improved urban forests. Volunteers for both years have included Alabama Power employees, Alabama TREASURE Forest Association county chapters, Boy Scouts of America, Future Farmers of America, schools, church groups, civic clubs, elected officials, city employees, volunteer fire departments, Master Gardeners, as well as city tree boards and commissions.

While the cleanup and rebuilding will continue for some time into the future, the third and final year of the campaign is fast approaching. Continuing to focus on the priority list of tornado-stricken communities, the Alabama Forestry Commission is already planning for another round of seedling giveaways in February 2014. Assistance will be offered to 24 communities through giveaways in eight counties.

The opportunity remains for everyone to continue support of the Alabama Tree Recovery Campaign by making an online donation at [www.arborday.org/takeaction/alabama](http://www.arborday.org/takeaction/alabama). Every dollar donated will plant a community tree in Alabama. Every tree planted will provide hope and healing during the long-term recovery process. ☺

# American PAST

By Sarah Farmer

USDA Forest Service Southern Research Station (SRS)

Until the early 20th century, American chestnut (*Castanea dentata*) was one of the most ecologically, culturally, and economically significant trees of the eastern United States. The accidental introduction of an exotic pathogen, chestnut blight (*Cryphonectria parasitica*), devastated the chestnut population, causing the species to become functionally extinct.

However, American chestnut may be poised for a return to the woods. After decades of trying to develop blight-resistant trees, scientists have made great progress, and American chestnut trees that are presumably blight-resistant have been bred and planted in test plots. If these trees prove resistant, restoration will shift

from the quest for blight-resistance to regeneration.

Because of American chestnut's long absence from the landscape, standard silvicultural handbooks such as the USDA Woody Plant Seed Manual have not included complete information about the species' life history and growth habits. A new publication, *The Silvics of American Chestnut*, supplements silvicultural hand-

books by summarizing information about American chestnut that will be important to future restoration efforts. This new general technical report, published by the U.S. Forest Service Southern Research Station (SRS), describes the habitat, life history, special uses, genetics, and restoration of the American chestnut. The publication is the result of collaboration between G. Geoff Wang, the lead author, his colleagues at Clemson University, and Stacy Clark, a research forester with the SRS Upland Hardwood Ecology and Management unit.



Paul Wray, Iowa State University, Bugwood.org

USDA Forest Service Southern  
Research Station Archive, Bugwood.org



# can Chestnut AND FUTURE

The authors point out that restoring chestnut on most sites will require artificial regeneration — growing the blight-resistant trees in a greenhouse or nursery and planting them as seedlings rather than starting from seed. They also caution that even if the chestnut trees prove to be blight-resistant, the effects of damaging agents other than blight, including root rot disease and insects that defoliate leaves or damage roots, may represent real barriers to restoration.

American chestnut was once a dominant and widespread canopy tree through many parts of the country, its range stretching from Mississippi to Maine. Its nuts were consumed by animals and people alike, and it was widely used as timber. “Chestnut’s demise is regarded as the most tragic ecological event in the post-glacial history of eastern North American forests,” says Clark. “Its return from the brink of extinction would be one of the greatest success stories in the history of forest management.”

*Reprinted with permission from CompassLive, the online science magazine of the USDA Forest Service SRS. For more about forest science in the South, sign up for weekly updates from CompassLive at [www.srs.fs.usda.gov/compass/](http://www.srs.fs.usda.gov/compass/).*



Keith Kanoff, Maine Forest Service, Bugwood.org

*American chestnut catkins starting to bloom.*

*Headquartered in Asheville, NC, the Southern Research Station is comprised of more than 120 scientists and several hundred support staff who conduct natural resource research in 20 locations across 13 southern states (Virginia to Texas). The Station’s mission is “... to create the science and technology needed to sustain and enhance southern forest ecosystems and the benefits they provide.” Learn more about the Southern Research Station at: [www.srs.fs.usda.gov](http://www.srs.fs.usda.gov).*



# LITTLE CRITTERS - BIG THREAT!

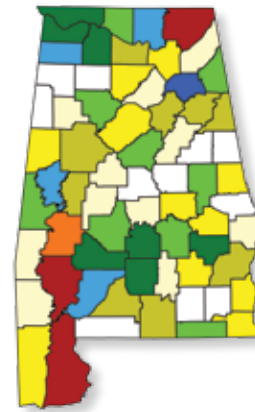


## Emerald Ash Borer

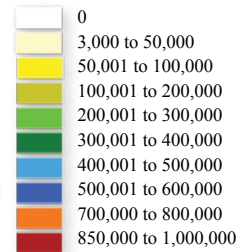
*confirmed in the neighboring state of Tennessee*

A non-native insect from Asia, the emerald ash borer attacks and kills native species of ash trees. The larvae of this insect are very destructive, boring into the phloem and cambium layers of the tree, feeding and creating galleries underneath the bark. This activity girdles the tree, disrupting the flow of water and nutrients. Eventually, the infestation kills the affected tree, usually within two to three years. First detected in Michigan in 2002, the emerald ash borer has since spread into 14 other states. In 2010, it was detected in Tennessee.

Counties Threatened



Ash



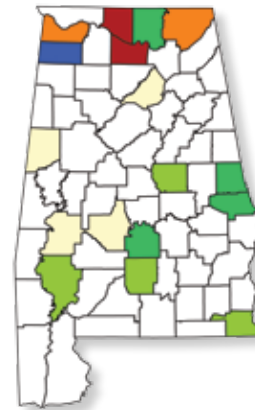
Volume in tons



## Walnut Twig Beetle/ Thousand Cankers Disease

*confirmed in the neighboring state of Tennessee*

Native to the western part of the United States, the walnut twig beetle and associated fungal “thousand cankers disease” mildly affect western species of walnut trees. However, this disease is very harmful to the highly susceptible eastern species, the black walnut tree. The fungus is introduced when the walnut twig beetles bore into the phloem layer and create galleries, causing cankers underneath the bark. Multiple attacks will cause many cankers that eventually overlap and girdle the affected branches, disrupting the flow of nutrients to the foliage. Approximately three years after the initial attack, mortality occurs. In 2010, thousand cankers disease was detected in Tennessee. It has now spread into Virginia and Pennsylvania.



Black Walnut



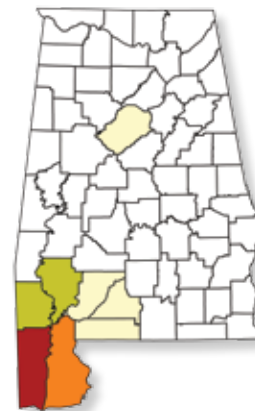
Volume in tons



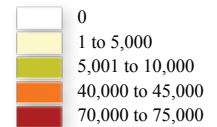
## Redbay Ambrosia Beetle/ Laurel Wilt Disease

*confirmed in Mobile County in 2011*

Another non-native insect, the redbay ambrosia beetle and associated fungal “laurel wilt disease” are originally from Asia. In the United States, native trees in the laurel family are very susceptible to this disease, especially redbay and sassafras. The tiny redbay ambrosia beetle bores into the tree, creating galleries in the xylem layer, introducing and inoculating it with the deadly fungus. Growing and serving as food for the adult beetles and larvae, the fungus eventually moves through the vascular system, disrupting the flow of water and nutrients. Within 4 to 12 weeks after the initial attack, the tree will wilt and die. First detected in Georgia in 2002, laurel wilt disease has spread to several southeastern states, including Mississippi and Florida. In 2011, the disease was confirmed in Mobile County, Alabama.



Redbay

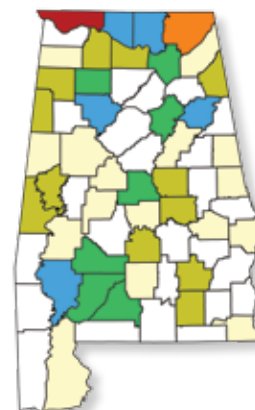


Volume in tons

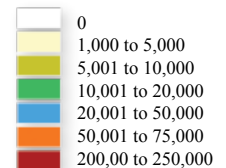
Note: One reason for the accelerating spread of these non-native invasive forest pests is the **long-distance transportation of infested firewood** and nursery stock.

# DON'T MOVE FIREWOOD

For more information visit [www.forestry.alabama.gov](http://www.forestry.alabama.gov) or [www.dontmovefirewood.org](http://www.dontmovefirewood.org)



Sassafras



Volume in tons

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# The Uncertain Future of HEMLOCKS in Alabama

By Chris Horne, Lawrence County Ranger/Technician  
Alabama Forestry Commission

The eastern hemlock (*Tsuga canadensis*), a majestic specimen commonly found along streams from the Southern Appalachians to Canada, is now in peril. Having the ability to survive under heavy canopies receiving very little sunlight, some have flourished in the remote canyons of North Alabama up to 300 years of age. Their presence on streambanks creates abundant shade which keeps water temperatures cool enough for certain fish such as trout

to survive. This makes the hemlock a keystone species, and losing it could cause a rippling effect. Unfortunately we have already lost a large portion of our hemlocks in the states to the north. For those unaware of the situation, there is a tiny insect that has been killing these trees and it is slowly making its way toward Alabama.

The hemlock woolly adelgid (HWA) is a sap-sucking insect not native to the eastern United States. It is believed to have

been introduced from Japan and was first noticed in Virginia in 1951. Since then, the pest has spread up and down the East Coast, devastating hemlock forests from Maine to the Great Smoky Mountains. Although it can be spread by wind and humans, birds are thought to be the biggest means of spread. The lack of a native predator to control its population has allowed the adelgid to feed unabated on hemlocks. (Continued on page 12)

# HEMLOCKS

*(Continued from page 11)*

The HWA has a very complex life cycle. As the insect matures, it produces a white cottony ovisac. This substance makes it very identifiable and in turn gives it its name. Adelgids feed at the base of hemlock needles by sucking sap. This affects the tree's ability to obtain nutrients, thus causing die-back and eventually death.

Currently there have been no reports of HWA in Alabama. Separated from most other populations, their isolation has somewhat protected them so far. However, it's only a matter of time before the insect finds its way here. Over the past decade, the rate of spread has averaged around 20 miles per year, with its range already reaching southern Tennessee and Northeast Georgia. With Alabama having the southernmost natural stands of hemlock, it's a race against time to find a way to protect them. In the South, once a tree becomes infested it can reach mortality in as little as three to six years. This is much quicker than in the North due to several factors, but mostly the difference in climate.

In June of 2012, a symposium was held at Samford University to discuss what can be done to protect the hemlocks in Alabama from this almost inevitable threat. The objective was to bring together everyone who can help play a role in preserving the isolated stands of hemlock in the state and develop a strategy while there is still time. On hand to speak were researchers, educators, and professionals who have been dealing with this problem further north for nearly a decade. As the threat draws nearer, it is the hope that we can learn as much as possible from their knowledge and be ready when this pest reaches our backyard.

In the effort to control the HWA, there are two methods in use: chemical and biological. Foliar treatments, the least expensive chemical option, work by using truck-mounted high-pressure pumps to spray insecticidal soaps or horticultural oils into the canopies of infested trees. Concentration is usually on the underside of needles where the adelgids prefer to feed. For this treatment to be effective, the insects must be on the tree at the time of application. It kills the insects by smothering and drying them out. Each treatment lasts only 6-12 months before re-treatment

*Eastern hemlocks, some up to 300 years old, flourish in remote canyons of North Alabama at the southern-most boundary of the trees' native range.*

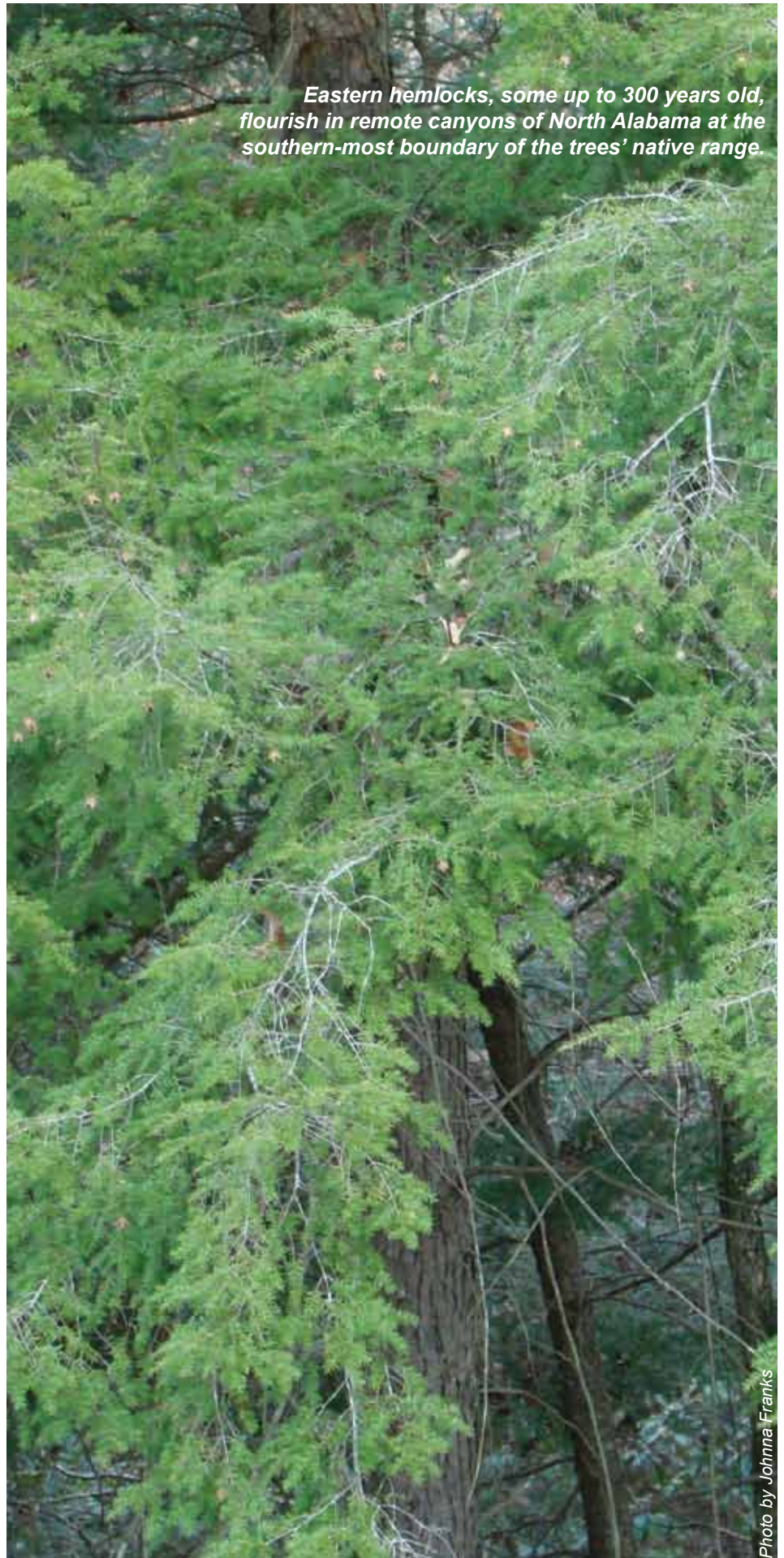


Photo by Johnna Franks



Photo by Bill Cook, Michigan State University, Bugwood.org



Photo by Bill Cook, Michigan State University, Bugwood.org

*Native to our state, the unique botanical treasure of Alabama's hemlock forests is now in peril.*

is necessary. This method is also limited to easily-accessible areas and smaller trees.

For larger trees, the best option is the use of systemic insecticides. The most effective products contain the active ingredient *imidacloprid*. This chemical must be either added to the soil and taken up by the roots, or injected into the stem of the tree. This is a more expensive method. However, each treatment can last up to three to five years. This still isn't a viable solution to protecting an entire forest; it is only practical for individual or small groups of trees, and is limited to accessible areas.

Clearly, the use of chemicals is not a solution to the problem as it only buys time. Our best bet at controlling the HWA on a large scale is biological control.

Since the adelgid was accidentally imported from Asia, it has no native predators to keep its numbers under control. Biological control essentially involves finding a natural predator and introducing it to infested areas. A great deal of research is being done on the use and effectiveness of predator beetles to control HWA. Before a new beetle can be released, it must go through a quar-

antine to make sure it will not have any unintended effects on the environment. Once approved for use, they can be bred in a lab. Clemson University has one of a few beetle-rearing labs that researches and breeds predator beetles to be released into hemlock forests. Rearing beetles in the lab is a complex and costly process. It's not yet known how big of an impact the predator beetles will make, but it is our best hope at this time. The goal is for the beetles to at least control the HWA population to a point where hemlock trees can still survive.

Although the loss of our eastern hemlocks in Alabama probably would not have as much of an ecological impact here as it may have in the North, losing them would definitely take away from the diversity and beauty of our state. It's

unknown when or if the hemlock woolly adelgid will reach Alabama, but if it does, hopefully we'll be prepared and the magnificent hemlocks can be preserved. 🌲

Photo by Lorraine Graney, Bartlett Tree Experts, Bugwood.org



***The tiny non-native insect, hemlock woolly adelgid (HWA) has been devastating hemlock forests up and down the East Coast.***



Photo by USDA Forest Service Southern Research Station Archive, Bugwood.org

# Educational Events of the Past Year from Around the State

By James P. Jeter, Registered Forester,  
Alabama Forestry Commission

**W**hen this “Hardwood Corner” series of articles was started, I made the statement that the purpose of my contribution would be to keep you updated on issues that involve hardwood silviculture and/or water quality from a forester-landowner perspective. Although it has been a while since we have presented any new information, the following is my attempt to do exactly that.

## Hardwoods Management

As everyone in the state of Alabama (and the United States for that fact) is aware of the chronic budget situations, partnering with other agencies to spread the word is a must. Over the past year, the Alabama Forestry Commission was able to partner with numerous others to help provide hardwood training and new thoughts for forest landowners.

The first such training in April of 2012 was the “Upland Hardwood” Forestry Short Course, spearheaded by Tim Albritton, forester with the USDA Natural Resources Conservation Service (NRCS). Tim organizes this meeting every two years so that interested parties can learn about the hot topics in dealing with upland hardwood management.

Sponsors and presenters were from the Alabama Forestry Commission (AFC), the University of Tennessee (UT), the USDA Forest Service (USFS), and the NRCS. Curriculum included the following topics:

- Managing Upland Hardwood Stands – Dr. Callie Schweitzer, USFS
- Hardwood Habitat for Wildlife and Financial Assistance Programs for Hardwoods – Jeff Thurmond, NRCS
- Oak and American Chestnut Restoration: Challenges of Artificial Regeneration – Dr. Stacy Clark, USFS
- Intermediate Stand Treatments, Including Crop Tree Management and Corridor Thinnings – Dr. David Mercker, UT
- “And What About Fire in Upland Hardwood Forestry Systems?” – Dr. Daniel Dey, USFS
- Situational Assessments – “Using This Stuff on the Ground” – Lynn Washington, AFC
- Hardwood Silviculture – Dr. Ed Loewenstein, Auburn University
- Forest Industry Perspective on Growing Quality Hardwoods – Jonathan Lowery, The Westervelt Company
- Wildlife Considerations in Hardwood Management – Patrick Cook, ACES
- Forested Wetland Management Considerations – Jim Jeter, AFC

There was also a field trip with the following observations:

- Reforestation/Afforestation/Hardwood Planting – Drew Nix, ADCNR and Jim Jeter, AFC
- Controlling Undesirable Plant Species in Hardwood Stands – Tim Albritton, NRCS
- On-Site Specific Stand Prescriptions – Group discussion

Finally, the Southern Hardwood Research Group out of Stoneville, Mississippi held a meeting in February of this year with the main theme: “Mid-Rotation Management of Hardwood Stands.” This was another very educational event.

I tell you all of this so you can be aware that many opportunities exist to learn more about upland and bottomland hardwood management, and there are folks trying to stay up on the issues. If you have questions dealing with any of the aforementioned topics, feel free to contact me or any of the partners involved. Also, you are encouraged to visit our AFC website at [www.forestry.alabama.gov](http://www.forestry.alabama.gov).

## Water Quality & Related Matters

Northwest Environmental Defense Center v. Lisa Jackson, EPA, (originally

A varied group was in attendance with a consultant forester and representatives from the AFC, the Alabama Department of Conservation and Natural Resources (ADCNR), the Alabama Wildlife Federation, the NRCS, and the U.S. Army Garrison Redstone. There was a field trip with some lively discussion that looked at a riparian zone restoration project, as well as a stop at Moss Lumber Mill.

As a counter to the meeting described above, Patrick Cook with the Alabama Cooperative Extension System (ACES) organized a course on the management of “bottomland hardwood.” It had been roughly three years since the last Advanced Hardwood Management seminar, so this September meeting was well attended by consultant foresters and landowners.

Sponsors and partners included the Wildlife and Freshwater Fisheries Division of the ADCNR, the AFC, the NRCS, and Dow AgroSciences, LLC. Topics covered included the following:

Decker v. Northwest Environmental Defense Center). In plain terms, we know it as the “9th Circuit Forest Road/Logging Road Case.” You may know by now that the U.S. Supreme Court heard this case. When the EPA issued a new rule just days before the case was heard, the justices were neither happy nor amused. A ruling of some sort should be made by this summer. In the meantime, the environmental group has filed suit against the EPA for the new ruling. Sadly, we will have to wait for the rest of this story. As of March 20, the Supreme Court overturned the 9th Circuit’s original ruling.

**County road notification** – The Alabama Loggers Council and the Alabama Forestry Association (AFA) has made progress in working with counties to modify their road notification processes. The major question is whether any single county is trying to go beyond the state notification law that was passed. To find out where your county stands on this issue, go to the AFA website ([www.ala-forestry.org](http://www.ala-forestry.org)) – under the Programs tab, select Alabama Loggers Council – then select the County Issues tab to find your county on the map.

In a related matter, I have received several complaints about loggers tracking mud onto a paved road and/or mud entering a paved road after the logger has finished. This is usually not a water quality issue; however, it is a public safety issue for which liability can be incurred if an accident happens. Not to mention, it provides for negative public relations for timber harvesters as well as landowners.

**“Driving home the point of clean water”** . . . Also road related, the Black Warrior Clean Water Partnership, the Alabama Department of Environmental Management, and the City of Northport Stormwater Management Program sponsored an “Alabama Dirt & Gravel Road Workshop” in February. Led by John Hopkins, LTAP Trainer, the workshop was well attended by a varied audience. Loggers can view the presentation for Professional Logging Manager (PLM) credit on the AFA website once it is posted.

Hopefully this workshop will be repeated in other areas of the state. If you get a chance to attend one, it will be well worth the time. It’s not just for government entities; the principles and techniques apply to private roads as well. ☎





# Venomous SNAKES of Alabama

By Keith Gauldin, Wildlife Biologist

Division of Wildlife and Freshwater Fisheries, Alabama Department of Conservation and Natural Resources

*[Editor's Note: As a follow-up to the article regarding "non-venomous" snakes published in the Fall 2012 issue (page 15), we felt it only fair in this Spring issue to provide information on a few "others" we might have more reason to avoid. . . ]*

**N**o species of native wildlife in Alabama receives more of a bad rap than snakes. While some people are infatuated by them, many only want to see them dead. Misconceptions about snakes and their bad reputation mainly stems from a lack of knowledge about the different snakes that inhabit our state.

Alabama serves as host for approximately 42 species of snakes, of which only six are venomous. Five of the six belong to a group termed "pit vipers" which includes the cottonmouth,

the copperhead, and three rattlesnakes. The sixth, in a group by itself, is the coral snake.

Pit vipers reside in the family *Viperidae*, characterized by curved, hollow moveable fangs that can pivot to be held flat against the roof of the mouth, heat-sensing pits located between the eye and nostril, and hemotoxic venom. Practically enhancing the snake's ability to see in the dark, the heat-sensitive pits are primarily utilized for detecting prey. Their pupils are elliptical in a vertical orientation, and they typically have a triangular-shaped head (although some non-venomous water snakes will flatten their head and resemble this characteristic when alarmed or disturbed).





*Water moccasin*

The **cottonmouth** is a common snake of Alabama's landscapes, particularly around any type of water body including lakes, rivers, streams, and swamplands [and is also referred to as a water moccasin]. The name cottonmouth is derived from its white inner mouth which is often exposed when the snake is disturbed. While the young have bright bands of dark brown to olive-brown, the adults appear to lose the bands as they age, leaving them a darker solid brown to black with faint blotches. The young typically have a chartreuse-tipped tail, believed to be used to attract prey. The cottonmouth has a habit of standing its ground more so than other snakes.

The **copperhead** is the cottonmouth's upland counterpart. It has a unique coloration characteristic of dark brown bands on a coppery lighter background that resemble an hourglass pattern. This coloration makes it especially hard to detect in the forest leaf, which leads it to be occasionally stepped on by outdoorsmen. This is probably why more people are bitten by this particular snake in the Southeast than any other venomous snake. Although the bites are painful, most are not serious as compared to those of other venomous snake species.



*A copperhead, ready to ambush.*



*Timber rattlesnake*

The **timber** or **canebrake rattlesnake** usually occupies similar areas to that of the copperhead, but is also found in areas that are a little wetter. Its coloration also makes it difficult to detect in the forest leaf litter. This snake can vary in color ranging from gray to brown, with dark brown V-shaped bands or "chevrons" evenly spaced down the length of its body. It often remains motionless until it feels it has been discovered. At that time, it initiates its all-too-familiar buzzing signal, warning the intruder to stay away.

The largest rattlesnake in Alabama is the **diamondback rattlesnake**. Record specimens of this species have been documented at lengths of 8 feet. The diamondback prefers drier sites such as the coastal sandy pine forests, pine flatwoods, and upland sandhills. It is often found in association with gopher tortoise burrows, which it frequently utilizes for refuge. The diamondback is typically a hefty snake, with dark brown-to-black diamonds along the length of its back on a lighter tan-to-light yellow background. Acting as an ambush predator, it often sits coiled and motionless for extended periods, waiting for the opportunity to subdue small rodents. Their venom is highly toxic to humans and is likely the most dangerous snake in Alabama, but it is not apt to strike unless it feels threatened or harassed. Nevertheless, it is wise to keep your distance from this snake.

*(Continued on page 18)*



*A well-camouflaged eastern diamondback rattlesnake.*

# Venomous SNAKES

(Continued from page 17)

The smallest of the rattlesnakes in the state is the **pygmy rattlesnake**, often referred to as a ground rattler. Its pugnacious attitude must stem from its small stature, for it is quick to coil and rattle, although its rattle is hardly perceptible. The color pattern of this snake is a light-gray background with dark brown-to-orange blotches along the back. Due to its smallness, a bite would not be a serious threat to an adult human, although it would be a painful experience. However, this quick-tempered snake is swift to coil and strike when disturbed.

The **coral snake** is the only representative in Alabama of the family *Elapidae*. While this family also includes the cobras, the coral snake is a much more docile representative of the family. It is, by far, the most colorful of the venomous snakes in the state. The brightly colored bands of black, yellow, and red are the signature of this snake. The black bands separate the yellow bands, and it typically has a black-tipped nose. (A couple of other non-venomous snakes that resemble the

coral snake are the scarlet snake and scarlet king snake, both of which have black bands that separate red from yellow bands.) Bites from the coral snake are very serious and can cause severe harm due to its neurotoxic venom. Fortunately, these bites are rare, usually associated with someone attempting to handle the snake.

The majority of snake bites occur from individuals harassing or handling snakes. The best advice in regard to avoiding a snake bite is to avoid handling any snake if there is any doubt of its identification. If a bite occurs, present-day recommendations are



Chris Evans, Illinois Wildlife Action Plan, Bugwood.org

*Pygmy Rattlesnake*

to seek medical attention as quickly as possible rather than the dated suggestions of cutting, tourniquet application, or sucking the venom from the bite. A cell phone can be a tremendous asset in alerting medical personnel of the incoming bite victim if such an unfortunate incident should occur. Last of all, watch where you step.††

U.S. Fish and Wildlife Service

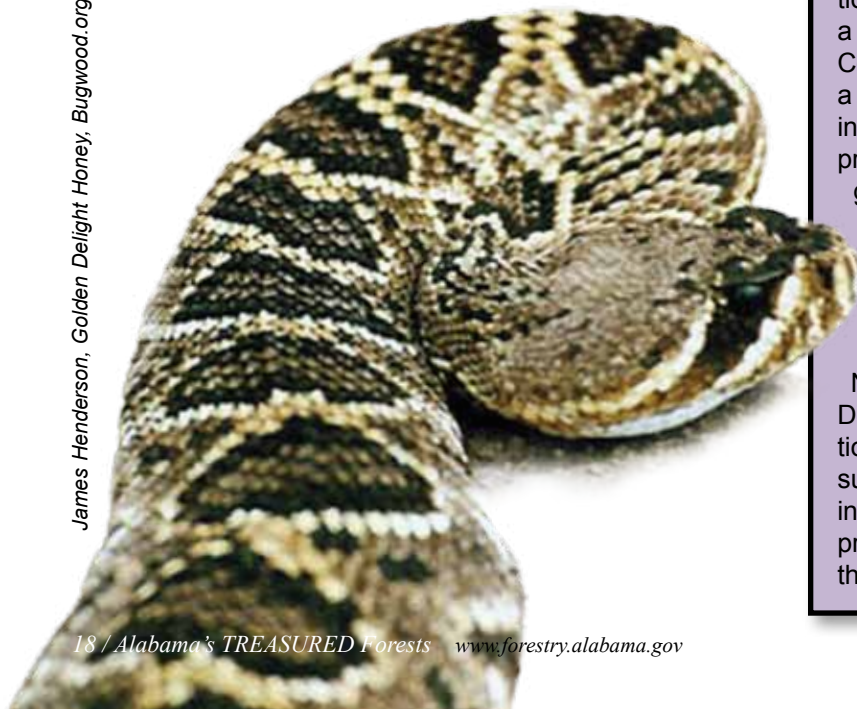
*For more information contact Keith Gauldin, Wildlife Biologist, Alabama Division of Wildlife and Freshwater Fisheries, 30571 Five Rivers Blvd., Spanish Fort, AL 36527; telephone: (251) 626.5474.*

### Important Survey Participation Opportunity:

The U.S. Fish & Wildlife Service was recently petitioned to list the eastern diamondback rattlesnake as a threatened or endangered species. The National Council for Air & Stream Improvement, Inc. (NCASI), a non-profit research center that provides technical information on environmental issues for the forest products industry, has developed a survey and is gathering data to improve understanding of the distribution and habitat associations of this species. Anyone encountering an eastern diamondback rattlesnake is encouraged to complete a survey form and submit to NCASI. (For more information, visit [www.ncasi.org/snakesurvey.aspx](http://www.ncasi.org/snakesurvey.aspx).)

NCASI will be collecting these forms through December 31, 2013. Following that date, data collection will cease and NCASI will compile results from surveys, remove any information that would identify individual respondents and/or landowners as well as precise locations, and provide a summary of results to the U.S. Fish & Wildlife Service.

James Henderson, Golden Delight Honey, Bugwood.org



# Alternative Harvesting for Aesthetics:

## Suggestions to Minimize the Visual Disturbance from Harvesting Timber

By David Mercker

Extension Forester, University of Tennessee

**W**hen woodland owners are asked to rank the reasons why they own their land, the non-consumptive reason of “to enjoy the scenery” often ranks above the consumptive reason of “timber production.” This is not to say that landowners do not wish to derive income from logging, but it does suggest that logging should maintain the forest scenery as best as possible.

An array of practices can be incorporated into a logging operation to minimize loss of aesthetics. Here’s what this entails:

- ◆ **Ensure that all forest structures are present** – Provide for a variety of tree and plant species, in a variety of heights, diameters, and crown layers; included should be herbaceous understory, shrubs, snags, downed woody debris, and both “newer growth” and “older growth” trees.

- ◆ **Combine harvesting methods** – Try to emulate natural disturbances when harvesting. This can include the creation of group selection openings (of various sizes) coupled with intermediate harvesting practices such as thinning, crop tree release, sanitation cutting, and/or single tree selection. Group selections mimic natural disturbances to the forest, while intermediate harvesting emulates normal tree mortality.
- ◆ **Leave visual buffers** – especially near dwellings, roads and trails, ponds, creeks, and other areas of high recreational use or aesthetic enjoyment. Harvest these areas lightly or not at all.
- ◆ **When selecting a tree (or groups of trees) for harvest, ask the question, “Will this tree improve** in quality,

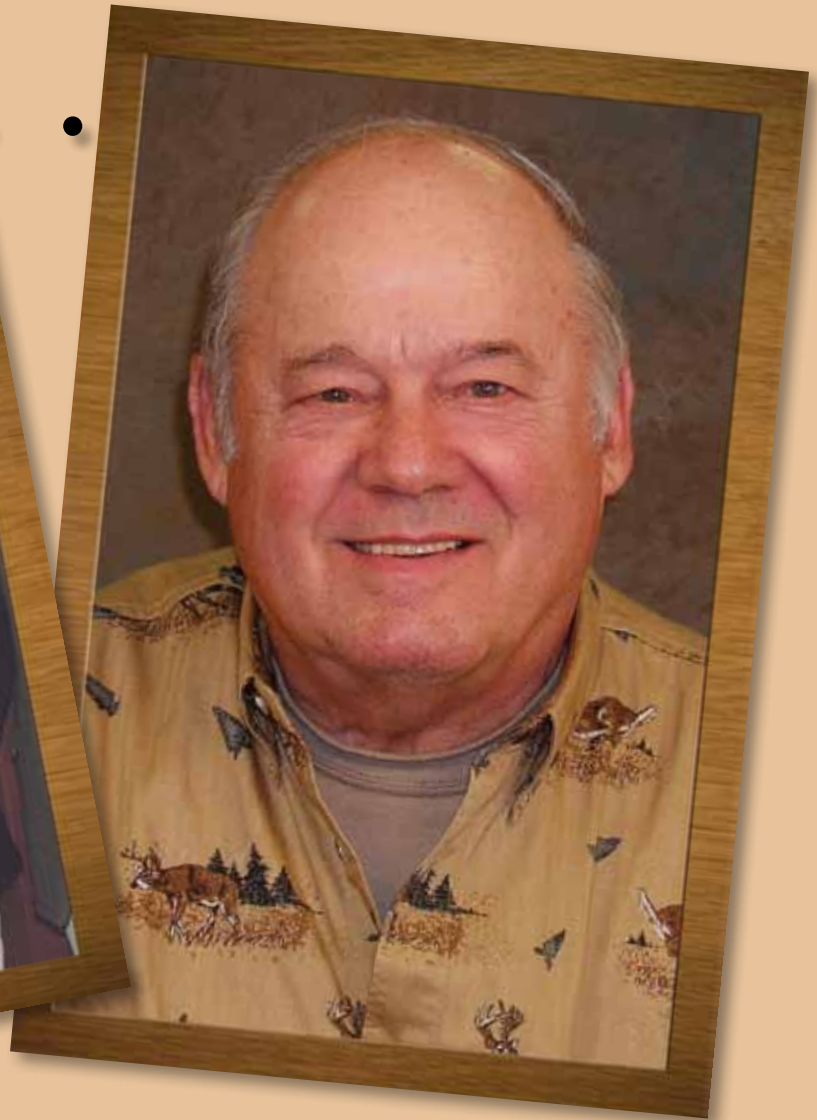
value, and vigor by leaving it for future harvests?” If not, harvest it. In so doing, this may release better quality, younger trees nearby.

- ◆ **Leave some look-em-at-em’ trees** – Commonly called culls, wolf trees, or trees of unusual species or form, look-em-at-em’ trees are those that make the forest experience special. Their monetary value may be low, but their scenic or wildlife value can be immeasurable.

This approach to forest management is a viable alternative for those forest landowners who appreciate forest aesthetics. It is also a method that is less likely to attract attention and resulting complaints. Many of the developing forest certification systems have standards that address aesthetics, so the subject is likely to continue gaining in importance. ☛



# Goodbye to a Friend . . .



**James Gary Fortenberry**

(March 17, 1936 - September 27, 2012)

It is with great sadness that we say goodbye to an individual who played a long and important role in the history of the Alabama Forestry Commission and the Alabama TREASURE Forest program.

Former Commission Chairman James Gary Fortenberry passed away on September 27, 2012, at the age of 76.

A resident of Ward, Alabama, he was retired from the James River Corporation in Pennington. Originally from Irondale, he attended the University of Alabama where he met his bride, Shirley. Following graduation, they moved to Choctaw County, Shirley's home county, and purchased 100 acres from her father. Managing the timberland and obtaining more acreage as time passed, he soon became a leader in the Choctaw County forestry community.

As a strong proponent of good forest stewardship, Fortenberry's property was certified as a Tree Farm in 1978 and a TREASURE Forest in 1980. With his multiple-use management philosophy, wildlife was the top priority and timber production his secondary objective. Therefore he took advantage of every acre of the forest with both hardwoods and pines. In 1989, their now 1,200-acre property was honored as the state winner of the Helene Mosley Memorial TREASURE Forest Award. Ten years later, the timberland they owned had climbed to over 2,000 acres.

In 2004, Gary and Shirley Fortenberry were honored with the Alabama TREASURE Forest Association's Bill Moody Award. This award, given to honor individuals and/or groups making significant contributions to the advancement of the TREASURE Forest Program and the Alabama TREASURE Forest Association (ATFA), was presented at the Alabama Landowners and TREASURE Forest Conference in Tuscaloosa in October of that year. At the time, Mr. Fortenberry was serving as Chairman of the Alabama Forestry Commission's Board of Commissioners.

Gary was first appointed as a Commissioner by Governor Fob James and began his service to the Forestry Commission on November 5, 1996, replacing Carol Jean Grisham. Governor Don Siegelman re-appointed him to another term beginning November 5, 2001.



Photo by Jimmy Harmon

Recently established Fortenberry Memorial at the Baldwin County Boys Ranch in Summerdale.

During his tenure as a Commissioner, Fortenberry was elected Vice-Chairman on January 7, 1999, and continued to serve in that position through the January 2005 meeting. He was elected Chairman on January 21, 2005, and served in that capacity through the April 26, 2006, meeting. His term of office ended on November 5, 2006, having served ten years as a commissioner.

Friends of Gary Fortenberry have recently established the "Gary Fortenberry Memorial Hardwood Grove" at the Baldwin County Boys Ranch in Summerdale, Alabama (one

of the homes in the Alabama Sheriffs' Youth Ranches organization). "Mr. Fortenberry was a long-time contributor to the Ranch," said organizers, "and establishing a memorial hardwood grove seemed only appropriate. Gary loved hardwoods, especially oaks, and he had a special affection for Chinese chestnut trees because deer are so fond of the chestnuts."

The boys at the Ranch helped dig the holes and plant the trees. The hardwood grove is home to a

variety of species, and the Ranch director plans to establish a disc golf course in and around the grove for resident boys to enjoy.

It's doubtful that Gary Fortenberry could have imagined a more suitable legacy.

Sources: *Alabama's TREASURED Forests* (Spring 1990, Winter 1999, and Spring 2005)



Photo by Jimmy Harmon

The boys at the Ranch helped plant the memorial trees.



Photo by Jimmy Harmon

# THE VIRTUES OF A PORTABLE SAWMILL ON A WOODLOT

*By David Boyt, Missouri Tree Farmer*

**T**ree farming has been such a large part of my life for the last 30 years that sometimes I forget not everyone understands what it is and what it involves. When I tell someone I manage our family tree farm, I usually get a blank look and a comment to the effect, “THAT’s got to be the easiest job in the world.” I might as well tell them that I work for the highway department watching center-stripe paint dry! And every December, I have to explain that no, we don’t have Christmas trees (unless you want to hang tinsel on a walnut tree). With a full-time job, I spend less time working with trees than I’d like, but I do some planting, pruning, thinning, and even some salvage harvests. One of my more pleasant and productive tasks is running a small sawmill.

Like most woodland owners, I knew the irony of having trees all around me, but going to the lumber yard for building materials that are lower in quality and higher in price. Operating my own small sawmill has been a long-term goal, ever since I helped mill posts and beams for our home a little over thirty years ago. Working within a foot of the exposed drive belt and spinning 5’ saw blade that stopped only at the end of the day, I shoveled sawdust, helped turn logs, and offloaded the slabs and lumber. When I pulled in the driveway with a load of wood for our new

house, every muscle ached, my nerves were on edge, and my ears were still ringing from the roar of the unmuffled Detroit Diesel engine. But the best part was the satisfaction of participating in every step of construction, from felling the tree to driving the nails.

When small band sawmills became available, the crazy idea of running my own sawmill was within reach. With the assurance that I would finally finish the house we had been living in for the last fifteen years – and knowing that I’d probably get one anyway – my wife, Becky, gave the purchase her approval. Since then, I have milled miles of railroad ties, barn siding, trailer decking, specialty lumber for area woodworkers and artists, and house flooring – for other peoples’ houses (we’re still walking on the plywood subfloor).

The Norwood HD36 I currently run is a manual portable band sawmill. Picture a shop band saw on steroids, turned sideways, and you get the idea. The engine, drive belts, and blade ride down the track on a carriage as it makes a cut. Adjusting the height of the blade controls the thickness of the boards. Moving parts are well guarded, and the 23-horsepower engine is quieter than a garden tractor.

Manual sawmills rely on the sawyer’s muscle for log handling (loading logs on the mill bed and turning the logs), clamping the log down, and feeding the blade into the wood. With the help of a hand winch, a good cant hook, and a little practice, it is much easier than you might think. The engine automatically throttles down and a brake engages to stop the blade when not cutting wood. Besides the safety factor, this feature helps bring fuel consumption down to around three gallons for the 1,200 board feet of hardwood I can cut in a day, if the logs are all arranged and ready to go.

The trailer package allows me to tow the 1,800-pound machine behind my truck for sawing jobs and demonstrations at other locations. Norwood also offers track extensions for cutting





*Commercial sawmills are geared for a limited range of products. The versatility of small band mills such as the Norwood HD36 make it possible to quickly adapt to changing needs and a variety of different products as opportunities appear. This persimmon log is being milled for a local woodworker.*

long timbers of any length. In fact, I recently talked to a sawyer with enough track to cut 36-foot-long beams. Hydraulics to assist with sawing and log handling can be added onto the Norwood mill, which is an attractive option. I'm not getting any younger, after all.

The rule of thumb is that the value of wood doubles with every process. For example, a board foot of oak that brings 20 cents on the stump is worth 40 cents delivered to the mill, 80 cents as rough lumber, \$1.60 kiln dried, and \$3.20 as tongue & groove flooring. Double that figure for cherry or walnut.

I'm one of my own best customers for lumber, as there are always projects requiring lumber. Instead of buying pine at the lumber yard to re-deck my 16-foot flat-bed trailer, I culled out some post oak trees, milled the logs into 1-7/8-inch thick boards, and installed trailer decking that will likely outlast me! Other projects include fencing, sheds, a barn, and some (very) rustic furniture. A guesthouse is high on the priority list for when family comes to visit.

The sawmill opens up a host of new harvesting options. The wood left behind by logging crews is often more valuable than the wood taken out because of its unique character. Red elm, for example, could easily be mistaken for an exotic hardwood from South America. Sycamore, generally considered only suitable for pallets, rivals walnut in value when quarter-sawn on the mill. By emphasizing the uniqueness of my wood, customers see "character" where commercial mills see "defects." This increase in value makes it more feasible to use selective cutting practices, and gives the option of allowing superior individual trees to continue to grow, while harvesting the "weed" tree next to it. Instead of "cut the best and leave the rest," our harvesting philosophy is "worst first." Hopefully, after a few hundred years of this management, our patch of high-graded woods will again have the diversity and beauty of its former years.

The Norwood mill handles a variety of sizes and shapes of logs. Any sawmill can slice up a nice straight 10-foot-long, 20-inch-diameter walnut log. But what is in that crotch just above the log? Most loggers leave it behind to rot. But with a little care, a small band sawmill can convert it into book-matched

*(Continued on page 24)*



*Manual sawmills rely on muscle power for log-handling functions, such as loading and turning the logs. Once the cant hook has been mastered, it is possible to work with surprisingly large logs.*

# PORTABLE SAWMILL

(Continued from page 23)



*Even though portable sawmills are small in size, they can handle full-sized logs. Here, the author cuts a 30-inch-diameter white oak log that will be used for flooring.*

flitches that cause woodworkers to pull out their checkbooks and ask, “How much?” The most challenging milling I’ve done so far was on the other end of the log. The exposed roots of trees that have been blown down or bulldozed down have immense potential. Clamping them down for milling calls for some real ingenuity, and embedded rocks will destroy several band saw blades. However, the wood has the deepest color and most depth to the grain pattern of any wood I have ever seen.

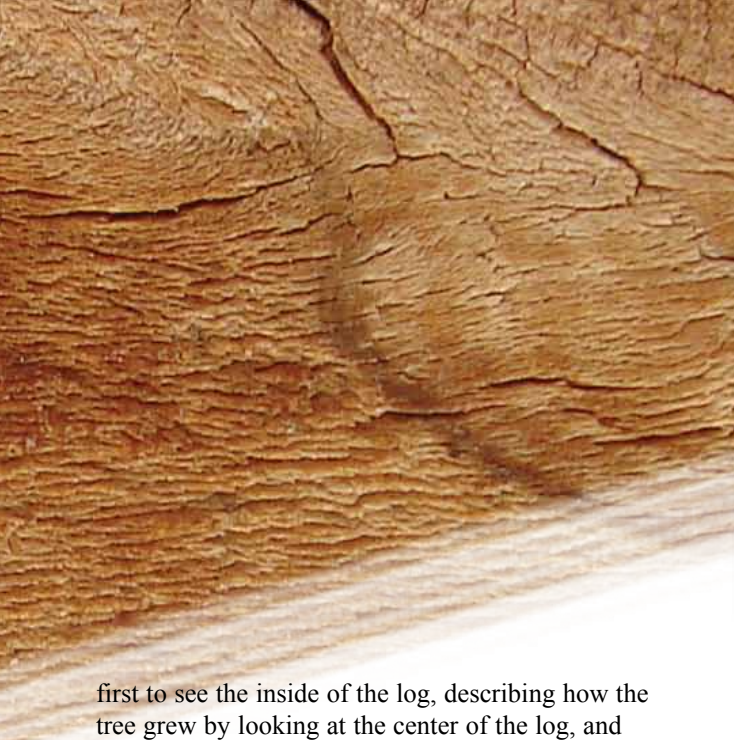
Not all of the lumber I cut comes from our patch of woods. I have also cut “urban logs” from yard trees that have died or blown down in peoples’ yards. Some had sentimental value to the owners, and they wanted to make furniture from the wood. Other folks just don’t want to see their tree get ground up for mulch, cut up for firewood, or hauled to the landfill. I have also salvaged logs from land-clearing operations and storms, including the 2011 Joplin, Missouri tornado. This is where portability really comes in handy. I have actually backed my Norwood sawmill into driveways right in town to mill a few logs, without even unhooking the mill from my truck.

The sawmill is a wonderful public relations tool for our tree farm. I have taken it to schools where I demonstrated cutting lumber to Industrial Arts classes (letting them keep the lumber), county fairs, farm shows, and even towed it over 1,000 miles to demonstrate it at the 2012 National Tree Farm Convention in Jacksonville, Florida. I love sharing the experience of being the



*Woodworker Jack Divine looks over a piece of persimmon that will eventually become a table top. His work relies on unique pieces of wood such as this for his business as a furniture maker.*





*A logging crew left this cherry log in the woods to rot because it was too short. Even though it had been left on the ground for several years, the wood was still in excellent condition.*

first to see the inside of the log, describing how the tree grew by looking at the center of the log, and even giving others the chance to make a few boards themselves. It provides an excellent opportunity to discuss the importance of taking care of our resources, and making the connection between the forest, the tree, and the wood. Whether this infuses my enthusiasm to others, gives them a new way of looking at their trees, or just entertains them for a little while, I always enjoy this part of my “job.”

Sawmilling runs the gamut from weekend sawyers who cut for themselves when they feel like it, to successful full-time businesses that employ a dozen people. With an initial investment of about one-third the cost of a new pickup truck, low maintenance, and operating expense of around 8 cents per board foot, I was able to start a small business that can expand if I decide to go into sawing full time.

The internet is a great place to get information about sawmills. Norwood’s web site, **NorwoodSawmills.com**, provides information about their mills, as well as a link to their forum, *Norwood Connect*. A couple of other good web forums are **woodweb.com** and **forestryforum.com**. Foresters, sawyers, and woodworkers from around the world participate, asking questions and offering their opinions. If you happen to see any posts from “Post Oakie,” you’ve found me! *Independent Sawmill & Woodlot Management* magazine also runs reviews on sawmills and other wood-harvesting and processing equipment.📧




*The same cherry log on the sawmill. The mill’s ability to handle a variety of shapes and sizes makes it especially useful for salvaging logs and lumber.*



*The inside of the same cherry log. Slabs such as this one open up a world of possibilities to woodworkers, and they are willing to pay top dollar, if they like what they see.*

*Author’s Bio: Dave Boyt has a degree in Forest Management from the University of Missouri. He is Managing Editor for Independent Sawmill & Woodlot Management magazine, and manages a family tree farm in southwest Missouri. He also writes for Norwood, and operates his sawmill for fun and profit in his spare time. If you have any questions or comments, he can be reached at [dboyt@netins.net](mailto:dboyt@netins.net).*



# Just an Old DEAD TREE

*By Joel Glover, Wildlife Biologist  
Alabama Department of Conservation, Wildlife and Fisheries Division*

If you would like to know how to manage your property to reach your objectives of providing optimal wildlife habitat, you should ask someone who knows. How about a landowner whose property has been certified as a TREASURE Forest, has won the Helene Mosley Award, been recognized as the Tree Farmer of the Year, and has hosted numerous tours and educational activities? Not a lot of folks meet those criteria, but there are a few around and it has been my good fortune to visit most of these properties. During such visits, I've attempted to give a tip or two, but mostly I have been educated by the landowners as to what works and what doesn't.

One thing most of these landowners have in common is that they understand wildlife management involves a lot of trial and error. Just because a technique works great in one locale does not mean it will work at all in another. An example of this is a situation I have discussed several times with my good friends, Jerry and Genelle Brown . . . when I was a young avid bowhunter in north Alabama, I would often look for an area of oak leaf hydrangea over which to set up my deer stand. There, the deer would readily browse the shrub; however, in central Alabama I have yet to see where deer have even given the plant a test nibble. This is true with many practices. While one landowner raves about their great success with a cool season planting, another may tell you they will never plant it again. There are numerous variables involved with all aspects of wildlife management, yet

with a lot of schooling and 26 years of experience I still can't unravel many of the mysteries.

I do realize that if you never try a new technique, you will never know whether or not it will achieve your objective. At the same time, you should never put all your eggs in one basket.

Until I saw how well it worked for feeding and concentrating deer, I would not have recommended to anyone to fertilize kudzu. Okay, I still don't recommend it, but I have seen it work. A rather unique feature on Jerry's property is a large crater-like area that is filled with kudzu. A road encircles the area, allowing him to contain the plant in the "bowl." I think they have lost count of the number of deer they have taken from the stand overlooking the kudzu bowl. I wouldn't recommend it anywhere else, but it works great there.

I must admit I was a little surprised the first time I saw a landowner have the power company come and install a power line across their property, *not* to supply power, but to provide a place for doves to sit! However, it proved to be a great addition to the field and an excellent way for the owner to assess the number of doves using the area.

Granted, not all experiments are successful. Have you ever tried to distribute lime with a broadcast spreader, mixed your clover with wheat and covered it all an inch deep, or planted grain sorghum too thick? Some things just do not work well, but many landowners will confirm that you generally learn more

Photo by Joel Glover



from the failures than you do the successes. The sharing of these landowners' results have taught me a lot.

One of Jerry's latest wildlife success stories is just an old dead tree. And it isn't a tree that died naturally. It's a tree that Jerry killed – on purpose. Now this guy is a TREASURE Forest landowner and Tree Farmer from way back, so why is he killing a mature saw-log-size pine tree? Well, to create cavities, of course!

In forested habitats, cavity-nesting birds may account for 30-45 percent of the total bird population. These species are largely dependent on "snags" for nesting, roosting, foraging, and other functions. Snags are often a rich source of food providing three foraging areas including: external surface of the bark, the cambium layer, and the heartwood of the tree.

While primary excavators are those species that actually carve nesting and foraging cavities in snags, the cavities they create can have a long lifespan with many various users. Secondary cavity users inhabit either natural cavities or cavities abandoned by other species. Chickadees, bluebirds, wood ducks, titmice, great crested flycatchers, nuthatches, barred owls, screech owls, and kestrels often utilize cavities created by woodpeckers. Additionally, bats, gray squirrels, fox squirrels, flying squirrels, raccoons, frogs, snakes, honeybees, wasps, and spiders utilize the cavities. Absence of suitable snags can be a major limiting factor for some snag-dependent wildlife populations.

Jerry's snag creation could not have been much more successful. During the spring, the tree attracted a pair of Pileated woodpeckers, the likely creators of the multiple cavities in this old pine. In addition, a pair of red-bellied woodpeckers took up residence in the upper cavity, a pair of red-headed woodpeckers took over the lower cavity, and yellow-shafted flickers set up house-keeping in a cavity on the backside of the tree.

While there is something very natural about planting trees and watching them grow, killing them doesn't come so naturally. Hopefully from childhood we have been taught that trees are good. However, having worked with thousands of children over the years, I have learned that we need to teach a more complete message. While trees are great and vital to our existence, using those trees is also essential for us to enjoy the lifestyle to which we have grown accustomed. The products we utilize each day would not be available if we did not harvest trees. Not all landowners or the public in general understands that. If people do not understand the need for us to harvest trees, it can be a difficult chore to make them understand the benefit of a dead tree.

While I have spent a lot of my career talking with landowners about planting trees, after seeing the success of Jerry's snag, I may have to start recommending snag creation more often to those who are managing for cavity nesters!

When creating a snag, remember that the larger the tree, the more use it will normally receive. Always keep safety in mind, and avoid deadening a tree that might fall into an area regularly frequented by people or livestock. Snags should be large and well distributed, and both hard and soft woods should be utilized.

Although this once stately pine was now bare and full of holes, there had probably never been more life in that old dead tree! Unfortunately, shortly after nesting season, the old pine hit the ground in a wind storm. But all was not lost . . . downed woody material is home to a whole suite of species. Trees just keep on giving. And by the way, I noticed some hatchet marks on another tree nearby! ♣

Photo by Fletcher Scott





# Honeybee is Important Non-native Species

Photo courtesy of Bruce Avera Hunter, National Biological Information Infrastructure

*By Justin Brock, Wildlife Biologist*

*Division of Wildlife and Freshwater Fisheries, Alabama Department of Conservation and Natural Resources*

All seven species of honeybees belong to the genus *Apis*, which is the true honeybee genus. Interestingly, none of these true honeybees are native to Alabama or even the United States. However, since brought to America in 1622, honeybees have been a part of the everyday lives of Americans. From the honey and wax they produce, to their pollination of many plants we depend on for food or just enjoy having in our yards and gardens, these insects are truly a species we both need and admire. Unfortunately, it is possible for them to cross the line and turn into a backyard invader.

Honeybees in Alabama live in colonies usually located in hollow trees or some other type of cavity. The bees will swarm in the spring and early summer if they need to find a new nest location. This swarming period is caused by different reasons, such as limited space in a hive or the age of the present queen. During the swarming period, the queen will leave the hive, taking approximately half the colony with her in search for a new hive location. Meanwhile, the portion of the colony that remained will raise a new queen from the larva that has been left behind. The worker bees that leave the hive with the old queen are usually very gentle due to the

large quantity of honey they consumed when preparing to swarm. After a suitable cavity has been found, everything will go back to normal for the bees. The big question is if it will be at or in someone's house.

There are three times a person may come in contact with a honeybee: when bees are out gathering nectar from flowers, during swarming periods, or by encountering a hive. The first and most common way is when a honeybee is gathering nectar. The best way to deal with this is to avoid the bee. Also, remember that any sugary or fruity food or drink can attract bees. This happens more commonly in late summer when nectar from flowers is less abundant.

During the swarming period bees may land on a branch or other objects and stay a few hours or a few days. Although this may look intimidating due to the number of bees, the bees should be very gentle and pose little threat if just left alone. If the bees are in an area where they still need to be removed, a local beekeeper is usually happy to come and retrieve the hive. If no beekeepers can be contacted, it is recommended that a person call a professional such as a county extension agent or exterminator to assist with the problem.

People also come into contact with honeybees when they encounter an active hive. The bees at a working hive are more protective than most other bees. However, they are still not the mindless killers as portrayed in movies. Even so, caution does need to be used around hives.

The best way to deal with bee hives is to prevent them from ever being built in a person's yard or house. This can be done by filling all cavities around the home and sealing any cavity entrances. An example of this is filling a hollow spot in a wall with insulation, and using caulking to seal any holes that may allow bees to enter the house. This should be done before the spring warm-up when swarming usually occurs. If a hive is built in or around the home, it is recommended that a professional be contacted to give advice on removal.

Honeybees are a very important part of our everyday lives. They also require caution when they are encountered. Only an estimated one in 400 people are stung by honeybees each year in the U.S., but some people can have allergic reactions. Those individuals should exercise additional cautions and carry necessary medical supplies. ♣



## Tax Tips for Forest Landowners for the 2012 Tax Year

by Linda Wang, National Timber Tax Specialist  
and John Greene, Research Forester, Southern Research Station

**F**ederal income tax law contains provisions to encourage stewardship and management of private forest land. The primary goal of this bulletin is to assist forest landowners and their advisors with timber tax information they can use to file their 2012 income tax returns. The information presented here is current as of September 15, 2012.

### Personal Use, Investment, or Business Property

Different tax rules apply, depending on whether you hold your forest land as personal use, investment, or business property. If you do not own your forest land at least partly to grow timber for profit, it may be personal use property, which provides few opportunities for tax deductions. Profit motive is determined by factors including the time and effort you put into activities directly related to producing income; it also includes the expectation of future profit from appreciation in value of your timber due to growth and enhanced quality. An investment might rely mostly on such appreciation in value, while a business would conduct timber management activities on a more regular and continuous basis. It is a good idea to document your profit motive in a written forest management plan.

You must *materially participate* in the management of forest land held for business use in order to avoid the passive loss rules, which restrict the deduction of business costs. Investment property is not subject to the passive loss rules.

*Example 1:* You grow timber for profit from appreciation in value but do not actively manage it. Your forest land may be investment property.

### Timber Basis and Timber Depletion Deductions

*Timber basis.* If you purchase forest land, its basis is the total amount you paid for it (purchase price, survey, legal fees, etc.). The basis of forest land that you inherit generally is its fair market value (FMV) on the donor's date of death, while the basis of forest land you receive as a gift generally is the lower of its FMV or the donor's basis. You should allocate the basis of land, timber, and other assets (e.g., a bridge) that you acquire together in proportion to their FMV at that time and post them to separate accounts. If you didn't do this a consulting forester can determine basis retroactively, but you should weigh the cost of doing so against the potential tax savings.

*Example 2:* You bought forest land for a total cost of \$30,000. The FMV of the bare land is 64 percent of total FMV and the timber (300 thousand board feet (MBF)) is 36 percent. The basis of the land is \$19,200 (64% x \$30,000) and the basis of the timber is \$10,800 (36% x \$30,000).

*Timber depletion deduction.* Depletion is a deduction against timber sale proceeds. It is calculated by dividing your timber basis by the total volume of timber (*the depletion unit*), then multiplying by the units of timber sold. This is why you need to have a separate timber basis account.

*Example 3:* Continuing with Example 2, say you sold 200 MBF of the timber. Your depletion unit is \$36/MBF ( $\$10,800 \div 300$  MBF) and your depletion deduction is \$7,200 ( $\$36/\text{MBF} \times 200$  MBF).

### Timber Sales

*Sale of standing timber.* Only the net gain from a timber sale, after deducting timber depletion and sale expenses, is taxed. Report the sale of standing timber held as an investment on Form 8949 and Schedule D. Report the sale of standing timber held for business use under IRC sec. 631(b) on Form 4797 and Schedule D, whether you sell it outright (lump-sum) or pay-as-cut. If you sell timber outright under section 631(b) you also must file Form T, Part II.

*Example 4:* You sold standing timber held as an investment for over one year for \$8,000, incurring \$950 in sale expenses. Assuming a depletion deduction of \$1,330, your net long-term capital gain is \$5,720 ( $\$8,000 - \$950 - \$1,330$ ).

*Sale of cut timber.* If you cut your own timber or have it cut by a contractor working at your direction, either for sale or for use in your business, the gains are ordinary income unless you elect to use section 631(a) on Form T, Part II. If you so elect, the difference between the FMV of the standing timber on the first day of your tax year and its basis is a capital gain, and the difference between the proceeds from sale of the cut products and the sum of the FMV of the standing timber and the costs of converting it into products for sale (cutting, hauling, etc.) is ordinary income.

*Example 5:* You paid a contractor \$2,000 to cut standing timber held for business use for over one year into logs and sold the cut logs to a mill for \$30,000. The FMV of the standing timber was \$23,000 on January 1 and your basis in it was \$1,000. If you elect to use section 631(a) on Form T, Part II, report a \$22,000 long-term capital gain ( $\$23,000 - \$1,000$ ) on Form 4797 and Schedule D, and \$5,000 of ordinary income ( $\$30,000 - \$23,000 - \$2,000$ ) on Schedule C. If you don't make the election, all \$27,000 is ordinary income.

For 2012, the maximum rate for long-term capital gains is 15 percent (0 percent for amounts which, if added to your ordinary income, fit under the ceiling for the 15 percent tax bracket: \$35,350 for single taxpayers, \$70,700 for married taxpayers filing jointly).

(Continued on page 30)

# Tax Tips for Forest Landowners for the 2012 Tax Year

(Continued from page 29)

## Installment Sales

An installment sale involves receiving one or more payments after the year of sale, allowing you to defer tax by spreading your gain over two or more years. Interest is charged on deferred payments.

*Example 6:* You sold timber for \$10,000 (\$8,000 after deducting timber depletion and sale expenses) in 2012. The buyer paid you \$5,000 in 2012 and \$5,000, plus interest, in 2013. Your gross profit percentage is 80 percent ( $\$8,000 \div \$10,000$ ). Report a \$4,000 gain for 2012 ( $\$5,000 \times 80\%$ ), using Form 6252.

## Timber Management Expenses

If you hold your forest land to grow timber for profit, you can deduct ordinary and necessary timber management expenses, such as the cost to protect the woodland from insects, disease or fire, control brush, do a pre-commercial thinning or mid-rotation fertilization, or maintain firebreaks. If you qualify as an investor, deduct these expenses on Schedule A, where they are subject to a 2 percent of adjusted gross income reduction; if you qualify as a material participant in a business, deduct them on Schedule C.

## Reforestation Costs

All taxpayers except trusts may deduct up to \$10,000 (\$5,000 for married couples filing separately) per year of reforestation costs per qualified timber property (QTP). Qualifying costs include the direct costs to establish or reestablish a stand of timber by planting, seeding, or natural regeneration. Any amount over \$10,000 per year per QTP may be deducted over 84 months (*amortized*).

*Example 7:* You spent \$17,000 to reforest after a harvest. Deduct \$10,000, plus 1/14th of the remaining \$7,000 (\$500) on your 2012 tax return. Deduct 1/7th of the \$7,000 (\$1,000) on your returns for 2013–2018 and the last 1/14th (\$500) on your 2019 return. If you qualify as an investor, take the \$10,000 deduction as an adjustment to gross income on the front of Form 1040; if you hold your forest land for business use, take it on Schedule C. Elect to amortize and take amortization deductions on Form 4562, Part VI.

## Depreciation, Bonus Depreciation, and Section 179 Expensing

Capital expenditures, such as for logging equipment, bridges, culverts, fences, temporary roads, or the surfaces of permanent roads, may be deducted over a set number of years (*depreciated*). For example light-duty trucks and logging equipment are depreciated over five years. You also may take *bonus* depreciation equal to 50 percent of the cost of qualifying new property placed in service in 2012. Further, if you hold your forest land for business use, you may expense up to \$139,000 in qualifying property (generally tangible personal property) in 2012, subject to a \$560,000 phase-out and business taxable income limitation.

## Cost-share Payments on Form 1099-G

If you receive a cost-share payment from a qualified government program, you may exclude part or all of the payment from your income. Qualified federal programs include the Forest Health Protection Program (for southern pine beetle and mountain pine beetle), Conservation Reserve Program, Environmental Quality

Incentives Program, Wildlife Habitat Incentives Program, and Wetlands Reserve Program. Several state programs also qualify for exclusion. The excludable amount is the present value of the greater of \$2.50 per acre or 10 percent of the average annual income from the affected acres over the last three years. You cannot exclude part or all of a cost-share payment from your income and also claim a deduction for the expense reimbursed by the payment. Neither can you exclude part or all of a payment that reimburses a deductible forest management expense.

*Example 8:* You received a \$4,000 cost-share payment from the Conservation Reserve Program and used it as capital expenditure for your 100-acre woodland. If you had no income from the property in the last three years, you could exclude \$3,275 ( $(\$2.50 \times 100 \text{ acres}) \div 7.63\%$ ). The interest rate is from the Farm Credit System Bank. If you had \$9,600 of income from the property, you could exclude the entire payment:  $(10\% \times (\$9,600 \div 3)) \div 7.63\% = \$4,194 > \$4,000$ . Attach a statement to your tax return describing the program and your calculations.

## Timber Casualty and Theft Losses

Loss of timber from a casualty – a sudden, unexpected, and unusual event such as a fire or severe storm – may be deductible from your taxes. The deduction is the lesser of the decrease in FMV caused by the casualty or your basis in the timber block (the area you use to keep track of your basis). Similarly, a theft loss deduction is limited to the lesser of the decrease in FMV or your basis in the stolen timber. A competent appraisal usually is required.

*Example 9:* A fire caused \$5,000 in damage to your timber (\$9,000 before-fire FMV – \$4,000 after-fire FMV). Your basis in the affected block is \$2,000. Your loss deduction is the lesser amount, or \$2,000. Report the loss on Form 4684, Section B, and adjust your timber basis to zero on Form T, Part II.

*Example 10:* Continuing with Example 9, you sell the damaged timber for \$2,000 in a salvage sale. You have a taxable gain of \$2,000 ( $\$2,000 - \$0$  basis), but you can defer tax on the gain by using it to acquire qualified replacement property (e.g., reforestation) within the allowable replacement period, generally two years.

## Filing Form T (Timber)

You must file Form T (Timber), Forest Activities Schedule, if you claim a timber depletion deduction, sell cut products under section 631(a), or sell timber held for business use lump-sum. There is an exception for owners who only have an occasional timber sale, defined as one or two sales every three or four years. You must maintain adequate records, however, and if you hold your forest land for business use, it is prudent to file Form T. ☞

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# Wildlife School for Landowners

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Deadline for registering is August 15, 2013. Be sure to register early for this event!  
Registration is often closed early due to space limits being reached.  
Registration fee before July 31 is \$50, with discounted registration (\$30) for a spouse.  
Late registration will be \$60.

Agenda and registration form are available online at [www.swcc.alabama.gov](http://www.swcc.alabama.gov).  
Click on "calendar," then scroll down to "AACD Forestry and Wildlife Committee Wildlife School."

Registered foresters that attend will receive  
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# Southern Crab Apple

(*Malus angustifolia*)

By Fred Nation, Environmental Services, Baldwin County

What could be more American than apple pie? Well, it seems surprising that the beautiful, familiar “eating” apples that we see in supermarkets and our apple pies are not native to North America; they originated thousands of miles away, in central and western Asia, including eastern Turkey, Kazakhstan, and northwestern China. We do, however, have a few American apples. Our native *Malus angustifolia* is one of about 30 “crabs” that are indigenous to temperate areas in the northern hemisphere, including the Southern United States. Though our native crab apple is not a culinary treasure, it is a beautiful small tree that has

value as a forage plant for a long list of wildlife species including quail, rabbits, skunks, foxes, turkeys, and white-tailed deer.

Southern crab apple is a small, irregular tree to about 35 feet tall, sometimes seen as a large colonial shrub. The leaves are deciduous, alternate, oblong, to about 3 inches long, 2 inches wide, with rounded, sometimes serrate marginal teeth. The fruits are small yellow-green apples, broader than long, less than 2 inches across, often produced in huge numbers. Even when fully ripe in the fall, the apples are extremely astringent and sour-tasting. They are found growing in a variety of open, well-drained or moist habitats scattered throughout the Deep South except peninsular Florida. They are native throughout Alabama, but less frequently seen in southern and coastal areas of the state. The gorgeous, five-petaled fragrant, pink and white spring flowers have made them popular ornamen-

tals in parks and home landscapes throughout the United States and Europe.

Crab apples are a good source of pectin, a complex carbohydrate used to thicken or “set” jellies and preserves. Pectin is also used in laboratories as a culture medium for fungi and bacteria. With a lot of sugar, the juice pressed from ripe crabs can be made into a pretty brownish-red jelly. Medicinal claims for pectin derived from crab apples include the lowering of cholesterol levels and stabilizing of blood sugar.

The wood of crab apple trees is extremely hard and difficult to carve. It makes durable handles for knives and, when available, for larger implements such as axes. It burns extremely hot; in the grill the smoke has a pleasant scent and imparts a mild, sweet flavor that is said to be excellent for chicken or pork.

When in bloom, masses of pink and white crab apple flowers are a fragrant and beautiful sight. Even in midwinter, when the leaves and flowers are gone, the dark, craggy branches are interesting, dramatic features in natural woodlands and in our landscapes. Many named varieties are available from nurseries and garden centers. Since they are small trees, they don't need much space, and the birds will love their dense crowns for nesting sites.

The Alabama state champion southern crab apple, *Malus angustifolia*, is 59 inches in circumference, 39 feet tall, with an average crown spread of 27 feet, located in Montgomery County. When spring arrives and this magnificent giant is in flower, it must be a spectacular site to behold! ♣

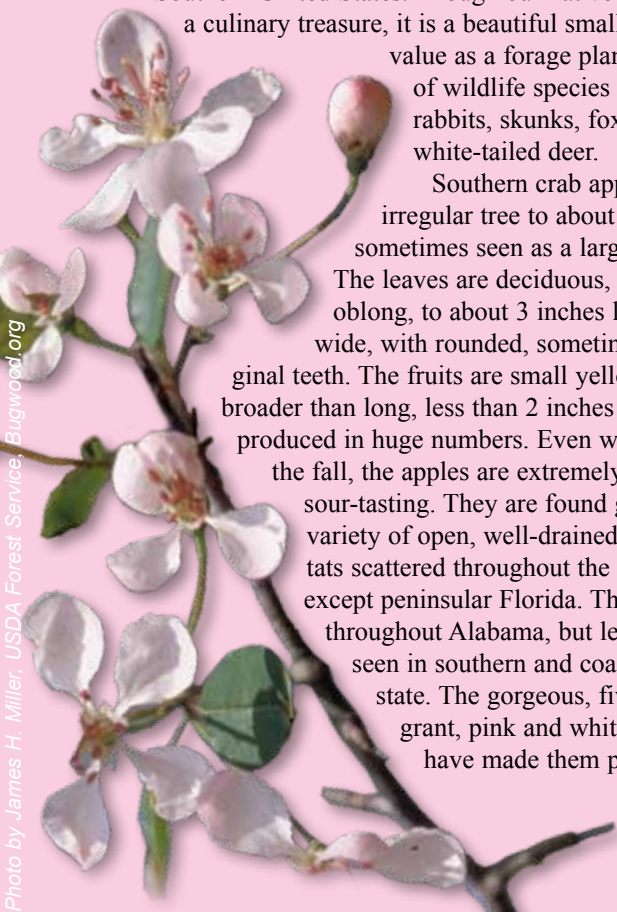


Photo by Fred Nation