A photograph of a dog, likely a Bloodhound, in a forest. The dog is looking up and to the left, with its mouth open and tongue hanging out. In the background, there is a fire burning on a tree trunk, and the sun is shining through the trees, creating a hazy, golden light.

Alabama's TREASURED Forests

An Alabama Forestry Commission Publication

"Blaze"

Alabama Forestry Commission
Arson Investigator

Fall 2009

from the **STATE FORESTER**

Under Section 404 of the Federal Clean Water Act, exemptions are provided for “normal silviculture” that are “part of an established (i.e., on-going)” operation. The term on-going has been generally interpreted to mean a continued forestry use (not a change in use) that can be supported by on-the-ground observations, activities, and other related evidence.

Historically, making these “ongoing determinations” has not been problematic, although there have been exceptions from time to time. Recently however, several controversial cases involving bottomland hardwood and cypress swamps have occurred where a field determination has been made by the U.S. Army Corps of Engineers and/or the U.S. Environmental Protection Agency (EPA), then was subsequently challenged and overturned in court. While the circumstances in each case have been somewhat unique, the outcome identified a need for some general guidance on the subject.

To that end, a formal request was made by the EPA Region 4 Branch Chief for Wetlands, Coastal and Oceans, to the Southern Group of State Foresters (SGSF) Water Resource Committee in the fall of 2008. Specifically, the Committee was asked to consider preparing a general guidance document that would assist a field representative in making an accurate “ongoing call” on bottomland hardwood and cypress swamps. It was asserted that such a document would be especially useful for regulatory representatives that are generally not familiar with forestry operations, and what should or should not be present on such operations as an indicator of silviculture on these forest types.

The Committee agreed to this request, organized a subcommittee to complete the work, and drafted the proposed guidance which was approved by the Southern Group of State Foresters at the summer meeting in 2009. The document was submitted in late June to the EPA Region 4 headquarters in Atlanta.

The information in this document is an attempt to demonstrate that a well managed forest can and will have periods of inactivity. It can be found on pages 21-22 in this issue of the magazine, as well as on our website at www.forestry.alabama.gov/BottomlandHardwoodMessage.aspx?bv=2&s=1. We hope it will be of assistance to landowners, loggers, and others interested in the sustainability of our states’ natural resources.



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That dog will hunt!
Blaze, the AFC's one-year-old bloodhound, is trained and ready to track arsonists. But he's also quite a hit with school children across the state, fulfilling his mission to educate Alabama's citizens about wildfire prevention. (Story on page 15.)

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The publication of a story or article in this magazine does not constitute the Alabama Forestry Commission's endorsement of that particular practice or product, but is an effort to provide the landowners of Alabama with information and technical assistance to make informed decisions about the management practices they apply to their land. The Alabama Forestry Commission is an equal opportunity employer and provider.

Correction: In the Summer 2009 issue of the magazine, we mistakenly credited Joel D. Glover as an employee of the Alabama Wildlife Federation, rather than the Alabama Department of Conservation and Natural Resources. The editor regrets this error and any inconvenience it may have caused.



A Plan for All Seasons

*By Kim Dorman, BASF ProVM Communications Manager
Photography by Tes Randle Jolly*

Ask Danny and “Sizy” Landrum any question about their forestland, and they likely have the answer written down in their files of land management plans. The Landrums meticulously document their timber tactics, from the first plan put down on paper decades ago, to a

Danny and “Sizy” Landrum know they need a plan for their nearly 800 acres of forestland. They also know that the next hurricane could sweep their plans away.

pile of revisions. These tangible records of their property – located near Citronelle, Alabama, which is about 50 miles north of

Mobile – provide concrete metrics and drive them to implement new and challenging goals each year.

Their goals include growing pines for income, managing wildlife habitat, improving aesthetics, and enriching the environmental qualities of

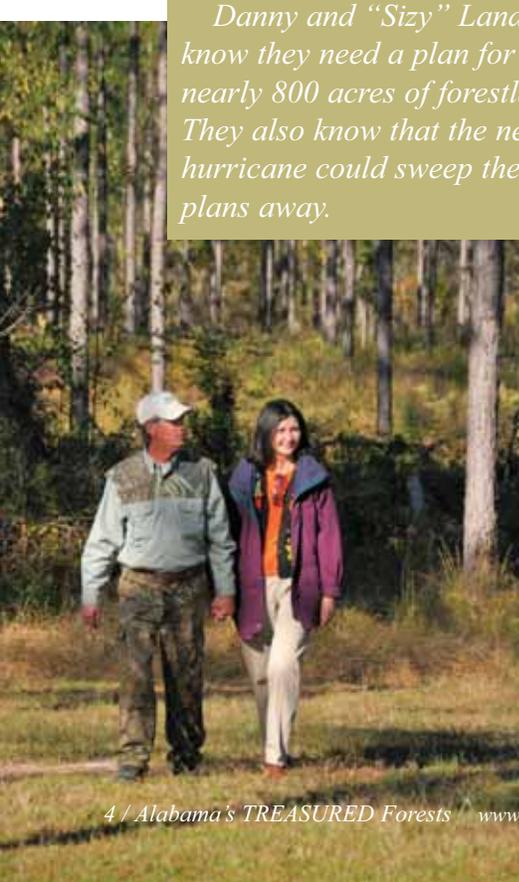
the property. The Landrums admit they often let their wildlife goals dictate more than they should, but a love for the land and wildlife provides motivation to painstakingly care for each tract of their nearly 800 acres of forestland.

But true perfection is elusive – the Landrums know the minute they settle into a plan, something will change. An invasive species will creep through the forest understory, hurricane debris will wreak havoc on plans to conduct a prescribed burn, or a new technology will provide a cheaper or quicker solution for success.

“You can sit down and come up with the best scenario in your mind, but if you don’t put it down on paper, you may fail to follow through,” Danny said. “Even so, managing land is a job that requires flexibility, and the best plans are ones that evolve based on what else is happening in and around the land.”

Objective **1** *Growing Pines for Income*

With 345 acres of planted pine, the Landrums’ main priority is to see a return on their investment. The majority of their land is slash pine, Danny’s preference because it resists insects and tolerates a frequent burn schedule. They choose management practices they believe will grow the best quality trees for that acreage.



Danny and Sizy Landrum enjoy the beauty of their property and its abounding wildlife.

With each hurricane that has blown through the Landrums' property – and there have been several, most recently Rita, Katrina, and Ivan – their management plans have had to change. The storms knocked down mature trees, snapped thick trunks like twigs, and twisted trunks to an inevitable pulpwood future. But Danny and Sisy adjust. They clear the fallen timber and thin tracks as needed to improve the surviving stand. "If you've got timber planted and you've got investments out there, you don't want to see it torn up," Danny said. "Every time a storm blows through you can bet you've lost a percentage of your future income."

Hurricanes are not the only thing taking a bite out of profits. Until 2008, Danny used a program of heavy mechanical site prep, shearing, raking, and burning to manage unwanted vegetation on the land, in hopes of creating a clean and healthy plantation. This was not only costly, but unwanted oak, galberry, sweetgum, and privet returned quickly, requiring additional management.



Landrum and QVM Certified Applicator Donnie Givens, owner of DonChem, Inc., discuss his recent site prep.

Also in 2008, the Landrums purchased several clearcut plots that had grown into a jungle of unwanted hardwoods and brush. Danny had read about using chemical site prep to prepare the land and felt this was an opportunity to test a revised management plan that might give seedlings a stronger start with less hardwood competition.

New to using herbicides for forest management, the Landrums turned to QVM Certified Applicator Donnie Givens, owner of DonChem Inc., to help them understand the role of site prep chemicals on an overgrown clearcut plot, as well as what results they could expect. DonChem's specialty is herbicide recommendations and application. "I've gained a lot of knowledge about herbicide application working with Donnie. He understands the goals we have for this land, and how to manage it properly to achieve those results," Danny said. "He's a valuable information resource and a heck of a nice guy to work with."

Danny carefully documented this new approach for his land management plans. He and DonChem decided to use ground sprayers to apply a tank mix of Chopper® GEN2™ herbicide, MSO, and nitrogen to the land in July 2008. This would knock

down undesirable species, allowing the land to be cleared of unwanted vegetation, which would be less likely to return and overtake new seedlings.

The Landrums burned the 40-acre site to remove any remaining dead vegetation and debris, and planted pine seedlings in March 2009. The primary goal of the herbicide program was to cost effectively remove unwanted vegetation, allowing the new seedlings to thrive without competition for water and nutrients. They chose a planting regimen recommended under the Natural Resources Conservation Service's Wildlife Habitat Incentives Program. To create a pine tract ideal for wildlife habitat, they planted 500 slash pine trees per acre and an additional four acres of wildlife food plots.

Objective 2 *Improving Wildlife Habitat*

On the Landrums' more mature acres, burning was part of the regular management plan. But Danny was burning the property more frequently than most landowners – as often as every two years – to control mid-story vegetation and allow sunlight to reach the forest floor. The fire frequency helped suppress unwanted vegetation but also added risk and liability.

Danny and his son D.J. are both prescribed burn managers, certified by the Alabama Forestry Commission. Through 32 hours of education, they learned fire science and fire behavior, including the impact environmental conditions have on fires. "We had to escalate our fire schedule in order to help the land support the wildlife," Danny explained. "But, long-term, I wanted to adjust our fire schedule back to every fifth year."

In addition to helping the Landrums get clearcut sites ready for planting, DonChem also took special interest in managing the land for wildlife habitat in order to meet all the family's goals.

"As Danny and I talked about his wildlife goals, I encouraged him to consider a mid-rotation release treatment on his more mature acreage," Givens said. "This would help decrease the number of scheduled burns, help valuable forbs and legumes flourish, and provide longer, more consistent vegetation control."

With a goal of reducing the burn schedule and mid-story growth, Danny worked with Givens to apply Chopper GEN2 in the fall of 2008. They used ground rigs to navigate the thick understory and treated both hardwoods and brush. The Landrums followed the treatment with a controlled burn to clean the understory of dead vegetation and debris. Danny hopes to burn these acres less often, but with a more strategic approach. Without the hardwood and brush competition,

(Continued on page 6)

Danny Landrum examines his cogongrass treatment.



the desirable grasses, forbes, and legumes can thrive, close to the ground. “Nothing likes to live in a thicket. I try to keep the ground as open as possible for quail and turkeys,” Danny said.

The Landrums also aim to keep forage food sources for deer at a height of 36 inches or less. “Once vegetation reaches 48 inches or higher, it’s out of the deer’s reach and it’s no longer a food source – even if it is a major food source plant.”

While Landrum’s understory management helps provide high-value food sources for wildlife, they also manage 16 food plots scattered throughout their property totaling nearly 30 acres. A little more than half of the food plots are planted in annuals, and a smaller eight-acre field is planted with perennials. A portion of the annuals include browntop millet and grain sorghum, beneficial for quail and turkey. Once seed heads dry out in the grain sorghum plots, Danny runs over the rows with a Bush Hog® so that the seeds fall on the ground for the birds to eat. “All I have to do is walk outside the house to see the quail enjoying the land,” Sizy said, recalling the whistling sounds of quail around their property during mating season.

Danny cherishes the time he can spend with Sizy, enjoying the land together. “Sizy is my partner in everything. She was with me for two of my best turkey hunts. I call her my good luck charm.”

Objective 3 *Aesthetics*

The Landrums also write aesthetic improvements into their land management plans. Danny and Sizy enjoy the beauty of the land and watching the abounding wildlife on their property – from a showy male turkey performing for hens to an endangered gopher tortoise sunning itself in a perennial food plot.

Generations before, Sizy’s grandparents and great-grandparents lived on a portion of the property when it was primarily used to harvest turpentine. The land was eventually sold, but Sizy’s memories held on. When the opportunity came, the Landrums bought the land back, piece by piece, to create the pine plantation they nurture today.

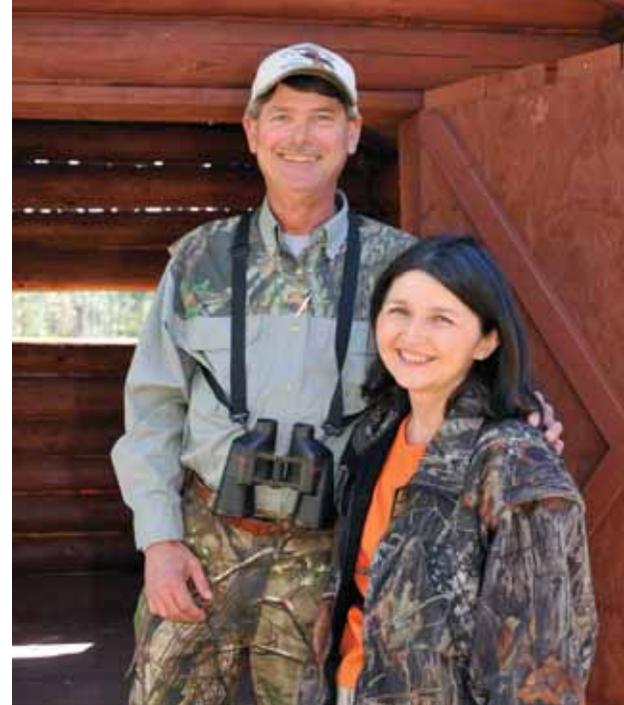
Danny keeps 12 miles of roads and trails groomed and cleared of debris. He even tries to tidy the land around the remnants of the turpentine community. The original well sits near one of the trails in a cleared area, and the chimney from Sizy’s great-grandparents’ house still remains.

The Landrums are quick to clear any weather-related damage and have even used storm remnants to create something beautiful in its place. After the recent hurricanes, Danny started to collect fallen timber to create log cabin-style shooting houses. He built his first shooting house in 2006 from trees on the property knocked down by Hurricane Ivan. Friends and family now hunt from the “Ivan House,” which is bordered by a five-year-old perennial food plot. The shooting house sits on the original home site of Sizy’s great-grandparents.

With three young grandsons eager to be out hunting, Landrum has started construction on a larger “Katrina House.”

Objective 4 *Environmental Management*

Situated in the Escatawpa River basin, the Landrum property has creeks and the Escatawpa River meandering through it. The



Danny and Sizy Landrum enjoy hunting and watching wildlife from their Ivan House.

waterways travel through Mobile County, into the Pascagoula River. Danny is thorough in his efforts to take care of the land and the water resources, from managing streamside zones to simply teaching his grandsons to pick up after themselves.

Their environmental aptitude was put to the test when the Landrums found highly invasive cogongrass on their land. “The thick grass was choking out virtually all understory plants and leaving no food sources for the deer, turkey, and quail,” Danny said.

After consulting with Givens, Danny sprayed 25 acres of cogongrass using Chopper GEN2 and glyphosate mix. He plans to monitor the land closely and retreat any patches of the grass that grow back, but he is confident he can take back the land.

Because of the work that the Landrums and Givens put into managing the forest acreage, they were recognized with a QVM™ Project Habitat™ Award. The award honors outstanding vegetation management programs following the principles and practices of Quality Vegetation Management, such as restoring and improving plant, animal, and human habitats; applying herbicide responsibly; and using the appropriate amount to achieve the desired results.

“It is important for us to write environmental management into our timber plans,” Danny explained. “We make a conscious effort to leave the land in better shape than when we walked onto it, whether we inherited it or purchased it.”

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A Look at Two Certification Standards for Family Forest Owners in Alabama

By Victoria Lockhart and Chris Erwin

Forest certification is a topic of increasing interest among forest landowners today, primarily because landowners are deciding how certification can help market their timber and ecosystem services such as carbon credits. In a nutshell, forest certification is a way for a landowner to obtain independent third-party documentation that their timberland property is managed in such a way that ensures forest sustainability. With all certification standards, as the saying goes, the devil is in the details. How do you define a sustainable forest, and in what ways are management activities documented and recognized in the marketplace?

Most agree that “sustainable” means meeting the needs of the present, without compromising the ability of future generations to meet their own needs. In 1998, at a conference in Montreal, the United Nations set about to develop criteria and indicators by which sustainable forests could be independently verified – now known as the “Montreal Process.” These criteria included:

1. Conservation of biological diversity
2. Maintenance of productive capacity of forest ecosystems
3. Maintenance of forest ecosystem health and vitality
4. Conservation and maintenance of soil and water resources
5. Maintenance of forest contribution to global carbon cycles
6. Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies
7. Legal, institutional, and economic framework for forest conservation and sustainable management

Within each criterion are many indicators that can be measured to demonstrate trends for or against sustainability. From these criteria and indicators, all forest certification programs in the United States were born. Most applicable to the Southeastern U.S. are the Sustainable Forestry Initiative and the American Tree Farm System. However, the Forest Stewardship Council is currently developing a Family Forest Standard as well.

Created in 1995, the Sustainable Forestry Initiative (SFI) is a certification program for private non-industrial and industrial landowners as well as forest product manufacturers. Any organization or agency involved in forest management may be eligible to participate including public forestland agencies, universities, and foundations. There are 154 million acres total certified to the SFI Standard and 2.5 million certified in Alabama. The 33 member companies in Alabama must pay annual dues and also pay for a third-party audit to verify their management practices conform to the SFI standard.

While the American Tree Farm System (ATFS) is the oldest of these programs, being created in 1941, its standard of sustainability is relatively new. In Alabama, there are nearly 2,000 certified Tree Farms totaling 2.5 million acres, roughly 10 percent of the forestland in the state. Nationally, there are over 91,000 certified Tree Farms totaling over 24 million acres. The Tree Farm System is sponsored nationally by the American Forest Foundation in Washington D.C., and in Alabama by the Alabama Forestry Foundation in Montgomery.

The Forest Stewardship Council (FSC) is an international certification organization headquartered in Bonn, Germany, with a U.S. Chapter in Washington D.C. There are approximately 40 million acres certified in the U.S. and no properties certified in Alabama. Currently FSC has nine regional U.S. Standards with Alabama being covered by the Southeast Standard. These regional standards are being combined into one FSC-US standard which is now in a final draft.

Because both standards used by the Tree Farm System and the Forest Stewardship Council were developed on the criteria and indicators of the Montreal Process, there are many similarities between the two. However, a comparison between the American Tree Farm System and the Forest Stewardship Council’s Family Forest Alliance also reflects several differences.

(Continued on page 8)

	American Tree Farm System (ATFS)	Forest Stewardship Council (FSC) Southeastern Standard for Small, Low Intensity Managed Forests (SLIMF)
Certifying Accreditation Body	ANSI-ASQ* National Accreditation Board (ANAB) and Standards Council of Canada (SCC)	FSC International Center, Accreditation Services International
Standard Revision Period	Every five years	Every five years
Number of Standards of Sustainability	9	10
Number of Verifiable Indicators	24	180
Maximum Size Allowed	20,000 acres	2,470 acres
Market Recognition	<ol style="list-style-type: none"> 1. Tree Farm fiber recognized by SFI, Inc. 2. Recognized by the Chicago Climate Exchange for carbon credit trading programs 3. Recognized under Green Globes “green building” rating systems through SFI recognition 	<ol style="list-style-type: none"> 1. No mutual recognition between FSC and SFI 2. Recognized by the Chicago Climate Exchange for carbon credit trading programs 3. Recognized under U.S. Green Building Council’s LEED “green building” rating system
Cost of Certification	Third-party certification provided to landowner free of charge under regional group certification	Landowner must pay for both a certification audit every five years and surveillance audits in the interim
Management Plan	<p>Plan components include:</p> <ol style="list-style-type: none"> 1. title page 2. type of ownership 3. management objectives 4. tract map 5. special sites 6. management recommendations for wood and fiber production, wildlife habitat, environmental quality 	<p>Plan components include:</p> <ol style="list-style-type: none"> 1. summary management plan must be made available to the public 2. objectives 3. property description, environmental limitations, land use and ownership status, profile of adjacent lands 4. silvicultural systems chosen based on ecology of site and forest inventories 5. rationale for rate of annual harvest monitoring 6. environmental assessments 7. plans for protection of rare, threatened and endangered species 8. tract map 9. justification for harvesting techniques and equipment to be used
Special Site Protection	<ol style="list-style-type: none"> 1. Sites include: <ol style="list-style-type: none"> a. historical b. biological c. archaeological d. cultural e. geological sites of interest 2. Landowner notes sites in the management plan and manages in a manner consistent with landowner objectives 	<ol style="list-style-type: none"> 1. Sites include: <ol style="list-style-type: none"> a. significant concentrations of biodiversity b. large landscape level natural forests c. threatened or endangered ecosystems d. areas that meet basic needs of local communities e. areas critical to cultural identity 2. Landowner must consult with stakeholders to ensure sites have been accurately identified and appropriate options for maintenance have been adopted 3. A summary of site assessment is included in the management plan and made available to the public 4. When sites cross ownership boundaries, landowner attempts to coordinate conservation efforts with adjacent landowners

	American Tree Farm System (ATFS)	Forest Stewardship Council (FSC) Southeastern Standard for Small, Low Intensity Managed Forests (SLIMF)
Best Management Practices (BMPs) for Water Quality	Required to follow State BMPs	Required to follow State BMPs
Riparian Zone Management	Landowner must minimize disturbances within riparian zones	Streamside management zones are specifically described in the management plan, included in a map of the forest management area, and designed to protect and/or restore water quality and aquatic and riparian populations and their habitats (including river and stream corridors, steep slopes, fragile soils, wetlands, vernal pools, seeps and springs, lake and pond shorelines, and other hydrologically sensitive areas)
Prescribed Fire	Must follow applicable laws and regulations	Must follow natural disturbance patterns, including its periodicity, intensity, variability, seasonality, and timing
Forest Chemicals	Use as necessary to achieve objectives	Must observe list of FSC-approved pesticides
Clearcuts	<ol style="list-style-type: none"> 1. ATFS does not limit use of appropriate silvicultural techniques 2. Landowners must comply with their management plan 3. All harvest activities must be conducted with sensitivity to other forest values (water quality, regeneration, wildlife habitat, biodiversity, and special sites) 	<ol style="list-style-type: none"> 1. Does not allow conversion of natural forests to plantations 2. Limited to 40 acres with some exceptions allowing up to 80 acres 3. Clearcuts not allowed when trees greater than 100 years old are present 4. Live trees and native vegetation are retained within the harvest unit in a proportion consistent with the characteristic natural disturbance regime 5. A proportion of the overall forest management area shall be managed so as to restore the site to a natural forest cover: <ol style="list-style-type: none"> a. 100 acres or less, at least 10 percent b. 101 to 1,000 acres, at least 15 percent c. 1,001 to 10,000 acres, at least 20 percent

**ANSI-ASQ - American National Standards Institute-American Society for Quality*

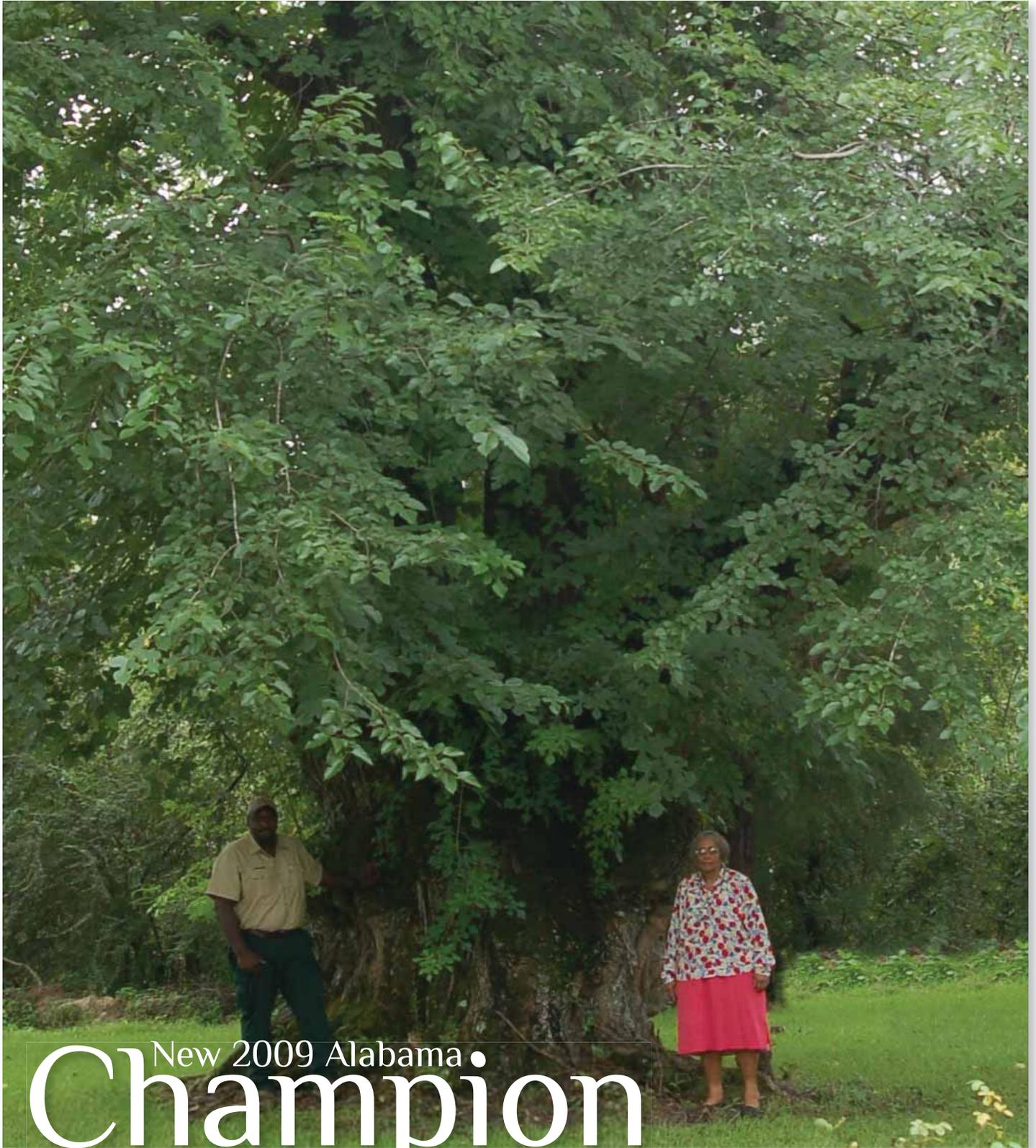
As you can see there are several differences between the two certification systems. Regardless of the system, the concept of a commitment to sustainable forestry is sound, particularly in a global marketplace where customers demand independent verification of sustainable management.

The process of certification involves setting an appointment with an accredited inspector who will review your forest management plan and walk your property to ensure that management activities correlate with the criteria and indicators of the certification system you choose. If you want to learn more about sustainable forestry or certify your forestland, the best starting point would be to contact your county office of the Alabama Forestry Commission or visit the Alabama Board of Registration for Foresters website, www.asbrf.alabama.gov/ for a listing of registered foresters in your area. For more information on the Tree Farm program, contact the Alabama Tree Farm Committee at treefarm@alaforestry.org or call (334) 265-8733. For more information on FSC certification, email info@fscus.org or call (612) 353-4511. ♻️

Victoria Lockhart is the Certification Manager of the American Tree Farm System. Chris Erwin is the Coordinator of the Alabama Tree Farm Committee.

Red Mulberry

Choctaw County, Alabama | Nominator: Lorenzo Johnson | Owner: William J. Scruggs, Sr.



New 2009 Alabama Champion Trees

By Brian Hendricks, Alabama Forestry Commission

Interest in Alabama's Champion Tree program remains strong as evidenced by the fact that 64 nominations from all regions of the state were submitted in 2009. The final tabulations have been completed, and 24 of the 64 trees nominated for Champion Tree designation have been declared new champions!

Of these 24 new champion trees, nine species dethroned the 2008 champions, while 15 filled vacancies for species that did not have a current champion. With the addition of these 15 trees, Alabama now has a total of 152 champions. A list of the 24 new Champion Trees for 2009 is as follows:

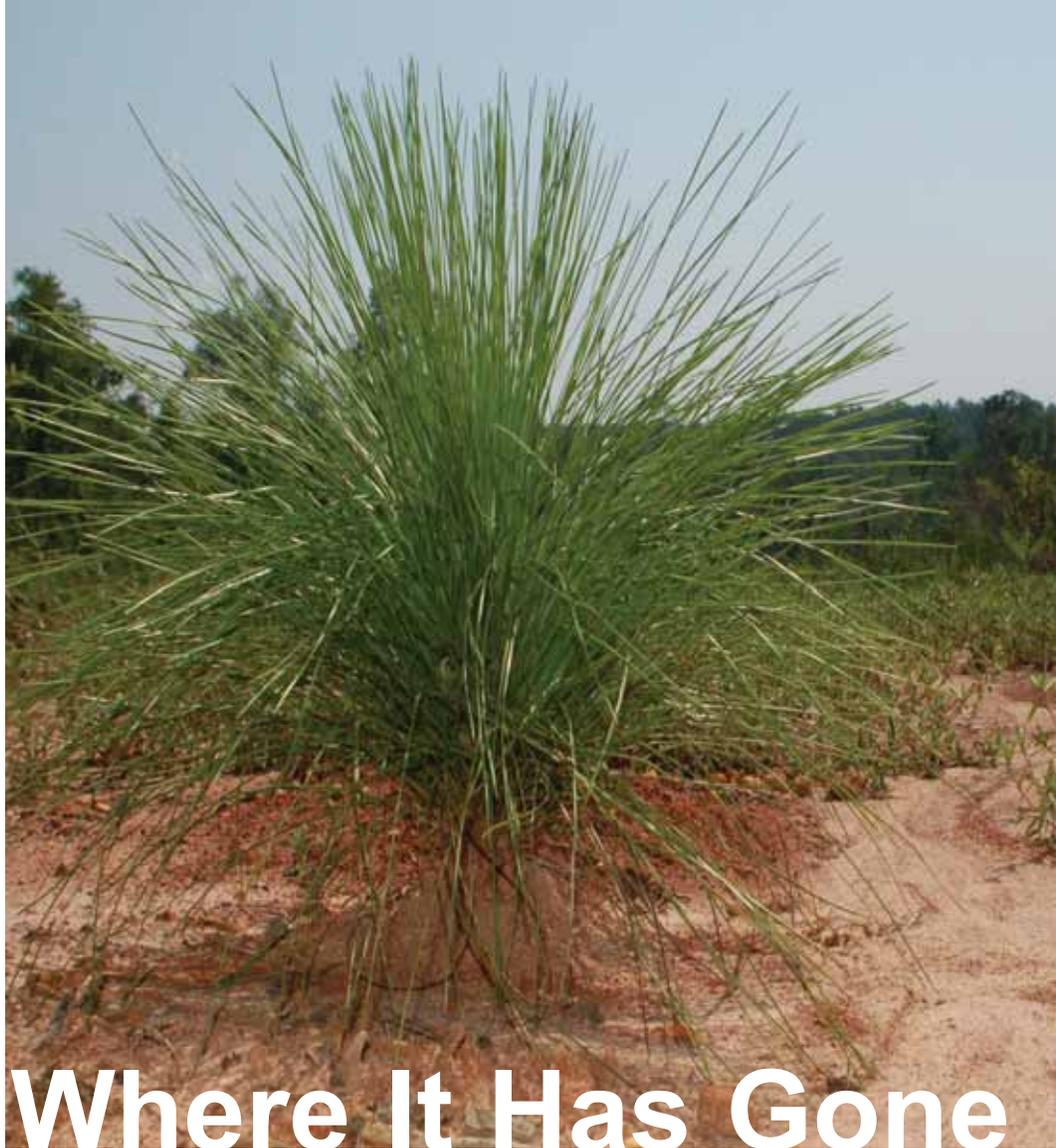
Tree Species	County	Nominator	Owner
American Smoketree	Madison	Brian Bradley	Land Trust of Huntsville & North Alabama
Cedar, Atlantic White	Baldwin	Forest Kibler	Jeanette & Forest Kibler
Cherry, Black	Madison	Doug Chapman	Roger Everett & Joyce Rutland
Chestnut, American	Talladega	Arthur Hitt & Scott Stevens	US Forest Service
Cypress, Pond	Baldwin	Dr. Thomas H. Wilson	AL Dept of Conservation & Natural Resources
Dogwood, Flowering	Cleburne	Glenn Berry	Michael & Holly Tolgo
Fringe-tree	Baldwin	Gena Todia	City of Foley
Hackberry, Common	Marshall	Sue White	John & Sue White
Hawthorn, Littlehip	DeKalb	Jason Shelton	DeSoto State Park
Hickory, Nutmeg	Dallas	Dr. Thomas H. Wilson	James Shand
Locust, Honey	Talladega	John Goff & Travis Ford	Headwaters Investments Corporation
Maple, Red	Morgan	Paul Floyd	City of Decatur
Mulberry, Red	Choctaw	Lorenzo Johnson	William J. Scruggs, Sr.
Oak, Chinkapin	Lawrence	Jack Paul	Tennessee Valley Authority
Oak, Darlington	Hale	Tim Washburne	David & Christie Krystofiak
Oak, Northern Red	Marion	Tony Avery	James Ross Markham, Sr.
Oak, Scarlet	Jackson	Jason Shelton	Joshua K. Shelton
Oak, Scarlet (co-champ)	Dallas	Dr. Thomas H. Wilson	James Shand
Pine, Virginia	DeKalb	Jason Shelton	DeSoto State Park
Serviceberry, Downy	DeKalb	Jason Shelton	DeSoto State Park
Sourwood	Marion	Josh Angel & Tony Avery	James Ross Markham, Sr.
Sweetleaf	Marion	Tony Avery	Marshal Rea, Jimmy Rea, & Cherry Gregg
Sycamore	Autauga	Dana O'Brian	David & Dana O'Brian
Willow, Black	Perry	Dr. Thomas H. Wilson	James Essex

Congratulations to all of the nominators and owners of the new champions! For those unfamiliar with Champion Trees, the purpose of the program is to discover, recognize, and preserve the largest of each tree species in Alabama. Anyone can nominate a tree for "Champion Tree" designation by completing an on-line nomination form; however, an Alabama Forestry Commission (AFC) forester is responsible for collecting the tree's measurements. Once a new champion is identified, both its owner and nominator receive certificates. The nominator is presented with a permanent tree marker by AFC county personnel that is placed in proximity to the base of the tree.

When determining a champion, three of the tree's components are taken into consideration: circumference, height, and crown spread. The formula used to determine the size of a tree is as follows: one point for each inch of circumference, plus one point for each foot of height, plus one point for each four feet of the average crown spread. For a tree to be eligible for the Champion Tree Program, it must be a species that is recognized as native or naturalized in Alabama. A naturalized tree is an "introduced" species that has established itself in the wild, reproducing naturally and spreading.

If you know of a tree that you think might be the largest of its species in the state, you are encouraged to send in a nomination. To complete a form on-line, visit the AFC website at: www.forestry.alabama.gov and click on the "Informational Resources" link. Due to limited AFC resources, a nominator is asked to review the measurements of the current champion to get an idea if his prospective tree has a chance of defeating the current champion's score before sending in a nomination. After all, there are millions of "big" trees in Alabama, but only one CHAMPION for each species. Nominations may be sent in year round. For a tree to be eligible for Champion Tree designation in 2010, the nomination form must be received by June 1, 2010. To learn more about the Champion Tree Program, visit the AFC's website. ♣

Longleaf Pine



Where It Has Gone How to Get It Back

*By Andrew Nix, Forester, Division of Wildlife and Freshwater Fisheries,
Alabama Department of Conservation and Natural Resources*

Longleaf pine ecosystems, among the most species-rich ecosystems outside of the tropics, are estimated to have once covered 60-93 million acres of the Southeastern United States. Longleaf pine occurred on a variety of sites ranging from dry sandhills to wet savannahs. The range of sites occupied or capable of being occupied makes them desired habitat for many popular game and non-game species, as well as a suite of threatened or endangered species, and species of conservation need. Ideal longleaf pine ecosystems are open, park-like forests that are the result of frequent fires. Alteration of the natural fire regime, timber harvesting, conversion to agriculture, and the loss to development

are among the historical causes that have reduced this once grand ecosystem to approximately three percent of its former range.

The early exploitation of longleaf pine ecosystems began with European exploration and settlement. Naval stores and logs/lumber for settlements were some of the first uses of southern pines, including longleaf. With the settlements came the conversion of acreage to agriculture to produce food stocks to support the growing population. Early settlers tended to fence agricultural areas and let their livestock roam free. Free ranging livestock, mainly hogs, also had a detrimental effect on longleaf reproduction.

Naval stores production, which had been underway in some of the colonies since the 1700s, was increased in a destructive manner to make way for the harvesting of southern forests. These patterns of exploitation were mainly confined to the coastal areas and inland waterways, until progress in steam locomotion and power made the vast areas of longleaf forests accessible to logging by the mid-to-late 1800s.

With innovations in the process of papermaking and technological advances in timber harvesting and transport, the pulp and paper industry entered the Southeastern US. The scrappy, poorly stocked stands leftover from the late 1800s and early 1900s, as well as land

being sold for back taxes resulted in many companies purchasing or controlling vast acreages across the Southeast that were harvested for pulpwood and replanted to loblolly pine in the ensuing decades. Industrial landowners and tree improvement programs favored loblolly pine for its ease of planting and perceived superior growth rates.

Other factors affecting longleaf pine were Smokey Bear and the campaign against fire, and a shift to the limited use of dormant season fire, which resulted in substantial acreage once in longleaf pine ecosystems being overtaken by hardwoods and other pines. More recently, a significant loss of acreage was due to the development of residential housing and retail centers. There are still remnants of the longleaf pine ecosystem in Alabama and the Southeast, and plenty of opportunity to restore and enhance these ecosystems.

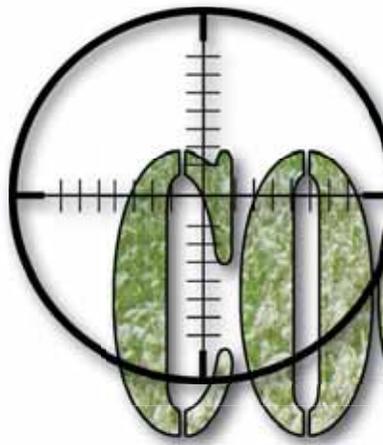
Longleaf pine ecosystems' history of providing goods and services for people has enjoyed resurgence over the past decade. An improved understanding of these ecosystems has created a framework to attempt to recapture the natural heritage they provided. Federal, state, non-government organizations, universities, and private landowners now work together in restoring longleaf pine ecosystems. It is hoped that these partnerships will reverse the downward trend of past years.

The actual process of restoring longleaf pine ecosystems begins with a current assessment of the ecosystem, from moderately degraded to highly degraded, and the site type and qualities. Moderately degraded systems still have longleaf pine present with native understory, whereas highly degraded systems do not have longleaf pine present and the understory is void of native species. In areas where both longleaf pine and native understory are present, the reintroduction of growing season fire and dormant season fire, as well as mechanical and herbicide removal of midstory, can restore the functionality of longleaf pine ecosystems over time. However, forest conditions created over decades will not be undone by one growing season burn!

On areas without longleaf pine but with native understory present, a combination of mechanical harvesting, growing season fire, mechanical and herbicide application, and the planting of container longleaf pine seedlings will begin the process of restoration. In areas with neither longleaf pine nor native understory, often having non-native plants present in the understory, a more intensive treatment is necessary to begin the restoration process. A combination of mechanical harvesting, mechanical site prep, herbicide treatment, planting of container longleaf pine seedlings, and the reintroduction of native understory plant material or seed will begin the restoration process. With all restoration efforts, the need for monitoring ecosystem function and change over time cannot be overemphasized.

It has been said that when the country was founded, a person could go from the Carolinas to Texas and never leave longleaf pine. These once expansive ecosystems deserve the ongoing restoration efforts. 🌲





THE BATTLE ON OUR DOORSTEP: COGONGRASS

By Stephen Pecot, Communications Director, Alabama Cogongrass Control Center

With all the coverage of cogongrass in recent issues of *Alabama's TREASURED Forests*, readers will be excited to know that a multi-year project has begun to tackle the very serious economic and ecological threats of cogongrass on private lands in Alabama. Through the leadership of the Alabama Forestry Commission and the Alabama Cogongrass Task Force, \$6.2 million of funds from the American Recovery and Reinvestment Act (ARRA, otherwise known as the "Stimulus Plan") was secured in the summer of 2009. Larson & McGowin, Inc., a full-featured forestry-consulting firm with headquarters in Mobile, Alabama, was chosen to coordinate the state's efforts. Larson & McGowin created the Alabama Cogongrass Control Center (ACCC) to administer the program. In this article, I will give an overview of the problem, the project's goals, and sources of more information.

First, a little background is in order. Cogongrass [*Imperata cylindrica* (L.) Beuv.] is a perennial grass originating from Asia. It was first introduced into the US through Mobile in the early 1900s as packing material for oranges. The leaves are typically 2-4 feet in length but can be shorter, are about 1 inch wide, and have sharp edges with a whitish midrib that is slightly off-center. After a frost, the leaves brown up but stay erect, unlike most other grasses. The root system is extensive, growing as a dense mat of underground stems called rhizomes. Cogongrass usually grows from a small circular patch to many acres in size and can merge into large infestations. It can grow in open areas and even persist in the shade. It is easily confused with other grasses, but all these characteristics taken as a whole can be used to determine if it is really cogongrass. You can download the cogongrass field guide at www.cogongrass.org/cogongrassid.pdf. You can also contact your natural resources professional to arrange for an expert field determination.

You may wonder why people are so up-in-arms about a grass that you see along many southern roads in the spring, its white seed heads tossed in the wind like a dandelion. Many do not relate a grass with such destructive forces as wildfire, plant pests, and hurricanes. Say the word "kudzu" to any Southerner, and they conjure mental images or stories of covered forests, homesites, and roadways. How could a grass be such a problem?

Cogongrass is considered one of the 10 worst weeds in the world. It is a major problem in over 70 countries, found on every continent except Antarctica. It permanently alters plant and animal communities, including Southern forests. Cogongrass increases fire frequency and intensity, putting homes, animals, and people at serious risk. It requires extensive investment of time, effort, and money to control. It can destroy entire landscapes, creating a 'sea' of cogongrass with no other plants. Domestic food and fiber supplies are impacted through reduction in wildlife food sources as well as killing or injuring valuable crops such as corn, cotton, and trees. Cogongrass is steadily marching through Alabama and into neighboring states, primarily along roads and through logging and farming equipment. It exists on many sites in Alabama, and a large-scale concerted effort must be employed to control it.

At this time, the most effective approach to controlling cogongrass is with either frequent tilling over a year or with repeated chemical applications, sometimes over several years. There are safe herbicides on the market that target particular plant species currently labeled for cogongrass. Many people wonder about other approaches to control such as using manual labor to extract the plant from the soil or incorporating it into the emerging bio-fuels industry. These alternatives are not only extremely labor-intensive and cost-prohibitive, but are also potentially dangerous and can exponentially spread the weed into areas currently devoid of cogongrass.

The ACCC is going to tackle the cogongrass problem head-on in Alabama using several strategies. With input from the Alabama Forestry Commission and the Alabama Cogongrass Task Force's leadership, we have devised a plan to eradicate cogongrass in Alabama on private, non-industrial properties north of US Highway 80, which runs east-west from Columbus, Georgia, to Selma, and on to the Mississippi state line. With this cogongrass eradication zone in place, we will greatly lessen the spread to other Alabama properties and into other states.

In south Alabama, it is a different story. Cogongrass has infested a tremendous amount of acreage and has existed there for decades. Because of this fact — and limited funds — we will attempt to control cogongrass on as many private, non-industrial

(Continued on page 31)

Sniffing Out and Tracking Down Wildland Arsonists

By Craig Hill, Alabama Forestry Commission

Blaze is his name, and arson is his game! The Alabama Forestry Commission is pleased to announce that Blaze the Arson Dog is officially on duty. A one-year-old bloodhound, Blaze will be used to track those persons that commit wildland arson. This is great news for Alabama because over the last three years, arson was responsible for 42 percent of all wildland fires.

According to Craig Hill, Chief of the AFC Law Enforcement Section, "Blaze is a welcomed addition to our investigative team. His ability to sniff out specific scents will enable us to track arson suspects back to their homes. Most wildland arsonists live within two to three miles of where they set fires."

Blaze and his handler have completed a year of intensive training, some of which was provided by the National Police Bloodhound Association and the State of West Virginia. Both the states of Virginia and West Virginia have successfully used bloodhounds for over 20 years to track wildland arson suspects.

Blaze has two primary duties with the Commission: 1) detect and deter wildland arsonists, and 2) wildfire prevention education. According to State Forester Linda Casey, "Blaze is very gentle and loving, so children are just naturally attracted to him. At each of his appearances and programs, materials will be given out which teach wildfire prevention and raise public awareness about wildland arson. But he's also a professional. With a specially trained arson dog on the job, we not only can reduce the occurrence of wildland arson in the state, but also educate future citizens about fire prevention. The AFC is very excited to have Blaze as part of our firefighting team." Because of his tracking ability, he will also be available to aid other law enforcement agencies in locating missing persons.

All initial monies connected to the purchase, food, veterinary care, and training of the dog were donated by four contributors: the Tuscaloosa County Fire Protection Association, District Three Volunteer Fire Fighters' Association, the Poarch Band of Creek Indians, and the Alabama Conservation Enforcement Officers' Association.

The Forestry Commission does welcome continued support and assistance in the ongoing upkeep of Deputy Dog Blaze.

The Alabama Forestry Commission's Law Enforcement Section is comprised of state peace officers that investigate violations of wildland fire laws, timber thefts, and thefts of timber harvesting equipment. Your help is needed to catch those responsible for setting fires.

Anyone with information about a suspicious person, vehicle, or activity seen in the vicinity of a wildfire is encouraged to call the Arson/Timber Crimes Hotline 1-800-222-2927. ☎





VETERAN COMPANY 2420 (CAMP P-60) AT THE FAIRFIELD FIRE TOWER IN WASHINGTON COUNTY, 1934 (ALABAMA FORESTRY COMMISSION)

Protecting Alabama's Forests

The Civilian Conservation Corps Projects in State and Private Forests 1933 – 1942

By Robert G. Pasquill Jr., Forest Archeologist and Historian,
National Forests in Alabama

On March 21, 1933, President Franklin D. Roosevelt addressed Congress and laid out his plans for dealing with unemployment. The president proposed “to create a civilian conservation corps to be used in simple work, not interfering with normal employment, and confining itself to forestry, the prevention of soil erosion, flood control and similar projects.” On March 31, Congress passed the Emergency Conservation Act, creating what was popularly called “the Civilian Conservation Corps,” or simply, the CCC.

The CCC would serve primarily as a labor force for the agencies of the Departments of Interior and Agriculture, and unlike many of the other New Deal programs, funding for CCC projects did not have to be matched by the states. It also provided a labor source for state forestry commissions. Between the proposal on March 21 and the passage of the Act on March 31, the CCC was debated and refined in Washington with two amendments being added to the original language of the bill. The first amendment, proposed by Major R.Y. Stuart, chief of the Forest Service, asked that the bill be amended to allow work on private land. He realized that the majority of public land was in the West and the majority of population in the East. The second amendment was proposed by Oscar De Priest, Illinois (R), the only African-American member of Congress, who proposed that the selection of enrollees be made with no discrimination based on race, color, or creed. (Lacy 1976:29)

Alabama wasted no time. *The Montgomery Advertiser* reported on April 2, 1933, that State Forester Colonel Page S. Bunker had submitted his reforestation plans to Washington. Projects in Alabama could employ an estimated 20,000 men working in the

seven state parks and thirteen state forests. Although the State Commission of Forestry had been established in 1907, very little work had been accomplished due to a lack of funding. It was revitalized in 1923 however, by the provision of legislative funding and the appointment of Colonel Bunker as the state forester. (Burleson 1975:29)

The Montgomery Advertiser reported on April 10 that Alabama had a quota of 5,000 “junior” enrollees. These young men between the ages of 18 and 25 were required to come from families on relief. They had to be citizens of the United States, and had to agree to send a substantial portion of their \$30 monthly allotment back to their families. Although selection was to be made without discrimination, the camps were, for the most part, segregated by color, as they were run by the segregated United States Army. On May 11, 1933, President Roosevelt authorized the inclusion of war veterans into the CCC. (Watkins 1999:162)

The first CCC camps established in Alabama were located in the Alabama National Forest in Lawrence and Winston counties in May of 1933. By the end of June, Colonel Bunker’s office was receiving hundreds of letters each day related to President Roosevelt’s reforestation program. According to an article in the June 22, 1933, edition of *The Florida News*,

most of the letters regarded employment, but many were requests for projects in various parts of the state.

State Forestry Projects

In June 1933, four CCC camps were established for state forestry projects in Alabama. Camp S-56 was established at Townley on June 2 by Company 467. Their work project consisted of building roads and firebreaks over the mountains and fighting forest fires. Company 467 was transferred to Sumter County in May 1934.

Camp S-51 was established at Oxford by Company 468 on June 3. This project consisted primarily of building a road to the top of Cheaha Mountain. In April 1934, the assignment was converted to a state park project.

Camp S-52 was established at Chunchula on June 14 by Company 1485. Their project consisted of construction of truck trails and firebreaks, forest fire suppression and prevention, and fire hazard reduction work. Company 1485 was transferred to Uriah in March 1939.

Camp S-53 was established at Florala on June 15 by Company 1483. They constructed firebreaks, roads, and bridges over 90,000 acres of private land. In November 1934, Company 1483 was transferred to Meridian, Mississippi.

Private Forestry Projects

By the end of June 1933, eight CCC camps were established for private forestry projects. On June 28, 1933, Company 2403 established Camp P-54 at Brewton. They constructed firebreaks, fire observation towers, telephone lines, and truck roads. Camp P-54 was abandoned in July 1934. Camp P-55 was established at Vredenburgh on June 25 by Company 479. They were transferred to Newton, Mississippi, in December 1934.

Company 1432 established Camp P-58 at Clayton on June 23. This was a company of African-American enrollees. They conducted their forestry project on land owned by A.B. Robertson. Most of the work consisted of soil erosion control, and in April 1935, the Soil Conservation Service took over the supervision of the project. In

January 1936, Company 1432 was transferred to Camp SP-3 at Uriah to work on the development of Little River State Park.

On June 22, 1933, Company 465 established Camp P-59 at Northport. After finishing construction of their camp, the work of this African-American company consisted primarily of fighting forest fires and road construction in Tuscaloosa County. They also established a side-camp of about 60 enrollees at Moundville, where they did erosion control and reconstructed several of the earthen mounds in the park. When word was received that the Company was to be transferred, civic organizations in Tuscaloosa County protested. In 19½ months, Company 465 had

built over 40 miles of road and carried out a great deal of fire prevention work in Tuscaloosa County. In spite of the protests, the Company was transferred to Camp SP-7 in November 1934 to work on Cheaha State Park. Company 465 maintained the side-camp at Moundville after they were transferred.

Camp P-61 was established on June 25, 1933, by Company 484 at Bay Minette. As soon as they completed the camp, their work project began across Baldwin County. John H. Guinn arrived at camp during the summer of 1933, spending two weeks in camp “conditioning” (getting into physical shape) before joining the work crews, building access roads for fire trucks. He worked with the civil engineer, laying out the roads, and was soon promoted to assistant leader earning \$36 each month. During fire season, he patrolled all of Baldwin County. He also manned the fire towers, most of them 70-foot wooden towers, but there were also taller steel towers. (Mr. John H. Guinn interview, November 18, 2002)

On October 24, 1934, *The Onlooker*, a weekly newspaper of Baldwin County, reported that there were 45 observation towers on state and privately owned land in Alabama. The state owned 13 steel towers, three towers of pole construction, and one stone tower. Private landowners, in cooperation with the State Commission of Forestry and federal agencies, had built five steel towers, 12 towers of sawed timber, and 11 towers of pole construction. Baldwin County had 15 towers, with several more being considered.

On June 24, 1933, Company 487 established Camp P-62 at Bessemer and began work on a private forestry project. In December 1933, the project was changed to Camp S-62 and they continued to operate as a State Forestry project. In October 1934, this project was transferred to the Department of Interior and

work shifted to the development of Oak Mountain State Park. (1936 CCC District D Annual)

On June 29, 1933, Camp P-63 was established by Company 1415. This African-American company was originally assigned to Chatom, but after protests by local citizens, the camp was established at Jackson where they were welcomed. Company 1415 worked on a private for-

estry project in Clarke County until they were transferred to Morton, Mississippi, in November 1934.

Camp P-73 was established at York on June 2, 1933, by Company 467. The work project consisted of fire prevention on 400,000 acres of privately owned land in Choctaw and Sumter counties, including the Allison Lumber Company. According to an article that appeared in the December 12, 1935, edition of the *Tuscaloosa News*, Colonel E. F. Allison was considered the South’s foremost conservationist. By 1936, Company 467 had constructed 40 miles of truck trails, 40 creosote-piling bridges,

(Continued on page 18)





CAMP P-54 AT BREWTON, 1934

(AUTHOR'S COLLECTION)

(Continued from page 17)

and a steel fire tower. They had run 25 miles of telephone line between fire towers, and had worked nearly 7,000 man-days at the Alabama State Forestry Nursery. In 1937, they built a 120-foot steel fire tower, created a six-acre lake to irrigate the state nursery, and produced and packed 2.5 million seedlings at the nursery. Company 467 also mapped 288,404 acres of land, showing timber quality, as well as houses, fences, roads, churches, and streams. They collected 18 bushels of conifer and one ton of hardwood seeds. Their fire control work increased the awareness of the people in that part of Alabama of the importance of protecting their natural resources. (1938 CCC District D Annual)

In July 1933, State Forester Bunker explained the type of work that the CCC could conduct on privately owned land. As reported by *The Florala News* on July 20, the government was "prepared to do certain work on private lands to put them back into condition for increased and continuous production of timber." Colonel Bunker had received many requests from landowners. Authorized activities included the construction of firebreaks, wood observation towers, truck trails, telephone lines (to connect the fire towers), emergency fire control landing fields, and protective structures such as cabins and tool sheds. The CCC could also reduce fire hazards, control insect epidemics, fight forest fires, and control erosion and floods. Planting trees on private land was not authorized. Landowners were to maintain and continue the work started by the CCC.

In July 1933, two more private forestry projects were begun. On July 17, 1933, Company 2423 established Camp P-57 at Glencoe. This company of African-American World War I veterans began erosion control work on private land in Cherokee, Calhoun, St. Clair, DeKalb and Etowah counties. In March 1934, the people of Gadsden heard that the camp was being moved. The *Gadsden Times* reported on March 13 that the Chamber of Commerce had wired Senators Black and Bankhead as well as Congressman Allgood to stop the move. By April 1934, the work project consisted of soil erosion control work on 5,000 acres by the construction of check dams, control ditches, and tree plantings. Company 2423 was transferred to Corinth, Mississippi, in June 1934, and Company 444 replaced them on the same day to continue the work. Company 444 improved local farms with terraces and check dams, until it was transferred to Tallapoosa County to work on a Soil Conservation Service project.

On July 18, 1933, Camp P-60 was established at Chatom by Company 2420. Their work project consisted of construction of telephone lines, fire breaks, truck trails, bridges, fire towers, dwellings for fire tower watchmen, and fire hazard reduction work. (1934 CCC District G Annual) By 1936, Company 2420 hoped to have all 600,000 acres of Washington County under their protection. They had built three fire tower dwellings, two fire towers, 89 miles of telephone lines, 308 miles of firebreaks, and 229 miles of truck trails, and had completed 339 miles of fire hazard reduction. They spent 10,385 man-days at fire suppression and 2,960 man-days of tower duty. They gathered 1,365 bushels of pinecones for seed collection. When

Washington County was hit with a screwworm plague, the enrollees built 500 flytraps and burned over 2,000 carcasses of cattle. (1936 CCC District G Annual) Camp P-60 was abandoned around March 1938.

On July 15, 1935, Camp P-75 was established at Chapman by Company 4434. By January 1936, this African-American company had a work project scattered over 1,157 square miles, consisting of construction of roads, bridges, lookout towers, cabins, latrines, fences, and telephone lines. The project also included seed collection, road maintenance, and fire hazard reduction. By 1938, the work project encompassed 1,078 square miles, with approximately half of this area being property of the W.T. Smith Lumber Company. The enrollees constructed truck trails, telephone lines, and lookout towers. Camp P-75 was abandoned on December 1, 1939, and Company 4434 transferred to Brewton to establish Camp P-78 to work on private forestlands in Escambia County through March 1942.

On September 20, 1938, Camp P-76 was established at Vredenburgh by Company 4435. The work project of this African-American company was private forestry projects, most likely in Monroe and Wilcox counties. This camp project was approved through the last work period of the CCC, which ended on June 30, 1942.

On May 1, 1939, Company 1485 established Camp P-77 at Uriah at the location of the old Camp SP-3. This work project was private forestry. Bruce Mantel enrolled in the CCC between his junior and senior years of high school in May of 1941, when CCC regulations were changed to allow summer enrollment for students. Prior to this, the enrollment period was for six months. He worked on soil erosion projects on private land. (Mr. Bruce Mantel interview, November 18, 2003)



COMPANY 1483, CAMP S-53 WORK CREW, 1934

(AUTHOR'S COLLECTION)

James Mills, “looking for adventure,” spent a month or so at Camp P-77 working on a road surveying crew. He was soon promoted to leader, earning \$45 each month, and ran the company canteen in camp. After finding the work “too confining,” he returned to the survey crew. (Mr. James Mills interview, October 28, 2003)

Company 1485 was disbanded in July 1941, and Company 3477, an African-American company that had been working on the Talladega National Forest since 1935, arrived in the camp on July 11, 1941. On November 16, 1941, Company 3477 was transferred to Camp SCS-14 at Dothan.

On July 2, 1940, Camp P-79 was established at Robertsdale to assist in the fire protection of the forested lands in Baldwin County. The county had been divided into four districts, according to a March 7, 1940, article in *The Onlooker*, and “Forest Riders” patrolled the forests, protecting several thousand acres. Landowners were charged six cents per acre for this protection. The CCC camp would help with the additional fire towers being considered. Camp P-79 was approved through March 1942.

Camp P-80 was established at Dadeville on July 6, 1940, by Company 5488. The enrollees worked on reforestation and fire protection on private land in Tallapoosa County. Camp P-80 was abandoned around September 30, 1941.

On August 8, 1940, Company 3490 established Camp P-81 at Bessemer. This work project on privately owned lands progressed satisfactorily, according to inspection reports. But by September 1941, it was difficult maintaining full company strength of over 200 men with the improved economy and better job opportunities. National Defense Training had become almost as important as the project work. Following the attack on Pearl Harbor and the United States’ entry into World War II, it was even more difficult to maintain full companies. In April 1942, just before the camp was abandoned, Company 3490 had only 86 men. They maintained a work project area within a 25-mile radius from camp, with five fire towers completed and another four to be built; 47 miles of telephone line completed and another 37 under construction; eight miles of truck trails completed with three miles under construction and another 30 miles planned.

A Great and Lasting Good

When the Civilian Conservation Corps came to an end on July 1, 1942, due to Congress refusing to fund the program, a great deal of work had been accomplished in a little over nine years. On July 16, 1942, *The Moulton Advertiser* reported on the “Great and Lasting Good” of the CCC, listing the work done in Alabama. The article did not break out their achievements by project, so miles of roads and firebreaks, and fire towers constructed, for example, are all combined whether they were built on national forests, state land, or privately owned land. The article did however report that due to the CCC’s improvements in fire protection, it was possible for the State Division of Forestry to improve fire control on thousands of acres of private timberland. On January 1, 1942, over 9.5 million acres of state and private forestlands in Alabama were under protection.



COMPANY 1485 (CAMP S-52 AT CHUNCHULA) BUILDING A BRIDGE IN 1934

(AUTHOR'S COLLECTION)

By 1943, Alabama had over 18 million acres of forested land, with over 9 million acres under organized protection of the State Division of Forestry. The ultimate goal of this division was to place all state and privately owned acres under protection. The State of Alabama was producing a tree crop estimated at \$150 million annually. The major focus of the Division of Forestry was the protection of the forested lands from uncontrolled forest fires. (Alabama Department of Conservation 1944:7-11) The work of the Civilian Conservation Corps helped the Alabama Department of Conservation reach this goal. ♣

Editor's Note: To learn more about the history and legacy of the CCC, read *The Civilian Conservation Corps in Alabama, 1933-1942, A Great and Lasting Good* by Robert G. Pasquill, Jr. This book is available through The University of Alabama Press.

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HARDWOOD CORNER

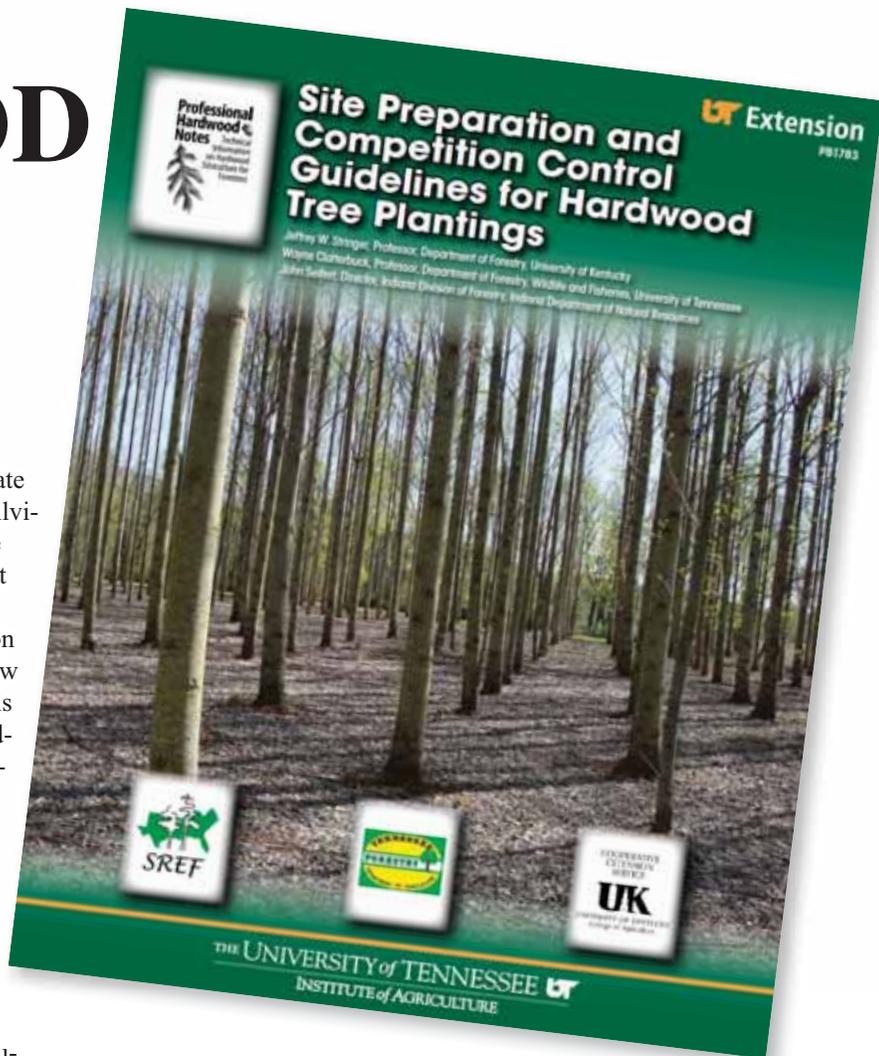
By Jim Jeter, Hardwood Specialist,
Alabama Forestry Commission

In an effort to bring you the latest and most up-to-date information dealing with all aspects of hardwood silviculture, I want to highlight a publication sent to me from Dr. Wayne Clatterbuck, Professor, Department of Forestry, Wildlife and Fisheries, the University of Tennessee. I have been pestering him for this information for some time now. This is a great publication and I know he is proud to be a part of it, as well as getting me off his back. Dr. Clatterbuck has been very instrumental in hardwood silviculture ever since I have known him. He studied under one of the premier hardwood silviculturists, Dr. John Hodges, at Mississippi State several years ago.

The publication is titled “Site Preparation and Competition Control Guidelines for Hardwood Tree Plantings.” It is located on the Alabama Forestry Commission website at www.forestry.alabama.gov. [Select the “Market & Informational Resources” tab on the left, scroll to the bottom, then click Informational Resources; Publications; Forest Management.] This document is 35 pages in length and covers the following topics:

- Successful Tree Plantings
- Factors Affecting Planting Success
- Types and Sources of Competition
- Seedling Quality and Planting Technique
- Planting Density and Design
- Animal Predation of Hardwood Seedlings
- Hardwood Specific Herbicides
- Hardwood-Compatible Groundcovers and Use of Pre-emergent Herbicides
- Site Preparation and Planting Guidelines
- Prescriptions:
 - a. Fields Currently in Row Crops
 - b. Fallow Crop Fields Containing Herbaceous Weeds
 - c. Crop Field – Multiple Years Fallow Containing Persistent Woody Species
 - d. Pasture (primarily fescue dominated)
 - e. Timber Harvesting Roads, Trails, and Landings
- Post-Planting Maintenance – Second and Third Year
- Groundcovers
- Herbicides

This publication is the newest in the Professional Hardwood Notes series funded through a training grant with the Tennessee Division of Forestry, and is a cooperative venture between Extension forestry faculty at the University



of Kentucky and the University of Tennessee. Each publication has been peer reviewed and is intended for professionals and advanced landowners.

Publications in the series to-date are the following:

- Site Preparation and Competition Control Guidelines for Hardwood Tree Planting (PB1783)
- Technical Guide to Crop Tree Release in Hardwood Forest (PB1774)
- Managing Oak Decline (SP675)
- Oak Shelterwood: A Technique to Improve Oak Regeneration (SP676)
- Hardwood Plantations as an Investment (SP677)
- Forest Management Strategies to Minimize the Impact of Gypsy Moth (SP678)
- Two-Age System and Deferment Harvests (SP679)
- Treatments for Improving Degraded Hardwood Stands (SP680)

These publications can be found online at:
<http://utextension.tennessee.edu/publications/forestry/default.asp>.

If you are interested in hardwood silviculture, please visit this site and read these publications. They will save you a lot of heartache and money. ☺

ONGOING SILVICULTURAL GUIDELINES FOR BOTTOMLAND HARDWOOD AND CYPRESS SWAMPS

Prepared by the Southern Group of State Foresters

Silviculture is defined by the Society of American Foresters as “the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.” This longstanding definition provided by the professional forestry society contains some key principles: establishment of trees (by either natural or artificial means), management of their health and quality to meet landowner objectives, and sustainability or continuity of the forest condition over time.

Actions necessary to establish and manage forests on a sustainable basis are necessarily as diverse as the species and forest types being managed. Individual species vary widely in such areas as light, moisture, and soil conditions necessary for establishment and growth. Practices such as prescribed burning, and harvesting methods such as selection, seed tree, or clear cutting, are more suitable for some species than others. Even with this diversity, however, there are certain silviculture principles that apply, and can be identified for specific forest types. Evidence of these principles being applied provides observable indicators of ongoing silviculture.

Bottomland hardwood and cypress swamps are normally managed as “natural forests” and are typically established by natural seeding of trees or coppice (stump sprouting). This may include long-term, low intensity management of natural regeneration with minimal or no intermediate treatments. These forests can be found in a variety of physiographic areas, are characteristically high in tree species richness, and may include a component of Southern pine. In such forests, tree spacing and stand density is not necessarily optimized for growth, and size and age-classes may vary widely among species and forest type. Management activities between the establishment of the forest and the eventual harvest may be minimal, and timber harvesting occurs less frequently and unpredictably, often driven more by markets, hydrologic conditions, and landowner objectives than by a planned harvest age or “rotation,” as in the case of typical pine management.

Prescribed burning is not common, as fire can damage or kill species common to these forest types. However, timber stand improvement activities such as thinning and control of invasive or undesired species are sometimes employed. Ongoing silviculture for bottomland hardwood and cypress swamps can often include extended periods where harvests do not occur, and where natural regeneration may be sparse and somewhat delayed. The delay comes from the necessity for these sites to become dry enough for natural seeds to germinate, and for coppicing to occur. Depending on weather and hydrology, the timing of this “dry down” condition may or may not be immediately coincident with a given growing season. Consequently, managers may supplement natural regeneration by artificially establishing seedlings if natural processes do not provide sufficient stocking and vigor of desired species within their desired time frame. Reforestation by artificial methods may involve some level of minimal site preparation and competition control to ensure adequate survival and growth of out-planted seedlings.

Relative to management of other forest types, bottomland hardwood and cypress swamps are largely “left alone” to grow and develop naturally over long periods of time. Consequently, periods of non-harvesting that may result in an “old growth” stand or a “cut-over” non-planted site do in fact represent a continuing silviculture use, assuming that future plans include commercial harvests at some point followed by reforestation as appropriate.

Though specific landowner objectives can sometimes be difficult to ascertain, there are usually some indicators of ongoing silviculture in bottomland hardwood

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SILVICULTURAL GUIDELINES

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and cypress swamps. Such indicators may be identified in a forest management plan (not necessarily a written plan) that addresses elements of silviculture such as timber harvesting and reforestation. An example would be a Forest Stewardship Plan. Other indicators include, but are not limited to, the following:

1. The property is occupied by a predominance of bottomland hardwood and/or cypress trees (except for recently harvested parcels).
2. The landowner is engaged in some type of forest management activity(s) such as boundary maintenance; firebreak construction and maintenance; invasive plant, insect, or disease control; and/or tree stand improvement (TSI).
3. The forest management plan includes timber harvesting and reforestation (either by natural or artificial means), and is being implemented.
4. The forest in question is enrolled in a third party certification program, i.e. Tree Farm, Forest Stewardship Council, Sustainable Forestry Initiative, etc., or is enrolled in agricultural-use tax status.
5. Where harvesting has recently occurred, the tree stumps are left in place (to provide coppice sprouts).
6. Intensive mechanical site preparation such as shearing and root raking have not been employed in the reforestation effort – except on sites where afforestation or restoration of bottomland hardwood or cypress swamps is being conducted.
7. Low ground-pressure equipment or mat logging techniques have been used on especially wet sites to minimize ground disturbance and soil compaction, and to facilitate natural regeneration.
 - Mat logging should incorporate acceptable techniques that maximize the facilitation of natural regeneration.
 - Skid trails should be minimized and follow applicable state-approved BMPs for logging operations.
8. Evidence of prior management activities, such as stumps from earlier harvests, or aerial photos indicating past activity and/or other such records of past tree establishment, cultivation, or utilization.
9. Forest roads serving the forest management purposes should be constructed in accordance with state-approved road BMPs, road BMPs listed in Section 404 of the Clean Water Act (CWA), and be consistent with the practice and purpose of forestry.
 - Forest roads are typically narrow, low-cost, and minimally spaced as to be practical and economically feasible.

Prior to an intended change in use, some practices may appear similar to those that are part of an ongoing silviculture activity. Indicators of such change in use or a non-silviculture use for bottomland hardwood and cypress swamps may include, but are not limited to the following:

1. The presence of intensive mechanical site preparation such as shearing, root raking, windrowing debris, or “stumping” of the site.
2. Road construction that is not consistent with the practice and purpose of forestry and that is not in compliance with silviculture BMPs for forest roads (i.e., road placement, road construction materials and features, or utility of roads with respect to customary forestry operations).
 - Roads are wider than necessary for transport of typical forest products during the logging process, or for access for eventual management activities.
 - Road spacing, placement and construction standards, and cost cannot be supported by harvest or other forest management revenues.
3. The presence of surveyed lot lines, utility easements, or similar indicators of planned development activities.
4. Lack of a forest management plan by the landowner (i.e., no written or stated intention of future timber harvesting and/or reforestation.)
5. Recently dug drainage ditches or old drainage ditches that have been recently maintained (this does not include typical roadside ditches associated with forest road construction or maintenance).

While all of the above indicators provide information about the nature, purpose, and future use of a bottomland hardwood or cypress swamp, it is not necessary for all of the indicators to be present to make an ongoing silviculture determination. Likewise, under special or unique circumstances, the indicators provided here may not reflect the actual intent of the landowner to carry-out ongoing silviculture or initiate a change in use. However, the indicators should generally provide for a reasonable “weight of the evidence” approach to making consistent, repeatable decisions in the field.

In addition, the indicators presented here are not intended to supersede or replace regulatory authority or exemptions such as those associated with site preparation and minor drainage, but rather to assist in making field level distinctions between ongoing silviculture for bottomland hardwood and cypress swamps, and other land uses that may have similar operational aspects. The ultimate determination of ongoing silviculture should be based on these indicators, but should also account for other relevant information as appropriate.

Roads vs. Skid Trails

The issue of roads versus skid trails emerged from discussions about mat logging operations in bottomland hardwood and cypress swamps, and the applicability of the “federal road BMPs” to log-mat skid trails. In that regard, it seems clear that “federal road BMPs” were intended specifically for roads and not skid trails, and especially not for log-mat skid trails, where BMPs are functionally inapplicable and physically impossible to construct. To that end, the following observations are offered:

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Can Firewood Be Harmful To Our Forests?

By Dana McReynolds, Forest Health Coordinator, Alabama Forestry Commission

Hot and humid days of summer are changing into cool and windy ones of autumn, making popular recreational activities such as water sports and picnics transition into wild game hunting and camping. Usually associated with these fall activities is a familiar custom: sitting around a warm campfire, roasting meals, and laughing with friends. This campfire social seems peaceful and innocent enough, but the firewood that fuels these fires can be detrimental to Alabama's forests. Besides the obvious potential of wildfires, something more devastating and long-lasting can spread into our native environment. Firewood that is transported into the state from other locations can possibly harbor non-native, invasive forest pests.

To fully grasp the possible effects of importing firewood and other untreated wood material into the state, it is important to understand the pests associated with these wood products. Several non-native insects and disease pathogens can survive for an extended time and for long distances in firewood. Insects in this group that are currently a threat to our southern forests are the Asian longhorned beetle, emerald ash borer, *Sirex* wood wasp, gypsy moth, and redbay ambrosia beetle. Most of these invasive insects are presently established in the northeast United States and are gradually moving south.

Remember chestnut blight? Well, there are other perilous disease pathogens wreaking havoc on our native forests. Diseases such as beech bark and sudden oak death are present in other areas of the United States and can easily be transported into Alabama's forest ecosystem through firewood and other untreated wood products. To quantify the devastation caused by these pests, each one has its own unique way of inhabiting the wood and spreading into a non-native environment.

1. **Asian longhorned beetle** (*Anoplophora glabripennis*) – Discovered in 1996 on several hardwood species in Brooklyn, New York, this insect was believed to be introduced into the United States from wood packing



Asian Longhorned Beetle

material imported from Asia. To date, this beetle has infested areas in New York, New Jersey, and Massachusetts. While a separate introduction was discovered in 1998 near Chicago, successful eradication efforts in Illinois have contained and virtually eliminated the infestations in that state.

The Asian longhorned beetle is shiny black with small white markings, 1 to 1¼ inches in length with long distinguishable antennae. The larvae do most of the damage by feeding into the tree's heartwood, forming galleries in the trunk and branches. In severe cases, this girdling activity will kill the host tree. This beetle mainly attacks maple species such as Norway, sugar, silver, and red, but will also attack other tree species such as boxelder, horsechestnut, buckeye, elm, birch, willow, London plane, ash, and poplar. The larvae can hide deep in the wood where they pupate increasing the potential of unknowingly transporting infested firewood from these states to other locations.

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Emerald Ash Borer

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- 2. Emerald ash borer (*Agrilus planipennis*)** – Discovered in 2002 near Detroit, Michigan, this insect is suspected to have arrived on imported solid wood packing material from Asia. Following the initial attack on its host tree in Michigan, the emerald ash borer has spread into Ohio, Indiana, Illinois, Maryland, Pennsylvania, West Virginia, Wisconsin, Missouri, Virginia, Minnesota, and New York by 2009, killing over 10 million ash trees. The emerald ash borer is a small, metallic-green beetle approximately ½ inch long. The adult beetle generally leaves a D-shaped exit hole in the bark as it emerges in the spring. The larvae, however, do most of the damage by feeding in the inner bark of ash trees, causing the vascular system of these infested trees to be disrupted. Eventually, this disruption kills the host tree. Ash species are the only known host. No affirmative eradication method is currently successful. Larvae can exist in the inner bark of cut firewood from ash trees, making transportation and introduction of this invasive pest into another location quite simple.
- 3. Sirex wood wasp (*Sirex noctilio*)** – This wood wasp species was discovered in a routine trap survey in Oswego County, New York, in 2005. Not known to have spread extensively, the insect has reported infestations in New York and Indiana. Also believed to have been introduced into the United States from solid wood packing material, the *Sirex* wood wasp originated from a wide area that includes Europe, Asia, and North Africa.

Sirex Wood Wasp



A rather large wood-boring wasp, the *Sirex noctilio* is 1 to 1½ inches long, with a metallic blue body and some black and orange areas on the abdomen and legs. The appearance of the adult male is slightly different from the adult female, but the general color scheme for both is basically the same. Both the adult insect and the larvae cause damage to the host tree. The adult female wasp bores into a pine tree and vectors a toxic fungus, *Amylostereum areolatum*. This fungus assists the larvae in feeding by converting the wood cellulose into a more easily digestible form. The fungus spreads into the wood causing the host tree to desiccate and eventually die. The larvae feed and exist in the sapwood of pines, creating the potential for unknowingly transporting infested firewood to other locations. Several pine species known to be potential hosts include Monterey, loblolly, slash, shortleaf, Virginia, Jack, lodgepole, ponderosa, and Jeffrey pines.



Gypsy Moth

- 4. Gypsy moth (*Lymantria dispar*)** – The gypsy moth was intentionally introduced from Europe into the United States near Boston, Massachusetts, in 1869 by a scientist trying to breed this insect for silk production. Approximately 10 years later, outbreaks of gypsy moth attacks were noticed in many areas of Massachusetts. Since that time, isolated infestations have continued to spread throughout New England. Some populations have disappeared without intervention, due to a variety of natural enemies. A second introduction of gypsy moth – an Asian species – was also found in the New England states. Overall, the gypsy moth has attacked host trees in the eastern states from Maine, west to Wisconsin, and south to North Carolina. Quite different in appearance, the male gypsy moth is brown in color while the female is white. The female European gypsy moths are flightless. Both adult moths, however, can attach themselves onto firewood, vehicles, or camping equipment and unknowingly be transported to other locations. The larvae do most of the damage by defoliating leaves of the host tree. With hardwood trees, one or two consecutive years of defoliation usually do not kill the tree, but repeated years of defoliation can. The main hosts are hardwoods such as oaks and aspens, but the gypsy moth will also attack other tree species such as apple, alder, basswood, birch, poplar, willow, hawthorn, hemlock, tamarack, pine, spruce, and witch-hazel.



Redbay Ambrosia Beetle

5. Redbay ambrosia beetle (*Xyleborus glabratus*) – The redbay ambrosia beetle was first discovered in a survey trap in the southern part of the United States in 2002 at Port Wentworth, Georgia. As with many others, this insect was believed to have been introduced on untreated wood-packing material from Asia. Since this time, the redbay ambrosia beetle has spread into other areas of Georgia, South Carolina, and Florida. In 2009, a new introduction was discovered in Mississippi very close in proximity to Mobile County in Alabama.

As with most ambrosia beetles, the redbay ambrosia beetle is small (approximately 1/16 inch long), elongate, and black in color. When it bores into a host tree, the beetle vectors an associated fungus (*Raffaelea lauricola*) that aids in the feeding process of the adult beetle and larvae. Eventually, the fungus “clogs” the vascular system of the host tree, killing it within a few weeks. The redbay ambrosia beetle is known to initially attack redbay and sassafras trees, but this insect will also infest other trees in the Laurel family such as swampbay, pondberry, pondspice, camphor, and avocado. Because both the adult beetle and larvae inhabit the inner areas of the tree, unintentional transportation of this pest by firewood is very possible.

6. Pathogens including sudden oak death and beech bark disease – As with invasive, non-native insects, pathogens are usually accidentally introduced into the United States on untreated wood products. Most of these forest pathogens are originally from Asia, although several are from Europe. Pathogens such as the one associated with sudden oak death disease spread from one host tree to the next either by root graft or translocation in the soil. Others are associated with a complex such as beech bark disease where there is a connection with a pathogen and an insect. If infected firewood or other untreated wood material is transported to another location from a quarantined area, introduction and spread of that particular pathogen can be inevitable.

Do Not Move Firewood

Several regions in the country are collaboratively campaigning to halt the interstate movement of firewood and other unprocessed wood material. State agencies, private groups, as well as federal government representatives are emphasizing the statement, “Do not move firewood from one location to the next.” Public information and awareness about the possible effects of using non-local firewood can aid in the prevention and spread of

these invasive forest pests. In some quarantined states, the Department of Agriculture and Consumer Services in association with the Animal and Plant Health Inspection Service (APHIS) are working diligently to submit a proposal to regulate the movement of such wood products. Flyers are being placed at state parks, national forests, and other natural areas to encourage campers to follow steps such as:

- When camping at state parks and national forests, purchase and use local, aged (dry) firewood.
- Purchase firewood within 50 miles of your destination.
- Many parks and forests sell firewood right outside the entrance.
- Local stores may also provide firewood products.
- Use firewood in its entirety during your camping vacation.
- Do not leave any unused firewood on site or transport it to another destination.
- If any firewood is left, give it to park or forest ranger, or donate it to a nearby camper.

Following a few simple rules can keep the serenity and peacefulness of camping without potentially harming Alabama’s native ecosystem. “Do Not Move Firewood” is a great catch phrase that can alert and inform all outdoor enthusiasts of the importance of preventing infested firewood from becoming detrimental to our forests. 🌲

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From the Outside Looking In... A Memorable Lesson at Summer Camp!

*By Angela R. Green
Communications Specialist, Pioneer Electric Cooperative, Inc.*

It all started fifteen years ago as a simple day camp for local students, but now the annual Natural Resources Youth Camp is one of the most highly anticipated events of the summer in Butler County.

Thirty boys and girls from all over the county are nominated by their schools and selected to spend three days and two nights at the camp that's held free of charge at the Mussel Creek Hunting Club, a rustic cabin on private property in north Butler County. The camp is a mix of indoor and outdoor activities where the students learn everything about the forest environment and how it relates to Alabama's economy, as well as how it relates to our everyday lives.

Paul Hudgins, Butler County Work Unit Manager/Forester with the Alabama Forestry Commission and Chairperson for the Forestry Planning Committee, has been a part of the program since the beginning. He said that not only has the camp grown, but the involvement from the community has spread. "The Butler County Forestry Planning Committee, in partnership with more than 20 individuals and companies, fund and organize this camp every summer," according to

Hudgins. "Each year is different, but the course stays the same. It gets better every year," he added.

For the past six years, Pioneer Electric Cooperative has played a small role in the day's events, providing demonstrations on power line safety. As a direct result of that involvement, Pioneer's Vice President of Engineering and Operations, Jason Settle, is on the planning committee and takes part in the actual camp. As the Communications Specialist for Pioneer Electric, I got a chance to go along on this journey (for part of the way) to cover what the camp was all about.

From the moment I arrived at the camp on Day Two, I was welcomed by the staff – not to mention campers – that wanted to make sure I got the full experience of spending the entire time there! One of the first campers I met was 12-year-old Paige Campbell who said even though she's used to the outdoors, this camp is still a new experience. "I really like the hands-on learning, having someone



show me instead of reading about all of these things was easier for me. It was worth being away from my phone and computer this summer,” she said.

The group had already spent the previous day learning field exercises that included a smoke trailer demonstration, put on by the Greenville Fire Department, and a power line demonstration by Pioneer Electric’s Phillip Baker. The campers also took part in lessons that taught trapping, tree identification, Indian artifacts, water safety, and hunting ethics . . . and that was only the first day!

The highlight of Day Two (I was told), was a showing of live creatures that most Alabamians should be familiar with: salamanders, snakes, and frogs. This part of the day was called “A Cooperative Environment,” put on by Jimmy and Sierra Stiles from PowerSouth. The duo kept the crowd captivated with their presentation, educating the campers on how to identify poisonous details before they let the campers handle the live critters! Pine snakes, king snakes, salamanders, and tree frogs were just a few of the day’s visitors. I certainly didn’t expect to become a part of that demonstration! [Check out picture at right]

The rest of the day was spent in the creek with a water quality activity and some simple play time. For R. L. Austin Elementary student Wallonzo Whipple, swimming in the creek was the highlight of his time at the camp. “It was crazy! The water was dirty and we saw fish right there with us,” he said.

Later on, the campers prepped for lessons on firearms handling and safety to get them ready for the next day of shooting skeet, black powder, and 22s, as well as archery.



I was only supposed to visit the camp for a couple of hours to write a simple story on Pioneer’s involvement, but it was too late . . . I was hooked and had to come back for the final day. Besides, the kids (and staff) had challenged me to a day of competition – never

mind the fact that I had never shot a gun before. That day, I must say I was impressed with the sportsmanship of these campers. For many of the students, it was their first time shooting or pulling a bow also. Greenville Middle School 7th grader Talia Lewis said that’s definitely the case with her, but she was excited to learn. In her own words she said, “My mind is on the fact that today is our last day here.”

Tommy Atkins is retired from the Department of Conservation, but still dedicates his time to the camp every year, teaching kids how to shoot black powder guns. He says the time he puts in is worth the effort, “I would rather children get experience in an environment like this, instead of experimenting on their own after finding a gun in their homes.” He also added, “I’ve seen kids have so little self-confidence when they first come to these camps, but once they get involved in the activities, their faces come to life.” Atkins said he plans on taking part in the camp as long as he’s physically able.

The camp has proven to do exactly what organizers set out to accomplish. Hudgins said, “So many kids have a one-sided perception of forestry and wildlife. We want to be able to show

them through positive role models that men and women can work in various roles in forestry.” He went on to say, “These campers are our future and they will affect the policies and procedures of forestry in Alabama in the years to come.”

As 12-year-old Greenville Middle School student D-Raylen McGrew explained, “I think it’s really good that other people in the community love that children are getting educated at this camp and make it possible for us to be here for free.” He added, “I want to be three things when I grow up – either a teacher, a doctor, or a lawyer – but this camp has shown me that I can go out of my comfort zone to experience different things.”

I, for one, know that I’ve learned a lot in the days I spent at the camp. I feel as if I bonded with everyone, and I had a chance to talk to several kids about how they felt being away from video games and the internet for three days, in comparison to what they will take away from this experience. One 12-year-old camper, Cailyn Thompson, summed it up best, “It’s a really great experience, especially if you don’t know a lot about natural resources. This is great and for everyone that made it possible, thanks a million times and keep doing it because we appreciate it.”



*Although the students seemed quite sure of it, Angela Green questioned whether or not reptiles were **really** the highlight of Day Two!*



The Butler County Forestry Planning Committee would like to express their appreciation to the various companies, corporations, and individuals for their financial support of this camp including the Butler County Soil and Water Conservation District and the Alabama Forests Forever Education Grant (“Stewardship” license plate) committee.



Forestry Competition Returns to Alabama Forestry Camp

By Karl Byrd, Alabama Forestry Commission

Focusing on friendships, team building, and exposure to the Forest and Natural Resource Fields, a total of 35 high school boys and girls attended Alabama Forestry Camp this past June. For the 12th year, the camp was held once again at the Federation of Southern Cooperatives/Land Assistance Fund's Rural Training and Research Center located in Epes (Sumter County), Alabama.

This year brought the return of forestry-related competitions with both individual and team concepts. Training in different competitive challenges throughout the week culminated with an exciting final day of competition to wrap up the annual camp. Students competed individually in tree identification, measurements, tree aging, as well as compass and pacing. Group activities included archery, pulpwood toss, bucksaw, and crosscut saw. These events brought a cross-section of students from across Alabama, allowing them to bond as teams to accomplish the challenges set before them.

Coordinated jointly by the Alabama Forestry Commission (AFC), The Federation, and Tuskegee University, this year's camp was conducted by an

Incident Command Team comprised of AFC personnel directing the daily activities. Each day students ventured out on field trips including tours of a TREASURE Forest owned by Mr. and Mrs. Bobby Williams (sponsored by the Alabama TREASURE Forest

Association), Westervelt Management Area (sponsored by the Westervelt Company, Inc.), Tom Beville Lock and Dam/Visitors Center on the Tenn-Tom Waterway (coordinated by the U.S. Army Corp of Engineers), Oakhurst Farms commercial fishery, Westervelt Sawmill, and Moundville Archeological Park and Museum.

Additionally, students were also treated to presentations on various topics during the week such as urban forestry presented by Auburn University, hunting and fishing demonstrations by Alabama Wildlife and Freshwater Fisheries, a wildlife presentation by Alabama A & M University, Global Positioning Systems (GPS) technology presented by the AFC's Brad Lang, an arson investigation demonstration by "Blaze" the Arson Dog and Officer Donnie Parker of the AFC, and a motivational lecture given by the Alabama Department of Agriculture Assistant Commissioner, Teresa Smiley.

The success of the Alabama Forestry Camp each year is dependent on those organizations and individuals that sponsor the camp in cooperation with those who assist with its daily operation. 🙏



Jemison TREASURE Forest/Tree Farm Welcomes Veterans

By Elishia Ballentine, Editor

It was one of those sultry summer days, when it's too hot to do much of anything except fish. And that was exactly the goal for some specially invited guests at a 50-acre Chilton County certified TREASURE Forest/Tree Farm near Jemison. Landowner William E. "Billy" Noble of Birmingham welcomed a group of eight veterans from the Birmingham Veterans Administration (VA) Hospital to his property for a day of fishing and relaxation.

These men, all blind, spanned in age from 30 to 70 years old. Originating from various parts of the country with diverse backgrounds, they had one thing in common . . . each had experienced combat, although serving in different wars. But on this particular day, the only battle they were anticipating was with the bass and bream in this five-acre lake.

The idea of Myra Grissom, she not only coordinated the event with the Nobles but her family-owned and operated "Miss Myra's Barbecue" restaurant in Birmingham also sponsored it. A volunteer once a week at the VA, she had recognized the need for a fishing outing for these veterans, making the transportation arrangements and lining up a few more hospital personnel to assist and ensure the safety of the fishermen.

Set up around the bank and along the 45-foot pier and a smaller 10x12 dock, the men caught over 60 fish that day. One veteran said it was the first fish he had caught in 40 years. All agreed it was indeed a fine catch, with the landowner noting that it was most rewarding to host such an occasion. The fishermen themselves couldn't decide which was most enjoyable . . . catching the fish or eating them at the fish fry! 🍷



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- Under 323.4 (6)(i), the “federal BMPs” make reference to permanent roads, temporary access roads, and skid trails – clearly differentiating between roads (even temporary ones) and skid trails.
- No further reference to skid trails is made under Part (6), only references to roads in the context of road fill, road location, road crossing, etc., strongly suggesting that the criteria associated with this section applies specifically to roads.
- State BMP manuals also differentiate between roads and skid trails, recognizing that these two forestry-based features are fundamentally different. Specific BMPs for roads and skid trails differ substantially in terms of structures, location, and construction techniques.
- Roads are designed to facilitate log-truck and conventional vehicular traffic, whereas skid trails are designed to accommodate rubber-tired skidders or tracked machines.
- Typical forest road BMPs such as broad-based dips, turn-outs, and basic road design such as surface crowning are not suitable for skid trails because skid trails are constructed at grade, and skidders drag logs along the trail itself. Such BMPs are especially unsuitable for log-mat skid trails since these trails are constructed from logs and the travel surface cannot be shaped, sloped, or crowned like conventional forest roads.

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THE BATTLE ON OUR DOORSTEP: COGONGRASS

(Continued from page 14)

properties as we can south of US Highway 80. We will also focus efforts on an 'advancing front' just south of US Highway 80, along the state's borders, and in high-threat areas such as major roads and arteries.

If you are a private, non-industrial Alabama landowner and currently have cogongrass on your property, you may be eligible to apply for our program. Depending on the property and infestation locations, in addition to other factors, you will be prioritized within the program's strategies. Further details on our strategies and programs will be provided on our website (www.alabamacogongrass.com) in the coming months. If you are interested, download and complete an information form so that we can get in touch with you when we begin accepting applications. If you do not have internet access, call (334) 240-9348 to request a copy.

It is important to note that this program is unlike cost-share programs currently offered by the government. If you are accepted into the program, the ACCC will arrange for the enrolled acreage to be treated, monitored, and re-treated at no cost to you. There are some restrictions on applicants if they are participating in cost-share programs. The enrolled, treated areas cannot qualify for any federal cost-share programs such as CRP or the EQIP program that are specific for cogongrass control.

For more information on the program, contact Ernest Lovett, Project Coordinator, at (334) 240-9348 (elovett@alabamacogongrass.com) or Stephen Pecot, Communications Director, at (251) 438-4581 (specot@alabamacogongrass.com). You can also visit our website (www.alabamacogongrass.com) for the most up-to-date information. ☪



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Yaupon

(*Ilex vomitoria*)

By Fred Nation, Environmental Services, Baldwin County

Yaupon is a large shrub or small tree in the holly family. It sometimes grows into an irregular tree to about 25 feet tall, but is most often seen as a colonial shrub. The bark is thin, smooth, pale gray or gray-brown in color. The leaves are evergreen, simple, alternate; the blades are oval, leathery, dark green, up to about 1½ inches long. Blount, rounded teeth along the leaf margins are quite distinctive, and make yaupon easy to distinguish from the dozen or so holly species that are found in Alabama. Yaupon is native to the coastal plain, from Virginia to central Florida, west through southern Alabama to eastern coastal Texas. It has been widely cultivated, and is now naturalized in a variety of habitats throughout the southeast.

Like other hollies, *Ilex vomitoria* is dioecious, which means that male and female flowers are borne on separate plants. Only the female plants produce the small, spherical, shiny red fruits that mature in great quantities along the stems in the fall of the year. These fruits (drupes) are an important winter food source for many bird species, including quail, wild turkeys, and bluebirds. The foliage and twigs are browsed year-round by white-tailed deer. Yaupon is an early succession species that quickly colonizes burned or timbered land, providing good cover and forage for wildlife.

Yaupon is one of our most historic native plants. Early European settlers discovered, or they learned from the Indians, that it contains a stimulant that we know today as caffeine. They roasted the leaves and twigs to increase the solubility of the caffeine, and boiled them to make passable substitutes for tea and coffee. Native American tribes throughout the southeast – including the Alabamas, Cherokees, and Creeks – venerated yaupon, and they used it in their religious and purification ceremonies. A strong ceremonial beverage, brewed from the dried or roasted leaves and twigs, was called the “black drink.” In his “Travels,” William Bartram describes in great detail an elaborate black drink ceremony which he was privileged to attend in December, 1775, at the Creek Indian village of Otassee, in present-day Macon County, Alabama. What was the effect of drinking copious quantities of the black drink? For the answer, take a close look at yaupon’s scientific name: *Ilex vomitoria*!

As an ornamental landscape plant, yaupon has few equals. Cultivars have been developed with a compact, rounded habit that can be intensely pruned into formal hedges or topiaries. Cascading or “weeping” forms have been bred, as well as tall, columnar varieties for informal hedges and corner plantings. Yaupon is a trouble-free shrub or tree of manageable size that feeds the birds, looks great, even in the winter, and it is native. What else could we ask for in a landscape plant?

According to the current listing of “Champion Trees of Alabama,” *Ilex vomitoria* is a species without a state champion. A specimen about 20 feet tall, with a trunk circumference of 12 inches or so would be a respectable state champion for this historic and beautiful Alabama native. The champion tree list is available online, at www.forestry.alabama.gov in the “Market & Informational Resources” section. ♣



Photo by Fred Nation