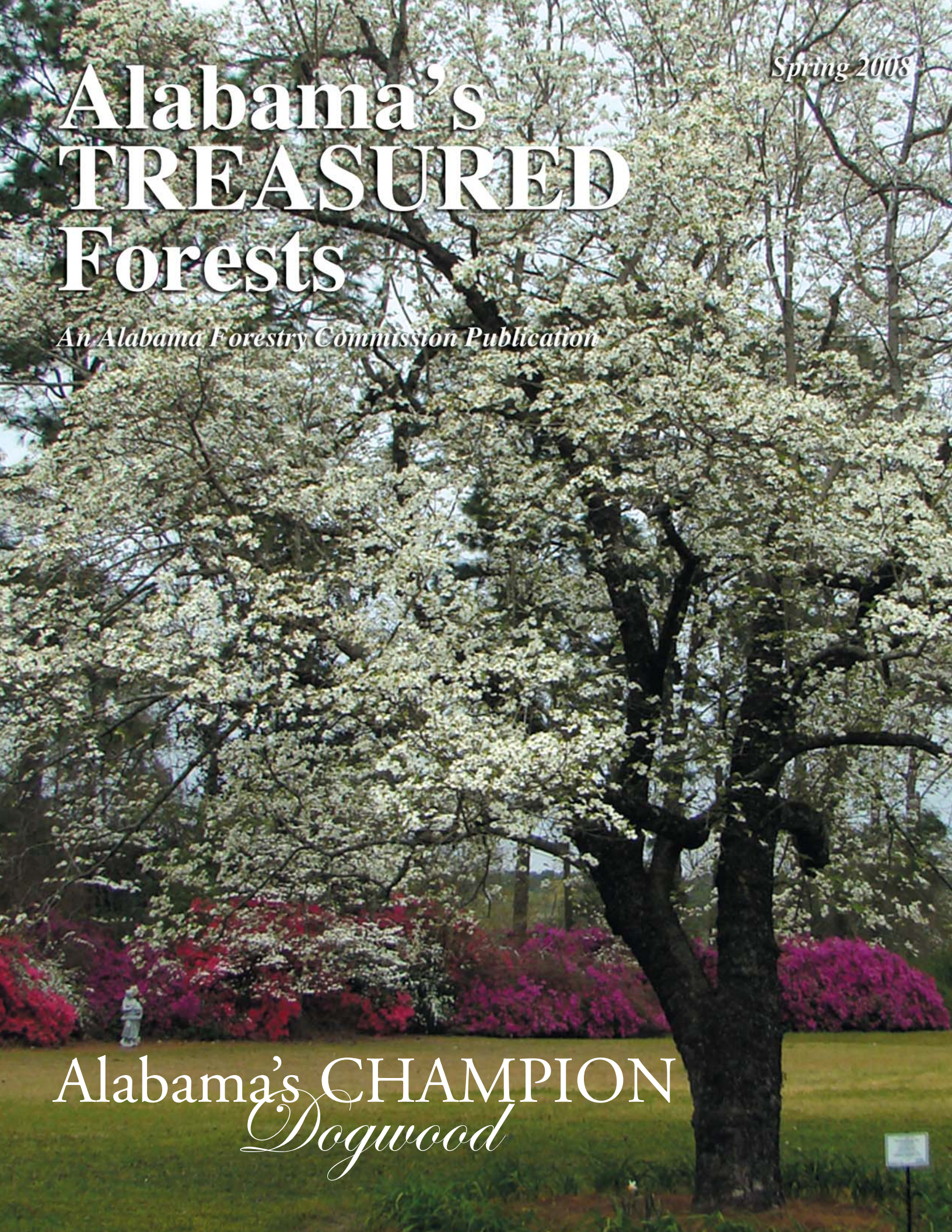
Spring 2008

Alabama's TREASURED Forests

An Alabama Forestry Commission Publication



Alabama's CHAMPION *Dogwood*

A Message From the State Forester

Linda S. Casey, State Forester

Maybe it's because I'm getting older, but I find myself thinking more and more about the things that made a real impression on me when I was a child. I was born and raised on a dairy farm in the mountains of Southwest Virginia in a small community called Coon Ridge. I think about the nights my sister, cousins, and I caught lightning bugs and times with my dad pointing out the Milky Way and different stars in the sky. There were few neighbors and a lot of pasture and forest for all of us kids to play. There were always chores that had to be done and we were often told that, "if you don't work in the garden, we won't eat this winter." It was a hard life but a good life.

Those were very formative years for me. In the Virginia hills I learned the value of hard work, grit, and the rewards of meeting new challenges. It also gave me a love and appreciation for the land and the belief that we all share a responsibility to be good stewards of our natural resources. In fact, it's one of the reasons I earned a degree in forestry and have spent the past 35 years working in forest industry and now as Alabama's State Forester.

As I enter my second year in this position, I realize that today I stand on the shoulders of many dedicated people who have made Alabama's forests a true success story. In 1936, our state was 58% forested. Today, it stands at 71% or 22.6M acres. Getting to this point was not easy. Wildfire, overcutting, pests, and occasional misuse of our forests were challenges that had to be met head on. It's a good thing there were people who did respond, because all of us benefit.

Today, Alabama's forests face its newest and arguably most difficult challenge. Urban and land development is consuming forested acres by the thousands. The impact should concern everyone. For example, we are seeing forest stands fractured into smaller, isolated, less functional parcels. Also, forest resource managers and landowners are struggling against a rise in exotic and invasive plant species that have roots in urban land use.

The unfortunate long term result of fragmentation of our timberland resources is a negative impact on functionality such as clean water and air quality, soil erosion control, wildlife habitat, scenery, recreation, and wood products. Additionally, the potential of damage to homes and structures from wildfires increases in the urban-rural interface areas. Whether you make your living from the forest, own forested land, or just like to spend time in the forest, no one among us is unaffected.

How we respond to this challenge to our state's forests is very important. It's the only way we will make a real difference. We can either react to the changes or be proactive. We can confront others or work together. We can stay in the 'here and now' or prepare for the future.

For me, I believe this is an opportunity for Alabama and our forests. In other parts of the country, states are trying to correct the mistakes of urban development after the fact. Their approach is more costly and less effective. Here in Alabama, we still have a huge forest resource to consider before urban development occurs. Our goal should be to find ways to promote urban development that supports economic growth and improves quality of life, while accommodating forest sustainability. I think it can be done. It won't be easy, but we can succeed if we do three things.

First, let's make urban development and Alabama's forests a public issue. Effective state agencies always work best when the people they serve are well-informed about state and local issues. The Alabama Forestry Commission is currently carrying out an educational campaign to help get the word out.

The next step is better collaboration. State agencies, homeowners, landowners, developers, planners and other groups interested in our state's natural resources are much more effective when they work together. The Alabama Forestry Commission is in the process of initiating meetings with landowners, other government agencies, associations, and professional groups to find common ground for us to work together on this issue.

And lastly, we need a statewide initiative. Good intentions only go so far. Ultimate success will require a statewide commitment from all groups and interests working around a common goal to incorporate a functional forest in new urban development.

The old saying is true, "you can never go back home." Not long ago, I went back to where I was born and raised and the change was profound. The dairy farm where I grew up no longer exists. Instead of fields and forests there are rows of houses occupied by a new generation of people working to make their families' lives better, much the same way my father did for me and my family.

We can't stop progress and shouldn't even try, but Alabama is at a crossroads. We can choose to be proactive and develop partnerships to collectively address this issue or we can choose to ignore it. The message of successfully addressing Urban Sprawl will be the heritage we leave our kids and grandkids. If, today, we accept this challenge to make Alabama's forests a part of urban development, then everyone wins. That's an opportunity we can't afford to pass up.

Linda S. Casey

Alabama's TREASURED Forests

Vol. XXVII, No. 1 Spring 2008

CONTENTS

4 **A Passion for Wildlife** *by Elishia Ballentine*
7 **Alabama's Champion Tree Program** *by Brian Hendricks*
8 **Clearing a Path Through Hardwood Bottoms** *by Tim Albritton*
10 **Turkey Sunrise** *by Charles Hovater*
12 **Good Stewardship** *by Paul E. Hudgins*
13 **Milestone: Coosa County Attains 100 TREASURE Forests** *by Joel D. Glover*
15 **Man Gets 21 Years for Stealing Trees** *by Dennis Sherer, courtesy of the Times Daily*
16 **Invasive Species: Alabama's Most Unwanted . . . Cogongrass**
18 **The State Fire Marshal: An Important Forestry Commission Partner** *by Tom Conway*
19 **The Environmental Effects of Wildfire** *by James P. Jeter*
20 **Fire Protection Around Your Home** *by Bruce Springer*
21 **Mapping the Future** *by Bill Christie*
23 **Who Am I? Destructive Insects of Alabama's Forests**
24 **Box Turtles in Alabama** *by Bennett Moseley*
25 **The Landowners' Land Trust** *by Frank McIntosh*
28 **Alabama Forests Forever** *by Rick Oates*
30 **AFC Board of Commissioners Elects New Chair and Vice Chair** *by Elishia Ballentine*
31 **Alabama Certified Burn Manager Training Schedule**

DEPARTMENTS

2 **Letter from the State Forester**
11 **Hardwood Corner** *by James P. Jeter*
32 **Trees of Alabama: Poison Sumac** *by Fred Nation*

On the Cover: *Alabama's newest Champion Flowering Dogwood* (Cornus florida) *is located in Geneva County, owned by William Tomlinson, nominated by Billy Wilson.*
Photo by Bobby Light

Background this page: *Crimson clover - a perennial sign of Spring.*
Photo by Elishia Ballentine

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A Passion for Wildlife

By *Elishia Ballentine*, Editor

Photo by Kelvin Daniels

Tucked away in Dallas County, far off the beaten path, Piney Woods is a quiet and peaceful TREASURE Forest with rolling hills and ridges offering scenic views in several directions. A veterinarian in Selma for the past 38 years, Dr. Lee Youngblood lives in town, only getting out to this country property on his days off and weekends. Not that he actually goes there to rest, however. He has plenty to keep him busy.

On a large-acre farm such as this, the chores and projects are never ending. But that suits Dr. Youngblood just fine. In fact, he says he doesn't want the jobs to end. He's very "project oriented" – always working on food plots, the pond, the quail trail, building/repairing the cabin or equipment, bush hogging, etc. He even practices what he calls Tractor Therapy . . . "When I'm plowing, I'm happy," he says.

His wife and the rest of the family enjoy going to the farm for relaxation and recreation. His two sons often go out to hunt, but they also help around the farm. His oldest son actually built the cabin that overlooks the lake. Four grandchildren also think the farm is the absolute place to be! With activities such as rambling in the woods, fishing, riding in the golf cart, birthday parties, and bunk beds, there is always something fun to do.

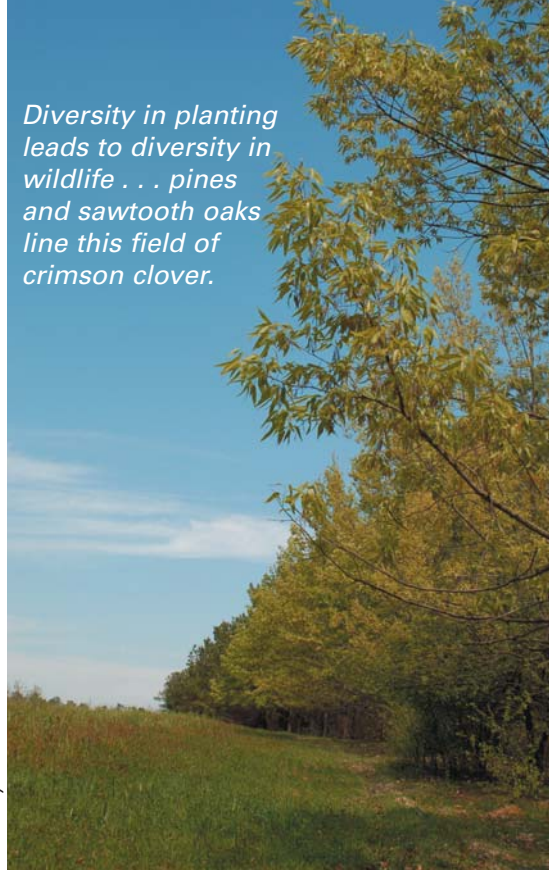
Located near the small communities of Tilden, Minter, and Carlowville in southern Dallas County, Dr. Youngblood says the property has belonged in his family for a long time. For years, his father ran cattle here. Lee inherited his original portion from his grandmother; then acquired more land from his brother and sisters, accumulating 760 acres over time. While all of the extended family's 1,520 acres is managed under TREASURE Forest principles, only his portion has been certified as a TREASURE Forest. This property was named the Helene Mosley Memorial winner for the Southwest Region in 2005.

His primary TREASURE Forest objective is wildlife management, with timber being the secondary objective. Diversity is key to Dr. Youngblood's conservation philosophy, providing wildlife and timber management with the least negative impact. This principle actually has a positive impact on wildlife. Someone who balances a love for all animals with being a sportsman and hunter, he remembers when deer and turkey were scarce. Lee firmly believes, "Diversity allows wildlife to thrive."

Most of the land was leased to International Paper Company that harvested timber and then reforested. In 1992, they began the harvesting process – gradually (approximately 200 acres per year) and selectively – performing a steady cycle of cut, site prep, and replant. According to Dr. Youngblood, it could not have been a better situation. "The relationship was perfect – mutually beneficial to all parties. We were very pleased with the process and the results. IP wanted the land to look as nice as we did. The company practiced an environmental-friendly policy and there was no clear cutting. They utilized SMZs and BMPs; they even planted wildflowers."

The entire harvest took about six years; resulting in multiple-year plantings. These different-aged pines make it easier to complete Lee's forest management plans in cycles, performing prescribed burns and thinnings over 200 or so acres at a time. For the most part, the plantation is in loblolly pine, although there is some natural longleaf scattered around. Unfortunately, Hurricane Ivan damaged a good bit of 30-year-old timber.

After the harvest, somewhere between 150 to 250 acres of hardwoods were left standing which make excellent turkey habitat. That's important to someone who claims turkey hunting as a passion! He has since planted several more acres in sawtooth oaks, plus five acres of other hardwoods including cherry bark, shumard, and white oaks. Dr. Youngblood has perfected a system of natural regeneration for chufas, another good food source for turkeys. In addition to disking lanes, he sprays the food plots to kill unwanted or competing grasses, allowing only the chufas and crimson clover to flourish. This provides nutritious treats not only for the turkeys, but for raccoons and squirrels as well.



Diversity in planting leads to diversity in wildlife . . . pines and sawtooth oaks line this field of crimson clover.

Photo by Kelvin Daniels

Although there are dove fields, the doctor's current major project is the

(Continued on page 6)

Dr. Lee Youngblood and Fannie Mae check out the fishing pier.

Photo by Elishia Ballentine

Photo by Kelvin Daniels

Photos by Elishia Ballentine

Photo by Paul Williams

Young pine plantation and scenic ridges.

Chufa "nutlets" provide a nutritious treat that turkeys love.

improvement of quail habitat. His goal is to eventually have 80 acres dedicated to quail.

Also an avid deer hunter himself, Lee leases out part of the property for commercial deer hunting. There are green fields, 30 to 40 acres in food plots, plus 30 to 40 acres in wildlife corridors and openings. Getting around on the place is no problem because there are six to eight miles of roads (with ditches and turnouts) as well as firelanes.

Rather than enlarging a small pond that already existed on the property, Lee and his sons constructed an adjacent 8-acre lake in 2002 and connected the two, stocking them with bass and bream. They also built a nice covered fishing pier. Now there are numerous hotels and "condos" for purple martins scattered all around the well-manicured pond, which is also home to several ducks.

As stated earlier in the article, Dr. Youngblood enjoys keeping busy. A past president of the Alabama Wildlife Federation, he currently remains on the Board of Directors. He helped start the Dallas County chapters of both the National Wildlife Federation and Ducks Unlimited. In addition to being active in the local Kiwanis Club, he is a member of the Longleaf Alliance and a sponsor member of the National Wild Turkey Federation. In 2003, Piney Woods hosted the latter group's national tour and seminar, where Dr. Youngblood shared his wildlife management style and techniques with approximately 60 landowners and biologists in attendance.

It always brings Lee joy to share the property. The Boy Scouts sometimes visit Piney Woods for camping and fishing outings, as well as the Outdoor Women program and other groups. Even while this interview was being conducted, he and Tom Lang, the AFC's Dallas County Manager, are planning and preparing for a tour of the Dallas County Natural Resources Coordinating Council in May.

Ever mindful of the future, Dr. Youngblood is already envisioning his next wildlife project: another large field of chufa and clover . . .

More projects *– Dr. Lee Youngblood uses a portable sawmill to cut lumber from the property (right) and a special home-made "kiln" to dry it (below). Different venders then make turkey calls from the wood – mainly cedar, but also poplar, walnut, Osage orange, and sycamore.*

Photos by Elishia Ballentine

Alabama's CHAMPION TREE Program

By *Brian Hendricks*, Champion Tree Program Coordinator, Alabama Forestry Commission

This Swamp Chestnut Oak (Quercus michauxii) *is the newest* ***champion tree*** *in Cleburne County, nominated in 2007 by Jake Holloway. AFC Forestry Specialist James Barker is shown with marker that will be installed near base of the tree.*

The Champion Tree program is once again alive and well in Alabama! Because trees and forests are such a big part of Alabama's landscape and economy, State Forester Linda Casey has emphasized the importance of recognizing "champion" trees via the Champion Tree program.

The purpose of the Champion Tree program is to discover, recognize, and preserve the largest of each tree species in Alabama. Currently, there are more than 100 champion trees in Alabama; 23 new champion trees were recognized in 2007.

Anyone can nominate a tree for this program by completing a nomination form; however, an Alabama Forestry Commission (AFC) forester or forestry specialist is responsible for collecting the tree's measurements. When determining a champion tree, three of the tree's aspects 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 either 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.

Once a new champion is identified, its owner and nominator receive certificates, and the nominator is presented with a permanent tree marker by AFC county personnel that is to be placed in proximity to the base of the tree. County personnel are encouraged to publicize the tree marker presentation.

To learn more about the Champion Tree program, visit the AFC's website. There, you will find useful information about the program and a current listing of all Alabama champion trees.

Clearing A Path Through Hardwood Bottoms Using the Basal Bark Treatment Method

By *Tim Albritton*, State Staff Forester, Natural Resources Conservation Service

Alabama's hardwood bottoms are rich with diversity, filled with beauty, and provide a fantastic wildlife habitat. They also protect our streams and filter the runoff from the adjacent watershed.

To get a view of this natural splendor, all you have to do is take a hike through the nearest river bottom you can find. There is a slight problem, however . . . there is a good chance your hike will be slowed down by the mass of privet invading these areas. You don't have to be an invasive plant expert to find this pest; it is literally spreading throughout the state, and for that matter, the Southeast.

Chinese privet *(Ligustrum sinense)* – or what we often call "common privet" – was introduced into the US from China around 1852. Like many introduced plants of that time, it was actually sent here from England after being transported there from China. Regardless of the history, it's here now.

Privet thrives in hardwood bottoms, yet most landowners are unaware of its invasion. It really becomes trouble after a timber harvest. Having already been established for years, privet literally explodes once the mature overstory trees are removed. If you wait until after your timber harvest to address the problem, it is too late. If you are dealing with a predominantly pine stand, prescribed burning on regular intervals will effectively control privet. However, prescribed burning is not an option in bottomland hardwoods.

The simplest and easiest way to address the problem in bottomland hardwoods is before a timber harvest, using herbicides. Privet is fairly easy to control with a number of herbicides and treatment options. The three common treatment methods are foliar spray, cut stump, and basal bark, each with its own advantages and disadvantages.

Having tried all three methods on my own property in Elmore County along the Tallapoosa River, the purpose of this article is to highlight my experience with the basal bark treatment. When I stated previously that privet literally explodes after a timber harvest, I was speaking from experience. And, my experience with these three treatment methods is what I would term, "lessons learned the hard way."

Photo by Kelvin Daniels

Photo by Sarah Albritton

Since harvesting a small stand of hardwoods in 1996, I have been spending weekends battling the privet invasion. Having spent most of my time using the foliar spray and cut stump treatment methods, I decided to give the basal bark treatment method a try just for kicks.

The basal bark treatment is performed by applying the herbicide directly to the base of the tree. The herbicide should be sprayed around the entire circumference, completely covering the bark from ground level to a height of 12 to 15 inches. The herbicide penetrates the bark into the living tissue (cambium) where it is transported through the tree into the roots and leaves. This treatment provides for a fast and effective way of controlling selected trees and shrubs.

I used an herbicide from Dow AgroSciences called *Pathfinder II*. It is labeled for the control of woody plants in the forest, and privet is one of the 95 species listed on the label.

Some of the qualities I like about *Pathfinder II* are that it comes ready-to-use, no mixing required, and it can be used in the cut stump treatment method as well. The chemical can be applied any time, including winter. If you have ever tried working in a hardwood bottom during the summertime in Alabama, you can really appreciate that aspect.

Another advantage to applying a basal bark treatment in the dormant-season is that privet is easily identified. Most of the native hardwoods in the bottomland are deciduous (naturally shedding their leaves), but privet is an evergreen. It stands out like a horse in dog race.

I found applying the herbicide to be fairly easy since I didn't have to spray all of the foliage as with the foliar spray method, or cut down the tree as with the cut stump method. With the basal bark treatment method, the herbicide is sprayed down low at the base of the tree, which also reduces the amount of drift.

Before you grab your sprayer and head out into the woodlands, you may want to familiarize yourself with some other nonnative invasive species. While you are killing privet, you can treat them, too. Some species listed in Dr. James Miller's *Nonnative Invasive Plants of Southern Forests* are: silverthorn, tallowtree, Chinaberrytree, princesstree, and silktree. All of these trees are a problem in Alabama, and if I were a betting man, I would bet you a dollar to a doughnut you have one or more on your property.

Jim Miller is a Research Ecologist with the USDA Forest Service, Southern Research Station at Auburn University, Alabama. His book is on the web at **www.invasive.org/eastern/srs/.**

Along with other concerned resource professionals, Dr. Miller and I serve on the Alabama Invasive Plant Council (ALIPC). To learn more about this problem which is adversely impacting our beautiful state, I encourage you to check out the Council's website at: **www.se-eppc.org/alabama/**. If you are not a member of the ALIPC, please consider joining us in our efforts to identify and address the issue of invasive plant species in Alabama. You can find an application on the website by clicking on the State Chapter link for Alabama.

Photo by Sarah Albritton

Turkey Sunrise

By *Charles Hovater*

Editor's Note: The following story unfolded on the property of Mr. and Mrs. Leslie McCollough, long-time TREASURE Forest owners in Colbert County, where Mr. Hovater and his grandson were guests.

Each year, the state of Alabama holds a youth turkey hunt the weekend prior to opening spring turkey season. I was looking forward to taking my oldest grandson, Parker, turkey hunting that weekend.

With the clock set for 4:00 a.m. and a restless night's sleep with dreams of 20-plus pound gobblers running over each other, coming to our calls… the clock brought me back to reality. The morning was just right as we walked through the woods to where we knew the turkeys would be. The lonesome sound of a whippoorwill rang out in the darkness as we approached the field we were going to hunt.

While we sat in the pre-dawn darkness, we heard an occasional owl hoot. As the aqua-green eastern sky started lighting up, a cardinal started his courting ritual, along with the sad cooing of a mourning dove. Then all of a sudden, we heard it… the gobble of a turkey. A second, then a third gobbler joined in. The grin on Parker's face said it all. Now it was up to me to call him to the gun.

Before long, all the other birds joined in for a musical serenade. What a morning! God really knew what he was doing when he created the spring of the year, everything coming to life after a hard cold winter. Soon we heard one of the turkeys fly down. I soft yelped and he immediately answered me with a huge double-gobble. The next gobble was much closer. Once again, a second and third turkey gobbled also. Then we saw movement to our right, and it was a jake with two hens. I told Parker to hold off until a good gobbler arrived.

Since he had never shot one, I could see the disappointment on his face. Shortly, the gobbler was a hundred yards behind us, strutting back and forth, but he would not come within firing range. Time passed and he still would not come within range. After a while I realized he was hung up and was not coming in. Aware that we needed to move on him and relocate, I was afraid that the two of us would make too much noise and spook him.

Photo by Johnnie Everitt

Left to right: Les McCullough, property owner; Parker Wright; and Charles Hovater, author of the story.

Finally around 9:30 a.m. he left for parts unknown. I just knew that I had messed up by not letting Parker kill the jake since it would have been his first bird. As the 10:00 hour approached, we heard an awful gobble and a half "kee kee" from what sounded like a lonesome teenage turkey. Sure enough, here came the jake with two hens, back to the field. I was not going to make the same mistake again and not let Parker get his first turkey. I called it up within gun range and like a pro, ol' Parker downed the bird. Words cannot describe the jubilant feeling we shared.

After a few hugs and high fives, we checked out his prize. To our amazement, the turkey had three beards; pretty remarkable for your first turkey. My season was already made with this one hunt… if I did not get a turkey all season, it was already a great one. That night, as all turkey hunters do, I kept turning the hunt over in my head. What a morning! But I could not quit thinking about the gobbler who wouldn't come in…

I called and asked Parker if he wanted to try again in the morning. Of course, he was ready. Morning broke much the same the next day. What a beautiful sight… all of the trees and flowers coming to life, and all God's creatures trying to outdo the other. The eastern sky started turning the same aqua color when Tom sounded his dominance. I made a soft tree yelp and immediately, he answered. I had Parker situated about 15 yards in front of me, watching the field. When I did a fly-down cackle, Parker nearly jumped out of his skin. He thought I was knocking a snake off myself. I clucked and purred and did an occasional yelp, and old Tom just couldn't stand it. He came pretty fast within gun range and for the second time Parker found his mark.

Two turkeys in two days… my season was complete!

Walking over to his prize, we could hardly believe our eyes… a 19 pound, 9 ounce turkey with a 10-3/4 inch beard and 1-1/8 inch spurs. Boy, were we happy! I hope every turkey hunter can share this experience of taking your children or grandchildren turkey hunting, feeling the jubilation of downing a big gobbler between the two of you.

As this hunt ended, I could not wait until the next weekend… the opening of the 2007 spring turkey season when I could experience another turkey sunrise, hear the call of the wild one more time, the roar from the king of the birds… the magnificent wild turkey.

Hardwood Corner

By *James P. Jeter*, Statewide Hardwood Specialist, Alabama Forestry Commission

Photo by J. W. Hybart, III

One of the most common causes of mortality in hardwood trees under stress from drought is hypoxylon cankers.

Hypoxylon cankers affect most oak species in North America, as well as other hardwoods. Fungi in the genus generally cause a white rot of hardwood slash, but there are some species that cause severe cankering of stressed, living hardwoods. Cankering caused by this fungus contributes to the premature death of trees stressed by drought, construction damage, or other problems. Rapidly rotting tissue leads to structural weakening, causing serious hazards to people or property in high-use areas.

Identifying the Fungus

The fungus is usually visible as a definite fruiting layer that has dislodged the bark. Fruiting layers vary in color. Hundreds of small, black fruiting bodies are imbedded in this layer.

Identifying the Injury

The fungus invades the tree's cambium and the fruiting layer exerts sufficient pressure to dislodge the bark. Careful observation is sometimes needed to see the fruiting layer, since it can resemble the bark of some trees, such as hackberry.

Biology

Weakened trees are most often attacked by *Hypoxylon* spp. The fungal spores enter wounds, germinate, grow into the cambium, severely cankering and often girdling the tree very quickly. Concurrently, white rot of the sapwood under the canker begins. Fruiting structures eventually cover the cankered area and rupture the bark. Spores are produced at a rapid rate and are windborne to new hosts.

Control

Disease prevention can be achieved in high value trees by keeping the tree vigorous and unwounded. Fertilize high value trees and water them during drought periods. Once the infection has occurred, remove infected limbs or trees because they rapidly become hazardous to people and property. (Source: *Insects and Diseases of Trees in the South*)

Robert L. Anderson, USDA Forest Service, Bugwood.org

On another note, these trees make poor firewood as they are usually pithy and soft. BTU output is poor. This is also a good reason not to make intermittent cuts in hardwood stands during extreme drought conditions. Trees wounded by logging operations make excellent candidates for this fungus.

Editor's Note: Jim Jeter now holds the dual role of Hardwood Specialist and BMP Forester/Coordinator. According to Mr. Jeter, the two jobs actually go hand-in-hand, as most SMZs (streamside management zones) and riparian zones consist of some, if not all, hardwood species. The maintenance of these stands in a healthy manner and their regeneration continues to be a major concern not only of forest industry, but also of the general public. He will address these issues in future editions of Alabama's TREASURED Forests *magazine, as well as answer most frequently asked questions pertaining to hardwoods. Contact him with your questions at this address:*

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Good Stewardship

By *Paul E. Hudgins*, Butler County Manager, Alabama Forestry Commission

Managing forestland in Alabama can be a labor of love for those individuals or couples owning land. However, many factors play an important part in how and why we manage our forestlands . . . managing for future income, recreation, aesthetics, or even wildlife are just a few. Landowners have available to them a wealth of resource professionals, consultant foresters, and agency representatives, as well as numerous periodicals that can assist them with various aspects of managing their forests for multiple use. And, in this information age, the Internet is limitless with information on just about any natural resource issue.

For the Alabama landowner, special recognition can be achieved by having their property nominated for one of the landowner recognition programs administered in the state. Alabama is unique in that it has three landowner certification programs. The USDA Forest Service's *Stewardship Forest*, the American Forest Foundation's *Tree Farm* program, and the AFC's *TREASURE Forest* program all acknowledge landowners who manage their forestland for multiple use.

For many landowners, letting others know they are promoting good land stewardship by managing their property for a variety of uses, both social and economic, is always a positive element to the forest community. Utilizing a sign to designate the forestland as being well managed and conservation-driven helps to promote dialect between landowners. This dialect then fosters more interaction between landowners, thus improving the promotion of good stewardship. We as Alabama landowners must do what we can to self-promote the good stewardship we are already performing and what the certification programs are all about. We must remember that good stewardship starts with us and should be passed on to future generations. Being recognized for doing the "right thing" is always a good thing.

Many Alabama landowners are already doing everything that needs to be done to be certified into one of these recognition programs, they just need to be acknowledged for all their hard work. Expecting *others* to instill good forest stewardship in today's generation is *not* what Alabama landowners need to be doing. The next generation is here and they will be setting policies that affect us all. Therefore, placing more signs on more acreage is just one way to promote good forest stewardship.

Photo by Paul Hudgins

Members of the Coosa County Forestry Planning Committee

MILESTONE:
Coosa County Attains 100 TREASURE Forests

By *Joel D. Glover*, Wildlife Biologist, Alabama Department of Conservation & Natural Resources

An historic accomplishment was recently recognized by the Alabama Natural Resource Council with the presentation of a plaque to the Coosa County Forestry Planning Committee, acknowledging that the county had reached a milestone by having over 100 certified TREASURE Forests. Reaching 100 TREASURE Forests is a significant accomplishment when you consider the fact that some counties have very few TREASURE Forests. This statistic often prompts the question . . . why do some counties have so many TREASURE Forests while others have so few? The answer is, there are many factors involved; however, there are some keys to success.

According to C.W. Moody, former State Forester and chief architect of the TREASURE Forest program, TREASURE Forest was developed to pull together natural resource agency personnel to provide multiple-use management guidance for landowners, as well as to recognize landowners who manage their property for multiple-use. This is how the program works in Coosa County: agency resource professionals, forestry and wildlife consultants, forest industry personnel, and private landowners work side by side in the Coosa County Forestry Planning Committee (CCFPC). Active for over 20 years, the mission of the committee is to educate landowners and youth concerning the proper management of our natural resources. The TREASURE Forest program has proven to be an excellent vehicle for fulfilling this objective.

Raymond Shaw, Helene Mosley Winner and longtime member of the CCFPC, once commented during a planning committee meeting that every cause needs a champion. A champion can be defined in many ways; however, Mr. Shaw spoke of a champion as an ardent supporter. In Coosa County, the members of the CCFPC "champion" the TREASURE Forest program. The members accomplish this by staying on the lookout for TREASURE Forest candidates. Whether the landowner is a client of a consultant, or is seeking management guidance or cost-share assistance, each member realizes every forestland owner interested in managing his or her property is a potential TREASURE Forest landowner. The path to TREASURE Forest is different for every landowner.

Whether landowners have developed their property on their own or through the use of resource professionals prior to hearing about TREASURE Forest, the program was not designed to find and recognize only those people who were already practicing good management. The major intent was to provide technical guidance and education to people

(Continued on page 14)

TREASURE Forest Milestone

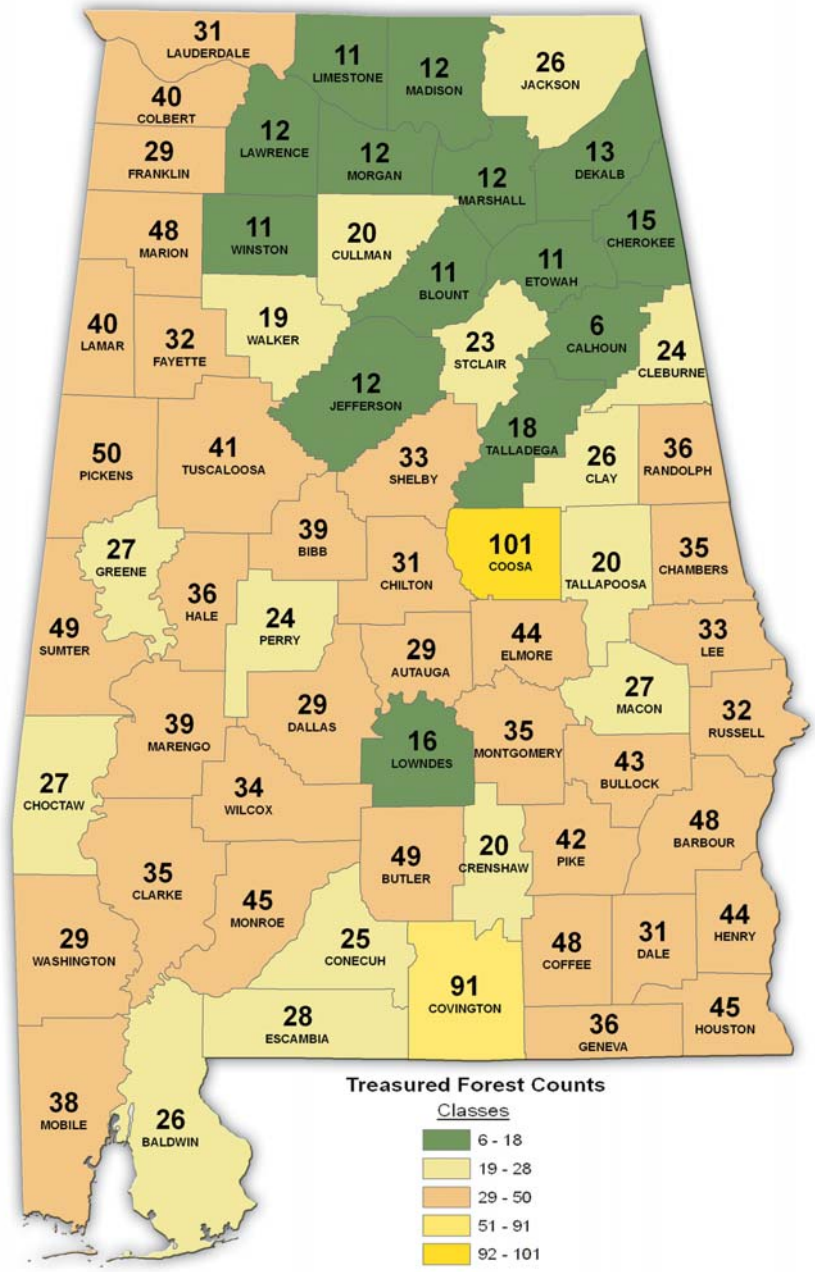
(Continued from page 13)

who could in turn put their knowledge into action on the ground. Although we occasionally find a landowner who is ready for certification, the most common scenario is where we meet a landowner, ascertain their objectives, make recommendations, and then facilitate the management of the property.

One important factor leading to the success of the program: the landowner is not told what to do on his or her property. Landowners choose their objectives; then they are offered recommendations to help them reach those goals. Virtually everyone's path to TREASURE Forest starts at a different point. While some landowners are well on their way when they come to our attention, others are starting with a blank slate. Depending on the enthusiasm and ability of the landowner to put recommendations into practice, the process may take only a few months or a few years. We have found this method of growing TREASURE Forest to be very effective. There is a tremendous sense of accomplishment for all involved when watching a property being transformed from a non-productive condition to one of meeting and exceeding the landowners expectations.

While actively seeking TREASURE Forest candidates, we routinely find landowners who need to begin with a stewardship plan. Many stewardship forests are TREASURE Forests waiting to happen. While stewardship is often an introduction to forest management, TREASURE Forest certification is multiple-use resource management with an exclamation mark at the end! Stewardship is not a competitor for TREASURE Forest, as much as a stepping stone toward it. With most conscientious landowners, there is a natural progression from Stewardship toward TREASURE.

While the members of the CCFPC champion the TREASURE Forest program, the true champions are the landowners who put the recommendations into practice thereby improving their property, their community, and Alabama as a whole. In addition to being champions *in* the program, these landowners are also great champions *of* the program. Our TREASURE Forest landowners are often the source of many other candidates. Agency professionals can talk with a landowner until they are blue in the face and still not have them put the recommendations into practice. However, when a friend, neighbor, or relative tells them they have implemented a practice and it worked, the landowner is then often very receptive.



Statewide, Coosa County leads the way in number of TREASURE Forests, with Covington County running a close second.

Most of the TREASURE Forest landowners in Coosa County are in some type of relationship with one another. TREASURE Forest ownership is very much a family thing. Each year the CCFPC hosts our TREASURE Forest Landowner banquet where the highlight of the evening is recognition of newly

certified landowners. Almost without fail, Forester Blake Kelley and I are joined not only by the landowner, but by their entire family for the awarding of their certificate. It does our hearts good to see multiple-use property management linking generations together and building a land ethic.

Aldo Leopold once said the danger in not living on a farm was thinking that food comes from the grocery and heat from the furnace. I feel this accurately reflects the attitude of many people today. This is especially true with children. A recent Kaiser Family Foundation study found the average American child spends 44 hours per week staring at some kind of electronic screen. An author recently diagnosed the youth of today as suffering from "nature deficit disorder." I believe many adults suffer from this as well. When people do not understand the importance of our natural resources, they also do not understand the need to protect them.

This past year's devastating drought is an excellent example. Alabama spent the year in a tussling match with Georgia and Florida over who would get water. It was evident from many news reports that some areas felt they were somehow "owed" the water they needed to meet their needs. This reflects a mentality that does not understand that natural resources must be protected and conserved. Many people do not understand that water does not originate in the tap. This idea does not set well with today's "I want it now" ideology. TREASURE Forest landowners who are willing to share their property with friends and family are helping to bridge the gap and develop a land ethic in others. Forest landowners understand, we are all part of one ecosystem and we must each do our part to protect it.

Knowing the relationship nature of the TREASURE Forests in Coosa County, I can tell you that having over 100 certified properties reaches a lot of people, people who have an appreciation for the land and want to see it properly managed. I can't help but believe that was what Mr. Moody and others had in mind when they put the TREASURE Forest program in place. TREASURE Forest is a way of life. It's about making your property the best it can be.

So what is the secret to TREASURE Forest certification? It starts with someone recognizing a candidate and explaining the program to them. Thomas Edison observed, "Opportunity is missed by most people, because it is dressed in overalls and looks like work!" Having properties certified as TREASURE Forests requires work. There is no way around that. However, like most work, it pays dividends that are worth the effort. In Coosa County, TREASURE Forest certifications are the result of a joint effort. Each member of the committee works toward the goal of certifying landowners. We meet landowners where they are currently and provide them with the information and assistance needed to reach their goals. This, combined with the landowner's efforts has proven to be a good recipe for success. Henry Kaiser remarked, "When your work speaks for itself, don't interrupt."

Therefore, I will sum things up by saying that in most cases, when I assist a landowner and see them progress and eventually merit certification, I receive the blessing. So maybe we have a selfish motive for working on TREASURE Forests . . . perhaps we just like being blessed!

Man Gets 21 Years for Stealing Trees

By *Dennis Sherer* of the *Times Daily*, Florence, AL - Reprinted with Permission

(Published November 09, 2007)

Lauderdale County Circuit Court Judge Mike Jones chastised Charles Calvin Moore before sentencing him Thursday to 21 years in prison for stealing trees. "Mr. Moore, you are a thief," Jones said after reading a list of prior convictions against the 44-year-old Rogersville man.

In September, a Lauderdale jury convicted Moore of one count of first-degree theft and one count of second-degree theft after witnesses testified he hired a Shoals logging company to cut trees on land near Waterloo that he did not own. Jones sentenced Moore to 21 years on each charge, with the sentences to run concurrently. He also ordered Moore to pay $20,666 in restitution, the amount Mike Lanier, a law enforcement specialist for the Alabama Forestry Commission, had testified during the trial that the illegally cut trees from the 12-acre tract were worth. Moore was arrested in 2006 and charged with two counts of first-degree theft. At Thursday's hearing, Moore cried as he asked Jones to spare him from prison so he could earn money for paying the restitution. "I'd like to get work release so I could pay those people back," he said. Mauriel Summerhill, an owner of the property where the trees were cut, told Jones she would like to be paid for the stolen trees, but she also wanted Moore sent to prison as part of his punishment. "He should serve some time to give him an opportunity to think about what he has done to us," Summerhill said.

Will Powell, chief assistant district attorney, asked Jones to impose a lengthy prison sentence. Defense attorney Billy Jackson, of Florence, argued that if Moore were sent to prison, he would be unable to repay his victims for the trees. After the hearing, Summerhill said she was satisfied with the sentence, but would have preferred the sentences be served one after the other. "I think he should have got 42 years," she said.

As a habitual offender, Moore could have been sentenced to life in prison.

Alabama's Most UNWANTED

Have You Seen This Invasive Weed?

Cogongrass

Imperata cylindrica

Charge: Crimes against Nature

Aka: Japanese Blood Grass, Red Baron Grass

Considered: Dangerous and destructive, extremely flammable, destroys critical habitat, no wildlife benefits

Last Seen: Spotted throughout south and central Alabama and headed north. Colonizes by rhizomes and spreads by wind-dispersed seeds. Also known to hitchhike

around the state, catching rides on ATVs, skidders, road graders, mowers, food plot equipment, forest road and right-of-way equipment.

Description: Grass is 1-5 ft. tall, often leaning into mats when over 3 ft. tall, tufts of long leaves, yellow-green, blades with off-center midvein, silver plumed flowers and seeds in spring, arising from sharp-tipped white-scaly rhizomes. Flowers from February - May in Alabama. Brown oblong seeds appear May - June and are released within silvery hairy husks for wind dispersal.

Resembles johnsongrass, purpletop, silver plumegrass and sugarcane plumegrasses but none of these have the off-centered whitish midvein or stem.

Ecology: Grows in full sunlight to partial shade, and can invade a range of sites. Aggressively invades rights-of-way, new forest plantations, open forests, old fields and pastures. Rapidly growing and branching rhizomes form a dense mat enabling it to exclude most other vegetation. Burns extremely hot, especially in winter, and promoted by burning. Absent in areas with frequent tillage.

Herbicide Control: Cogongrass control varies according to the age and rhizome mat density and depth. Young infestations are usually easier to control than older well-established infestations. Control measures range from mowing and tilling to herbicide control. Herbicide control varies according to location, time of year, and timber type. Multiple treatments may be required for total eradication.

IF YOU HAVE SEEN THIS UNWANTED WEED CONTACT YOUR LOCAL ALABAMA FORESTRY COMMISSION OFFICE FOR MORE INFORMATION.

WWW.FORESTRY.ALABAMA.GOV

Photos: Dana McReynolds, Alabama Forestry Commission
Chris Evans, River to River,CWMA, Bugwood.org

ALABAMA FORESTRY COMMISSION

The State Fire Marshal:
An Important Forestry Commission Partner

By *Tom Conway*, General Counsel, Legislative Liaison, Alabama Forestry Commission

The Alabama Forestry Commission has developed partnerships with numerous state and federal agencies, volunteer fire departments and associations, landowner organizations, and other groups. These partnerships are vital to the Commission's ability to carry out its mission of protecting Alabama's forest resources, providing services to the state's landowners, and educating the public on the importance of forestry in Alabama. One of the most valuable relationships the AFC maintains is with State Fire Marshal, Ed Paulk, and his staff.

Under Alabama law, the State Fire Marshal's office is charged with a wide range of responsibilities related to public safety. These include fire prevention, the investigation of structural fires to determine whether such fires were caused by arson, ensuring that all buildings where people may gather have adequate means of escape in case of fire, and the regulation of the sale, storage, and use of fireworks and other explosives.

State Fire Marshal, Ed Paulk, and State Forester, Linda Casey, discuss the working relationship between the State Fire Marshal's office and the Alabama Forestry Commission.

In many cases, law enforcement officers from the Fire Marshal's office and the Forestry Commission work together to investigate crimes when both structural fires and grass or woodlands fires are involved. An example of cooperation between the two organizations occurred in recent weeks when investigators from the Fire Marshal's office, in the process of investigating a series of structural fires, received information that the same suspect may have been involved in a string of intentionally-set grass and forest fires. This information was turned over to Forestry Commission law enforcement officers, who used it as part of their own investigation, eventually arresting the suspect on numerous felony charges related to the grass and woodland fires.

"Ed Paulk and his staff provide a tremendous service to the public and invaluable assistance to the Forestry Commission," State Forester Linda Casey said. "We have called on Ed many times in recent months to discuss issues related to the extreme drought we are experiencing in Alabama. He has always been cooperative and completely supportive of our efforts to protect lives and property during what has been a busy and difficult time for both of our organizations."

Casey noted that Paulk posted notices of Forestry Commission no-burn orders on the Fire Marshal's web site in recent months, increasing public awareness of the fire danger that has existed in Alabama for much of the year.

The Forestry Commission and the office of the State Fire Marshal both work to ensure public safety through prevention, education, and enforcement of Alabama's laws concerning fires. While the Commission concentrates on fires involving forested areas and the Fire Marshal's office is responsible for fires involving homes and other structures, the two organizations have a major goal in common: the protection of the lives and property of Alabama's people. The AFC and the Fire Marshal's office will continue to work closely together to accomplish that goal.

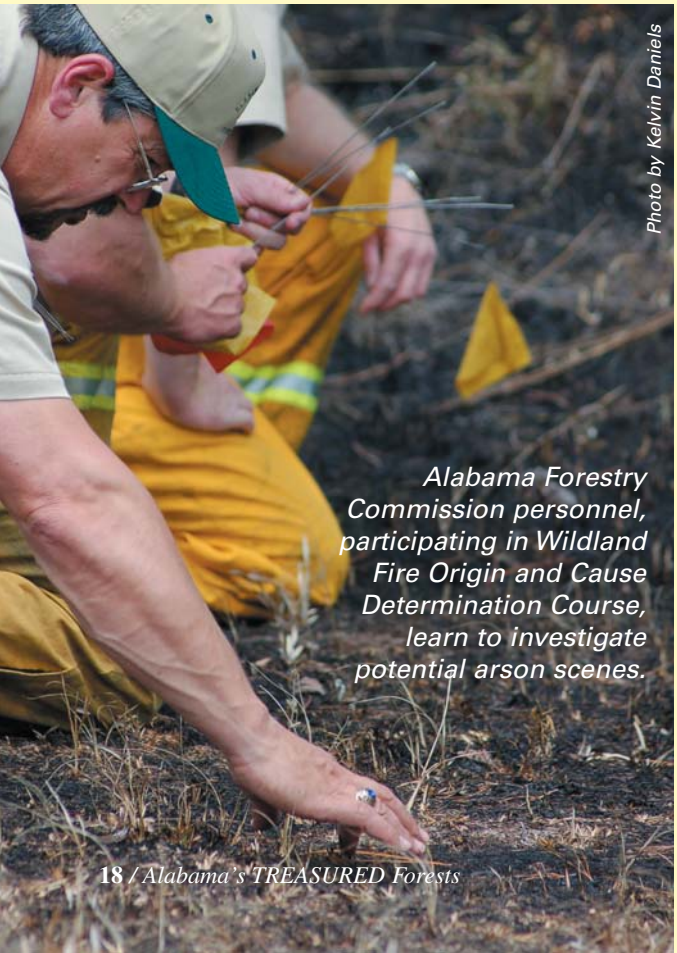


Photo by Kelvin Daniels

Alabama Forestry Commission personnel, participating in Wildland Fire Origin and Cause Determination Course, learn to investigate potential arson scenes.

The Environmental Effects of Wildfire

By *James P. Jeter*, BMP Coordinator/Hardwood Specialist, Alabama Forestry Commission

Photo by Bruce Springer

Natural resource managers may or may not agree on the positive impacts of using prescribed fire in the south; however, one thing is an absolute . . . a correctly conducted prescribed burn is much better on the environment than an out-of-control wildfire. Water quality, as well as all the other environmental factors, can and will be impacted by wildfire. The following is a brief discussion of how uncontrolled wildfire can affect our environment.

Vegetation: Fire may injure or kill part of a plant or the entire plant, depending on how intensely the fire burns and how long the plant is exposed to high temperatures. This is a complex issue for a brief discussion. However, if you kill or damage the plants on a given area, you are exposing the soil to the various elements such as heating from the sun, lack of filtration of storm water runoff, lack of soil stability, and increased water flow in a rain event.

Soil: Under extreme heat from uncontrolled wildfire, the structure of the mineral soil may be changed. Temperatures may be elevated long enough to ignite organic matter in the soil as well as alter the structure of soil clays. In some sandy soils, intense heat can cause a glass-like glaze to form a top crust causing all types of nutrient and runoff loss.

Water: The main effect of uncontrolled wildfire on the water resource is the potential for increased runoff of rainfall. When surface runoff increases after a fire, it may carry suspended soil particles, dissolved inorganic nutrients, and other materials into adjacent streams and lakes, reducing water quality.

Air: There is a lot of discussion on this topic and it is also very complex, but the bottom line is the lack of visibility. Studies are still being conducted on the amounts and types of particulates that are produced from wildfire and the damage they can cause. Decreasing the size of uncontrolled wildfires can put an end to these concerns. Wildfires are "out of control" from a smoke management viewpoint, in contrast to controlled burns that are planned to minimize smoke and particulate dispersal.

Human Health and Welfare: All one has to do is turn on the television to see the effects that wildfire can cause in any community. Catastrophic events can and do happen in the South (Georgia and Florida for example) just as they do out West. Every year, homes, vehicles, outbuildings, crops, and hay bales are destroyed by wildfires, and occasionally human lives are lost. Wildfires can also destroy entire stands of timber, eliminating the life savings of some landowners, and resulting in added expenses of clearing and replanting timber.

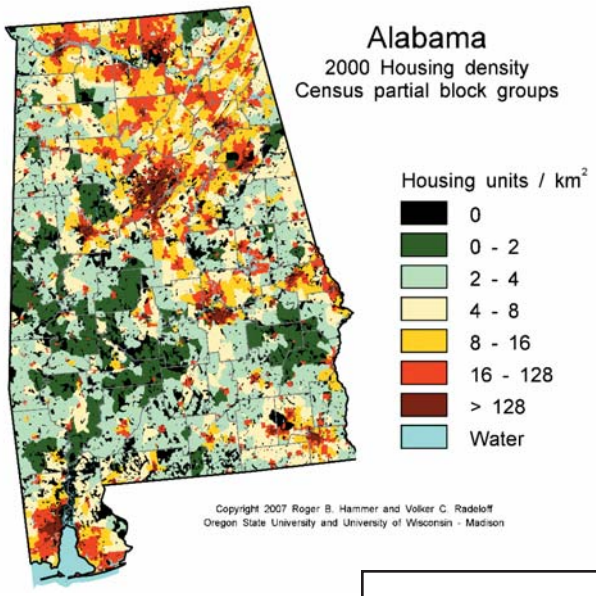
Wildlife: All wildlife species need four components to survive and thrive: food, water, cover, and space. Wildfire can destroy the food, water, and cover aspects for most species, creating spaces where they cannot thrive and grow. Larger species may be pushed away from fires, while smaller animals cannot escape certain death from the flames and intense heat.

Aesthetics: Wildfire in most cases is ugly, plain and simple. Who wants to live in an ugly environment? In cases of extreme heat and burnout conditions, a site may not appear to heal for many years, and the plant and animal component will be changed to accommodate the new environment. (Source: *A Guide for Prescribed Fire in Southern Forests*)

This is a simplistic approach in the discussion of the effects of uncontrolled wildfire. It is the mission of the Alabama Forestry Commission (AFC) to lessen the impacts from wildfire on our society by implementing various systems throughout the state. We have a very active fire control program, as well as a prescribed burning program. The more forests that we burn under controlled conditions, the less damage wildfires can create under uncontrolled conditions. We have instituted cooperation with programs such as Alabama's Clean Water Partnership, Your Town Alabama, Conserving Open Spaces, Green Infrastructure, and our own Wildland Urban Interface program. More information can be obtained from your county AFC office or by visiting our website: **www.forestry.alabama.gov.**

Fire Protection Around Your Home

By *Bruce Springer*, SE Regional Forester, Alabama Forestry Commission

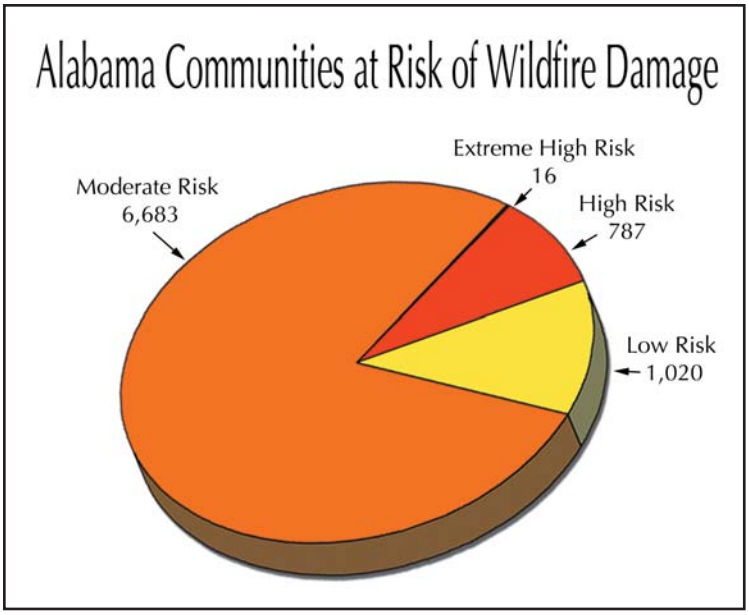


Among many emerging resource-related concerns of national attention, one that continues to receive discussion is the population movement into the rural areas and the impacts to fire fighting. There has been a dramatic increase in population, especially in the Southeast United States.

In the wildland-urban interface (WUI), the Alabama Forestry Commission's challenges include wildfire control. Recent research indicates that 803 communities in Alabama are at a high risk of wildfire damage and 6,683 communities are at a moderate risk. Nearly three quarters of all wildfires occur within two miles of a structure. During 2007, the Alabama Forestry Commission and volunteer fire departments saved 3,264 homes with an estimated value of 277 million dollars.

As unplanned development continues to increase, devastating wildfires will destroy homes and property that are built next to traditionally rural agriculture and forestland. It is unacceptable to continue the trend of property being destroyed and lives lost, when a few simple and inexpensive fire prevention measures can prevent these tragedies.

The Alabama Forestry Commission (AFC) has been promoting fire protection in the wildland urban interface for several years. Many areas in the state are now protected as a result. However, most areas are still unprotected from wildfires. As a result, the AFC is increasing efforts to further protect these areas.



Some of the future activities planned by the Commission include:

1. Utilize the Southern Wildfire Risk Assessment to identify specific areas at moderate-to-extreme wildfire risk and develop comprehensive Community Wildfire Protection Plans. Develop attack strategies and public escape plans during wildfire emergencies for these areas.
2. Establish Incident Command Response Teams to quickly respond to large wildfires.
3. Expand the WUI Professional Development Program to train AFC employees, volunteer fire departments, urban planners, and developers on how to implement fire protection measures, as well as design and implement smarter urban planning development strategies.
4. Develop and implement a Homeowner Wildfire Protection Assessment and Mitigation Plan for individual homeowners to reduce the risk of wildfire damage to their property.
5. Assist subdivisions and communities to protect their area from wildfires.
6. Promote Firewise Communities/USA certification and serve as the statewide contact agency.
7. Better equip volunteer fire departments with wildland fire fighting equipment and training.
8. Administer a cost-share assistance program to homeowners to build defensible space around their primary residence.
9. Continue to provide firelane installation and prescribed burning services to reduce fuel levels in the forested areas of the state.
10. Continue to publish fire prevention information and public service announcements.

For additional information on obtaining a Firewise assessment or Community Wildfire Protection Plan, contact your county Alabama Forestry Commission office.

Mapping the Future

By *Bill Christie*, GIS/Remote Sensing Analyst, Alabama Forestry Commission

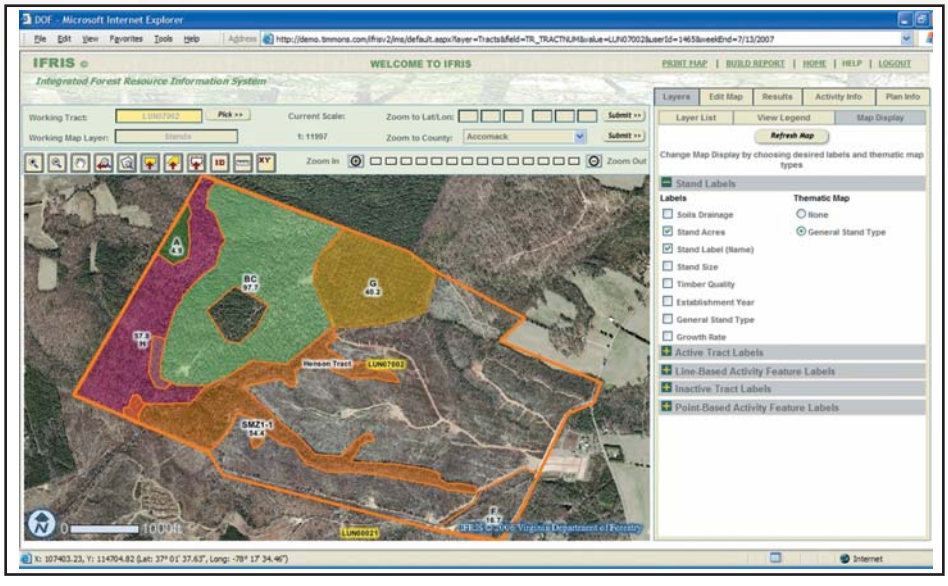
The Alabama Forestry Commission (AFC) is implementing a significant advancement in the way Geographic Information System (GIS) technology is utilized within the agency. Beginning in the spring of 2008, the AFC is making available an internet-based mapping tool to facilitate the collection and sharing of information from forest stewardship, forest health, and fire activities across the state. The mapping application will be accessed by any internet browser, such as Microsoft's Internet Explorer or Netscape, and enable AFC employees to enter their database information to a central repository. Built in Environmental Systems Research Institute's (ESRI) ArcGIS Server software, the internet mapping application represents a quantum leap in the use of GIS within the Commission to the most sophisticated, leading edge of enterprise GIS technology.

Currently, data relating to the various business processes of the AFC are recorded in separate databases on individual desktops. These databases are not in a centralized location and are non-integrated (not linked to each other). Information is difficult to share across the organization at all levels and reporting can be time consuming. Additionally, these informational databases are not presented or associated with other business process databases spatially.

By implementing an enterprise GIS solution, the Commission can leverage new web-based database and mapping technologies to increase efficiencies in the way we record, track, and report our activities. Benefits from the use of enterprise GIS will allow the AFC to:

- Meet the demands of more rigorous reporting (i.e. USDA Forest Service, cost share, grants)
- Track and summarize accomplishments more efficiently
- Relate employee time to grants and programs
- Provide all staff with the ability to query accurate, up-to-date data
- Better manage landowner data, tract information, and management plans
- Respond more quickly with landowner assistance
- Provide a flexible platform to build on for future applications and directives
- Automate the creation of fire status maps and have published directly to the AFC website
- Preserve the geospatial history of forest management activities
- Observe change in forest types and conditions through time
- Facilitate regional and statewide analyses relative to other data layers

(Continued on page 22)



VA Dept. of Forestry

Webmapping example

Mapping the Future

(Continued from page 21)

Other planned advancements for the Commission include:

Mobile-based GIS/GPS

- Field-based data capture and wireless upload to a central server
- Remote real-time fire crew safety monitoring and fire activities mapping

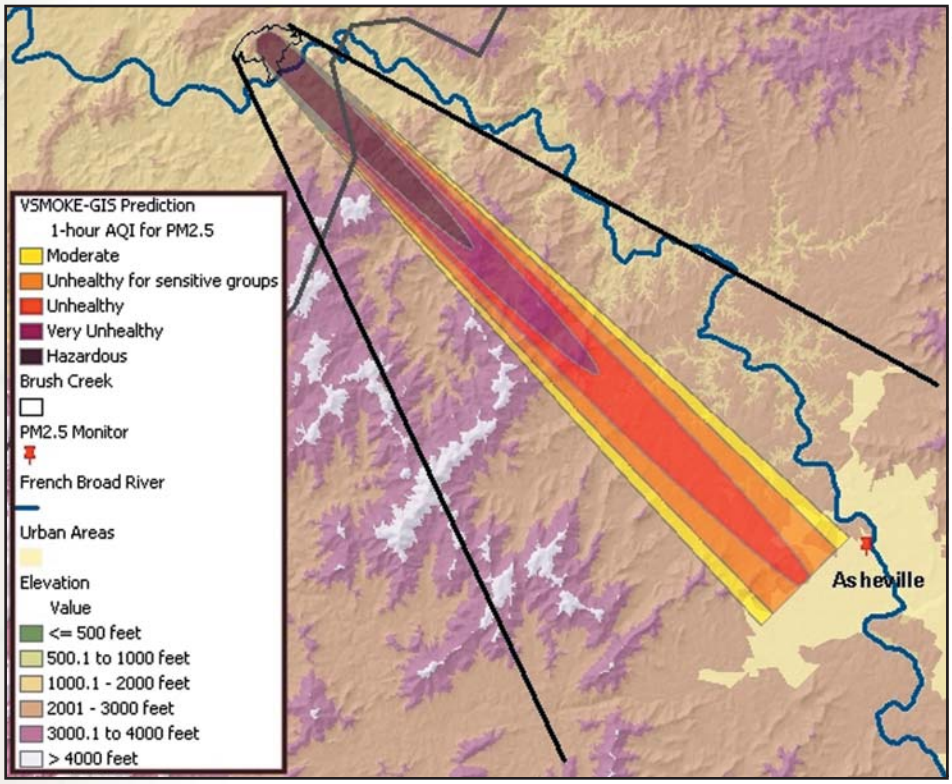
Arcpad and Recon

Complex Spatial Analyses & Modeling

- Smoke plume prediction and mapping
- Historical longleaf pine habitat modeling
- Conservation corridors analysis and mapping
- Wildland-Urban Interface analyses

Additional On-line Mapping Services

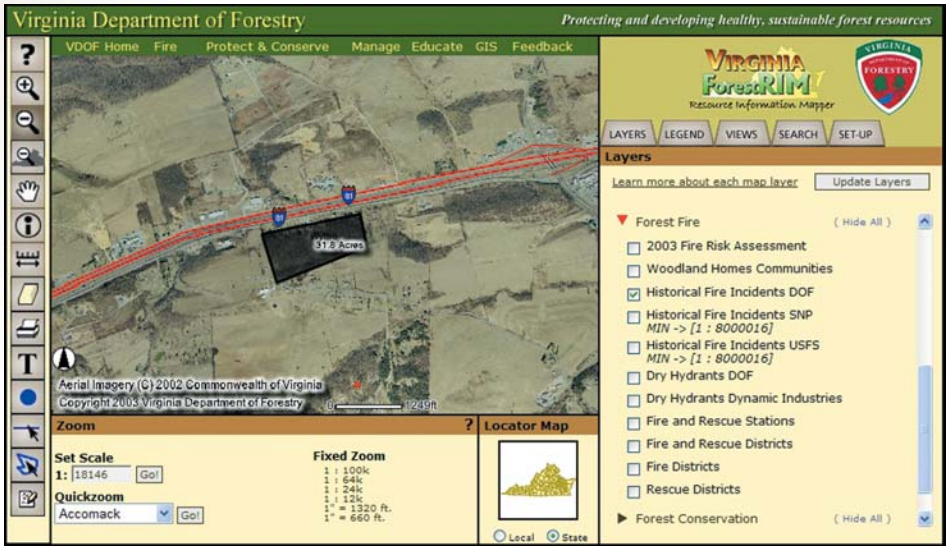
- Forest Health and Invasive Species databases
- Fire-related data entry and mapping
- Public on-line mapping and printing of forestry-related information
- GIS data download via the AFC website



Forest Service, USDA

Example of smoke plume prediction modeling

The mission of the Alabama Forestry Commission is (1) to protect the forests from all harmful agents; (2) to service and help landowners carry out responsible forest management on their property using professional technical assistance so as to benefit themselves, their land, and society; and (3) to educate the general public about the value of our forests in ensuring both a healthy economy and environment. We do this in the most efficient and cost-effective way possible. Implementing enterprise GIS technology at the AFC helps ensure success with our mission for the benefit of the forest landowners of the state of Alabama.



VA Dept. of Forestry

Another example of on-line forest resources mapping

Who Am I?

Destructive Insects in Alabama's Forests

A) I'm brown to black and only 1/8 inch long. My hind end is rounded, in contrast to the scooped-out posterior of Ips beetles.
I may be smaller than a grain of rice, but I am the most destructive forest insect in the South. I attack pine trees of all sizes, but usually infest trees larger than 6 inches in diameter first. Trees weakened by flooding, windstorms, and especially drought are my favorites.

Southern Forest Insect Work Conference Archive, forestryimages.org

Tim Tigner, Virginia Dept of Forestry, Bugwood.org

J.R. Baker & S.B. Bambara, North Carolina State University, Bugwood.org

Timothy Haley, USDA Forest Service, Bugwood.org

B) I'm easily recognized by my scooped-out rear end that is surrounded by spines. I'm black to reddish-brown and may vary in size from 3/32 to 1/4 inch in length. Adults not fully mature and found under the bark are usually yellowish to light brown.
Trees I've infested usually have numerous white to reddish-brown pitch tubes on the bark, about the size of a wad of gum. In trees of low vigor, pitch tubes may be lacking and the earliest signs will be reddish boring dust in the bark crevices at the tree's base.

C) As an adult beetle, I measure 1/4 to 3/8 inch long. I'm dark brown or black. I can easily be confused with Ips bark beetles, but I'm larger with a heavy body, and my posterior is not scooped out.
Signs of my handy work are the pitch tubes on the lower trunk and stumps, usually on the lower 3 to 8 feet of the tree. Tubes are large – sometimes about the size of a walnut – and white to reddish. Older tubes have a sugar-like texture. Foliage color is not a satisfactory indicator, since large infestations may develop before any trees are killed or foliage turns brown.

Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org

Lacy L. Hyche, Auburn University, Bugwood.org

Gerald J. Lenhard, Bugwood.org

Joseph O'Brien, USDA Forest Service, Bugwood.org

D) I am a major pest of red oaks, accounting for millions of dollars in losses from defects and degrade in lumber. My antennae are very long, almost doubling my 1-inch (25 mm) body length. My rust-brown color blends well with the bark surface, and I am rarely seen. The first signs of my attack resemble the fine frass produced by ambrosia beetles. As the larvae bore into the tree, sap begins to extrude from the attack points. Within the tree, tunnel diameters gradually increase from pinhole size to about 1/2-inch.

(Answers are located on page 31)

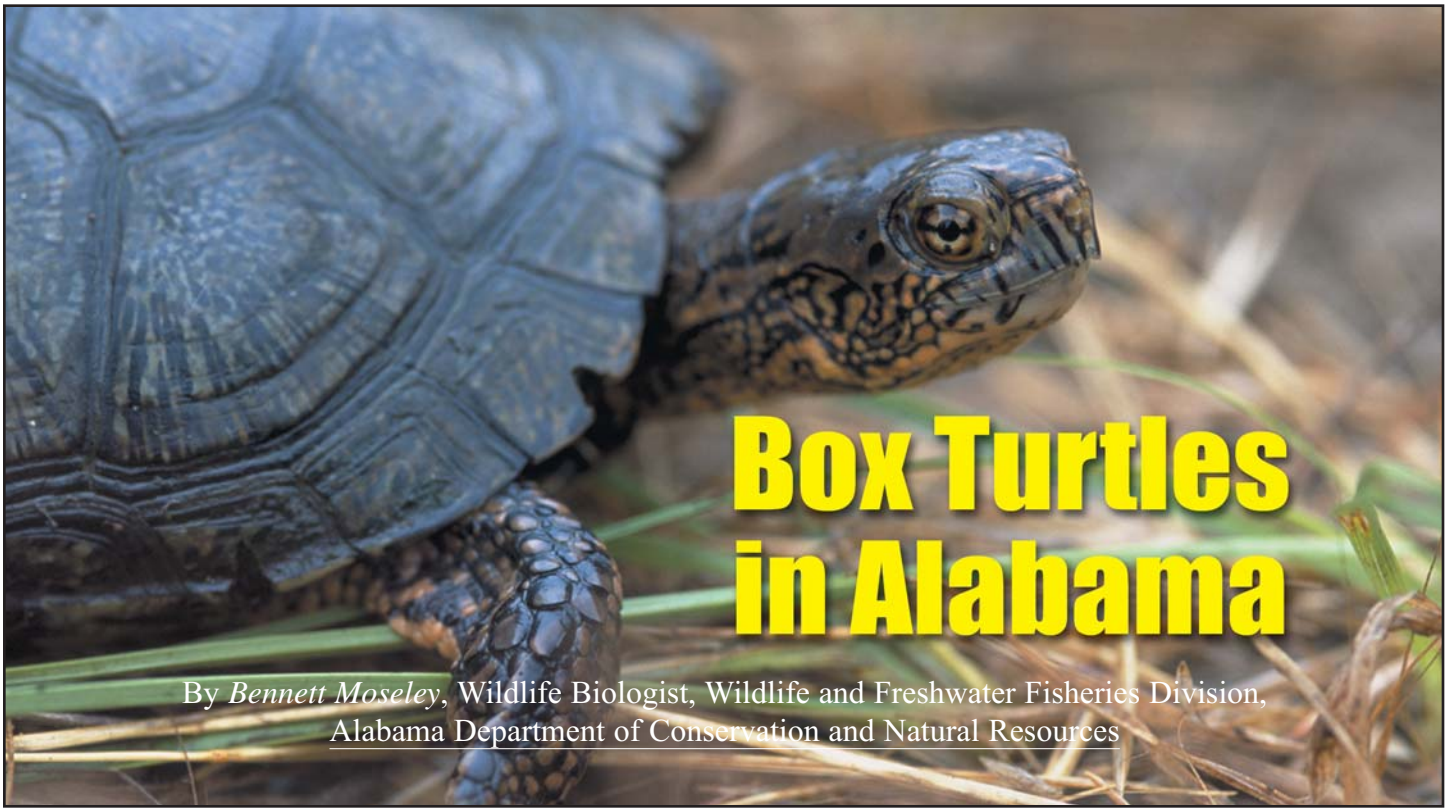


Photo courtesy of ADCNR

Box Turtles in Alabama

By *Bennett Moseley*, Wildlife Biologist, Wildlife and Freshwater Fisheries Division, Alabama Department of Conservation and Natural Resources

Box turtles are common in most parts of Alabama, even though there has been a decline in population numbers in recent decades. They can often be observed after a summer rain along rural roadsides and near forested areas. Box turtles have a unique, hinged plastron — the lower portion of the shell — that allows the turtle to close its shell almost completely, providing an excellent escape from any would-be predators.

Two of the most common subspecies in Alabama are the Eastern box turtle *(Terrapene carolina)* and the Gulf Coast box turtle *(Terrapene carolina major)*. The Eastern box turtle is usually four to six inches long with four toes and a brightly marked upper shell, or carapace. The Gulf Coast box turtle is the largest of these subspecies measuring five to seven inches in length with four toes. The carapace is usually an olive drab and not as brightly marked. Both subspecies have steep, keeled, high-domed upper shells with variable markings. Their jaws are slightly hooked and the toes are only slightly webbed.

Males of both subspecies can usually be distinguished from females by the concaved depression found on the lower shell or plastron. Males are usually larger and have thicker, longer tails. They will normally have red irises while females have yellowish-brown irises. Both males and females occupy woodlands and pastures and are usually found near streams or ponds.

Mating season usually begins in the spring and continues throughout the summer. Males have been known to mate with several different females or one female several times over a period of years. It is possible for a female to lay fertile eggs up to four years after a successful mating. Both Eastern box turtles and Gulf Coast box turtles have distinct courtship rituals. Nesting usually occurs from May to July. A nest is usually dug in sandy soil using the strong hind legs of the female. Eggs are carefully laid in the nest and covered. Clutch sizes vary from three to eight eggs, and females may lay several clutches each year. Incubation is usually three months but can vary depending on soil temperature.

Box turtles are long-lived reptiles and may live for more than a hundred years. Their flesh has been consumed as food; however, they are dangerous to eat because their diet consists of mushrooms that may be toxic to humans. These toxins may remain in their flesh for long periods. Box turtles are omnivorous, feeding on insects as well as berries, fungi, worms, roots, slugs, flowers, frogs, salamanders, and snakes. They will eat eggs indiscriminately and have been observed eating carrion.

Population numbers of these turtles have been declining in recent decades largely due to habitat destruction. Much of this loss can be attributed to residential construction, highways, and commercial developments. Roads also present a great hazard to turtles, with large numbers lost to automobiles each year. Another possible reason for this decline in population might be attributed to the increase in the illegal pet trade of reptiles and amphibians.

Alabama has adopted regulations protecting many animals, including box turtles, against this illegal trade. These regulations make it unlawful to offer for sale or trade anything of value for any box turtle, box turtle part, or reproductive product. This is definitely a step in the right direction and it is hoped that future research on habitat and environmental needs will further protect these subspecies of box turtles. In the meantime, a kind act such as safely removing one from the road might go a long way in preserving these animals for future generations.

For more information contact Bennett Moseley, Area Biologist, Kinterbish WMA, P.O. Box 207, Ward, AL 36922, or visit **www.outdooralabama.com**.

The Landowners' Land Trust

By *Frank McIntosh*, Director of Land Protection, East Georgia, Georgia Land Trust

Every conservation easement (CE) must have certain elements to reach fruition. First, the land has to have **conservation values** (CVs). There are basic CVs set forth in the IRS code section 170h (see box below). Conservation Values set forth in 170(h) include such things as habitat for native animals and plants, productive forest and agricultural lands, and protection of water quality. Unless a property provides at least one of these benefits, any charitable deductions claimed on the CE may be deemed invalid. All CEs must have a **baseline documentation report** (BDR), a snapshot in time of the property at the time of donation, that not only documents the property's CVs, but also maps out areas on the property to be preserved inviolate, as well as areas where reserved activities and uses may be undertaken.

All CEs must have a **conservation purpose**. The conservation easement must demonstrate that it will allow no activities detrimental to the conservation values it sets out to protect. The rights reserved within the CE – such as agriculture, timber management, or construction of barns, sheds, houses, and ponds – must be compatible with and allow for the protection of the CVs. For example, if the purpose of the easement is to protect prime agricultural soils, the landowner would typically reserve the "farmstead area" (repair shop, equipment shed, etc.) on the area with the poorest quality soil, or near a road, so as to maximize the productivity of the soil. If the landowner sets out to protect a rare plant, the area with the rare plant will be afforded special protection (perhaps limited or no harvesting, and no agriculture or food plots). The landowners must provide that their activities will be conducted in accordance with plans and best management practices (BMPs) to ensure the property will remain productive, and indeed have its productivity enhanced by agriculture, silviculture, and other activities on the property.

There must be an **endowment** on the property, to ensure its perpetual monitoring and the defense of the CE's terms and conditions. There must be **clear title** – you cannot donate what you do not own outright. At the end of the process of negotiating and defining all of the above, there must a **recorded deed of conservation easement** – the terms and conditions of the CE run with the land in perpetuity and the deed will provide evidence of this for future titles.

Landowners Intent on Protecting the Land: The Most Important Ingredient

However, for any of the above to matter at all, the land must have a property owner willing to take the extraordinary step of saying, "the value that the commonwealth and I place on the qualities and uses inherent in this land are so important, that I will ensure their perpetual protection." Our land trust understands this and works diligently to make sure that we are readily available to help the landowner protect the property's conservation values in an efficient and professional manner. We work with the landowner to create a conservation easement that reflects the conservation values the landowner desires to protect. The easement is also constructed to ensure that the landowners' commitment to protecting the land does not constrain them from traditional uses of the property that provide value to them. This is critical to the success of a conservation easement.

We have now helped put in place over 250 CEs protecting nearly 100,000 acres. We have a significant body of practice that we bring to bear to ensure that our CEs are as up-to-the-minute in not only meeting but exceeding the evolving standards involved in putting a CE in place. Our baseline documentation is always being refined to ensure that it clearly demonstrates the conservation values associated with the property and clearly shows how the property will be used in the future. We work with landowners to put in place an endowment program that is feasible and yet ensures that their wishes for the property will be observed in perpetuity.

Forever is a mighty long time. As the landowners' land trust, we think our experience, our sensitivity to what landowners are trying to accomplish, and our attention to ensuring the proper legal form of our easements will help the time pass meaningfully and productively for all concerned. *(Continued on page 26)*

IRS Code Section 170(h) stipulates Conservation Easements (CEs) must be donated:

1. **in perpetuity;**
2. **to a qualified charitable organization, that has the commitment and resources to enforce the CE;**
3. **exclusively for conservation purposes.**

170(h) generally defines "conservation purposes" as:

1) **The preservation of land areas for outdoor recreation by, or the education of, the general public;** (With CEs given for recreation or educational purposes, public access is required to claim an income tax deduction.)
2) **The protection of relatively natural habitat for fish, wildlife, plants, or similar ecosystems;**
3) **The preservation of open space where such preservation will yield a significant public benefit and is either:**
   a) For the scenic enjoyment of the general public (For scenic easements, much of the property must be visible to the public; physical access is not required); or
   b) Pursuant to a clearly delineated federal, state, or local governmental conservation policy.
4) **The preservation of a historically important land area or certified historic structure.**
   a) Visual or physical access is required, depending on the nature of the property or building to be preserved.

ALABAMA LAND TRUST

PROTECTING LAND for PRESENT

All the Way to 100k . . .

When we drafted our 2007 year-end fundraising letter, we thought "All the Way to 100k" was a good slogan. With 18,000+ acres protected in 2006, it seemed reasonable that we could make it "all the way to 100,000" acres protected by the end of 2008. We got ahead of ourselves. The Alabama Land Trust and Georgia Land Trust put a record 35,556 acres into over 80 conservation easements (CEs) in 2007, bringing the total to a shade under 100k (with just less than 50,000 acres each protected in both Alabama and Georgia). It now looks as if we could reach 125,000 acres in 2008 — the goal our 2006 strategic plan gave us to reach by 2011.

Forever Wild/Special Natural Areas: The Forever Wild conservation easement, as the name implies, means that land will remain essentially as it is at the time the CE is granted. Generally these are mature forested ecosystems like wetlands, cypress swamp, and various hardwood forests — bottomland, mesic cove or xeric. Sometimes instead of designating the entire property Forever Wild, landowners set aside "Special Natural Areas" to receive particular protection within the larger CE. These areas, when protected by Forever Wild CEs and Special Natural Area designation, continue to provide critically important habitat for numerous migratory bird species, many of which are declining across their range. (The high habitat values here are identified in the Alabama and Georgia State Wildlife Assessment Plans.) These forests often also contain rare or imperiled plant species. One 2007 CE donor designated a Special Natural Area of about 100 acres protecting one of the largest known stands of the rare relict trillium; another donor created a 350-acre Special Natural Area that holds the largest known native stands of the Alabama croton and Durand oak. These CEs allow the donors to ensure the land's stewardship in perpetuity while continuing to enjoy the hunting, fishing, hiking, and other "peaceful enjoyment" of the land. This protection also allows regenerating areas time to develop into a mature forested ecosystem. Around 15% of our 2007 acres protected were designated Forever Wild/Special Natural Area areas.

Riparian Corridors: These CEs protect the land along rivers and streams critical to water quality and habitat protection. Almost all of the CEs feature a water course on or bounding the property and most donors give these areas special protection: "no cut" areas or timber harvest limitations; provisions to ensure that agricultural operations preserve buffers; and actions taken to keep livestock off streambeds and out of wetlands. The habitat protection value of these CEs is inestimable. They are used by animal life along the banks as highway systems between increasingly limited habitat areas. Some of the riparian CEs were in the Tennessee watershed which now has only 5% of the wetlands originally associated with the river system.

The waters associated with these CEs host an astonishing numbers of species. The Cahaba, the last free-flowing river in Alabama and site of several 2007 CEs, is home to more than 131 species of freshwater fishes (18 of which have been found in no other river system), 40 species of mussels, and 35 species of snails. Of these animal species, 69 are endangered.

Then there are the people living along these rivers. Sometimes, rivers rally communities, and the properties they protect become a string of pearls along regenerating streams. Along Choccolocco Creek, in the high growth area along I-20 near Oxford, nearly four miles of streambeds were protected in 2007. Highlights from other watersheds worked in Alabama include: a single conservation easement that protected nearly six miles of streambed along the Black Warrior River in Greene and Hale counties, as well as along the property's major creeks and sloughs; a landowner that gave special protection to almost ten miles of the Tallapoosa River and its tributaries in Tallapoosa, Randolph and Chambers counties; over two miles along the Coosa;

GEORGIA LAND TRUST
& FUTURE GENERATIONS
Make That 125k

and more than five miles along the Cahaba. In Georgia, another mile added to an existing CE along the Conasauga in Murray and Whitfield counties; and a little more than a mile on both the Chattahoochee and the Little River. More detail on these CEs and watersheds is on our website at **www.galandtrust.org**.

Wildlife Habitat/Working Forest: The above CE types provide a great deal of habitat protection. Working Forest CEs, which are at their core dedicated to preserving the sustainable timber resource and associated production of commercially important timber products, incorporate many elements specifically aimed at improving wildlife habitat. They typically have management plans indicating such things as: current best management practices (BMPs) used; the size and placement of wildlife food plots to ensure adequate forage; what steps will be taken to protect special areas; and long-term plans for stand types (when and how the stands will be harvested). Some landowners' goals include longer stand rotations, minimizing clearcuts and longleaf restoration. Others focus on more intensive management of timber with an emphasis on protecting the productivity of the soils and waters.

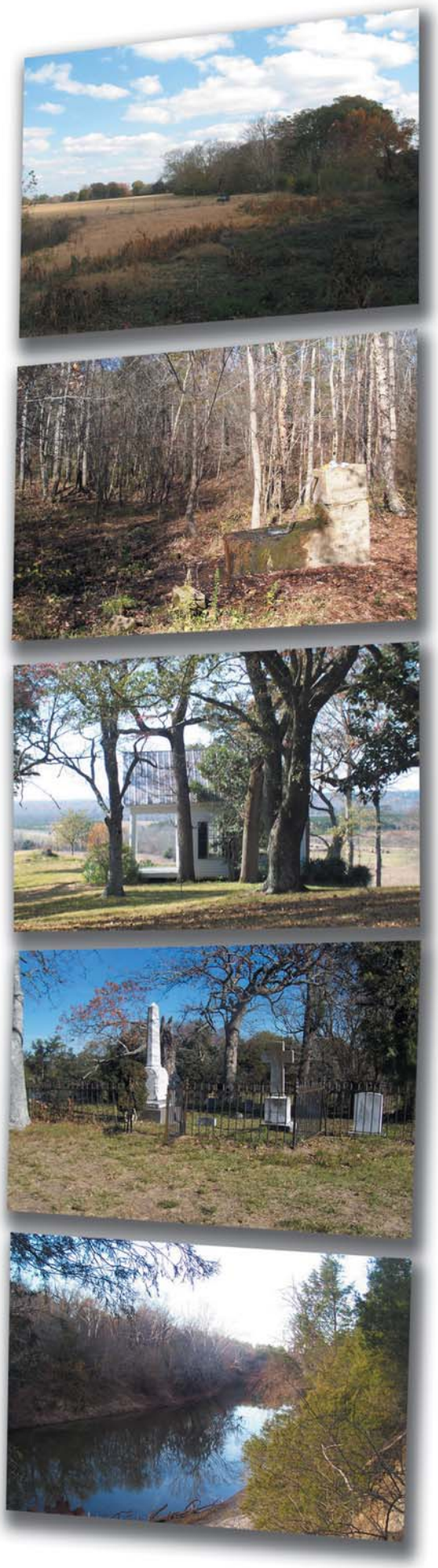
Agricultural: These conservation easements seek to keep productive lands producing and to protect important agricultural soils. Generally, these CEs feature a significant percentage of soils regarded as "Prime Farmlands" or "Soils of Statewide Significance" by the USDA Natural Resources Conservation Service (**http://websoilsurvey.nrcs.usda.gov/app/**). A 600-acre conservation easement in Alabama in 2007 had virtually 100% "prime farmlands" soils. Land that good simply should not wind up as a "house farm." Some of these properties have been in the same family for nearly two centuries. Others may have newer owners, but they are still people who know the great productive value of their land and want to protect it. Agricultural CEs also include management plans to ensure that agricultural practices on the properties will preserve and enhance the productivity of the soils that is the core value of the CE.

Historical/Cultural: Conservation easements can be specifically designed to protect historic or cultural resources. In general, our CEs don't specifically focus on historical/cultural resources but the protected lands provide a meaningful context for the historic resources found on the properties. Some of these may not be grand or imposing (such as those shown at right — a roughly made artesian fountain, a tiny schoolhouse, and a family plot) but they offer a glimpse of landowners' lives over the years and the harmony of these lives with the land.

Mosaics and the Future: Many of our donors blend all the above elements: their properties have one-part working forest, another agriculture, and a "Forever Wild/Special Natural Area," woven together with riparian corridor and historical/cultural components. We look forward to continuing protection efforts in 2008, including working with previous conservation easement donors to add acreage, as well as new donors recommended by previous donors or otherwise interested in protecting their land.

We hope that by this time next year, we will be celebrating reaching the 125k-acre mark. The more different lands we work to help protect and see protected, the more we understand how much more there is out there that really deserves special care. We appreciate your support in the past that helped get us this close to our current goals, and we hope we can count on you to help us reach future goals and push ahead even further.

The Alabama Land Trust and Georgia Land Trust are separate conservation organizations working under a common corporate umbrella, governed by the same board of directors with some staffing focused on Georgia and others on Alabama. Visit the two organizations' combined website at ***www.galandtrust.org.***



Alabama Forests Forever

Foundation Board Awards 2008 Grants

By *Rick Oates*, Alabama Forestry Association

Thanks to your support of the Alabama Forests Forever license plate, many valuable projects will be conducted this year which have the goal of teaching Alabamians about the importance of forestry to our environment and economy. What's more, this marks over ten years that money from the sale of this tag has been given to worthy forestry education projects. During that time, almost one and a half million dollars have been given to such important causes.

You know what this plate looks like… it has Alabama's state bird, the Yellow Hammer, on the right side. What you may not know is how the money from this tag is spent and why you should get a tag and help support the cause of forestry education.

If You Purchased a Forestry Tag in 2007, Here's Where Your Money Went…

Each year the forestry license plate provides grants to forestry education projects throughout the state. In fact for the last eight years we have awarded approximately $150,000 annually to great projects. These projects must support the two goals of the foundation, which are to:

1. Promote healthy and productive rural and urban forests, clean water, and abundant wildlife.

2. Educate the citizens of Alabama about the contribution that forests make to the environmental quality and economy of the state.

In December of 2007, the Board of the Alabama Forests Forever Foundation awarded $140,000 to several organizations that carry out forestry education projects across the state, including:

- **Forestry Awareness Week Now (FAWN):** This program, sponsored by county forestry planning committees, SAF Chapters, and other local organizations gives school kids, generally 4th graders, an opportunity to get out in the woods and see what forestry is all about. Students go to several different stations where they learn about tree identification, soils, products, wildlife, water, and many other topics. This is a great way to introduce students to forestry. It takes hundreds of volunteers across the state to organize this massive effort.

- **Chambers County Educational Programs for Landowners, Teachers, and Students:** The Chambers County Forestry Planning Committee brings in several expert speakers for different conferences throughout the year. These take the form of lectures, hands-on activities, and field trips. They host specific events for county educators, 10th grade students in the county schools, area landowners, and 3rd graders from across the county. Over 500 people each year are exposed to sound forestry education through this program.

- **Project Learning Tree & Teachers Conservation Workshops:** These two programs, well known in the forestry and education communi-

Taking a hands-on approach, both Project Learning Tree and Teachers Conservation Workshops are responsible for bringing good conservation education to teachers across Alabama.

ties, are responsible for bringing good conservation education to thousands of teachers across Alabama. Taking a hands-on approach, both of these efforts utilize volunteers to teach individuals who will impact generations of future voters about forestry.

- **Alabama 4-H Environmental Field School Watershed Project**: Through this grant, the Environmental Field School at the Alabama 4-H Center purchased equipment to enhance their Forest Ecology Class, providing hundreds of kids each year an opportunity to hike through a watershed and see the benefits of forestry to clean water and wildlife.

- **Butler County Natural Resources Youth Camp:** This three-day, two-night camp helps 6th graders in Butler County become more aware of Alabama's natural resources. Students get hands-on education in forestry, wildlife, tree identification, fire protection, soil and water conservation, and forest products from qualified professionals in the forestry community. The focus of the program is multiple-use management of our forests.

Grant Program Attracts Many Applications

This grant program is highly competitive, and these are just a few of the grants given of a total of $258,000 requested last year. A cross section of the forestry community evaluates the grants and makes recommendations to the Foundation Board for their approval. The selection committee includes the Alabama Forestry Commission, the Alabama Forestry Association, the School of Forestry & Wildlife Sciences, the Alabama Forest Landowners Association, the Alabama Chapter of the Society of American Foresters, the Alabama Chapter of the Association of Consulting Foresters, and others.

Funded programs such as the Butler County Natural Resources Youth Camp, FAWN, the 4-H Environmental Field School Watershed Project, and Chambers County student field trips give Alabama kids an opportunity to get out in the woods and see what forestry is all about.

Tag Sales & Revenue

If you purchase a tag for $50 above the regular cost of your license plate, the Foundation receives approximately $41 dollars. A portion of your $50 also goes to the Penny Trust Fund which is a special fund created by the Alabama Legislature for educational projects.

For that $50, you are also allowed to personalize your tag at no additional cost. If you currently have a personalized tag, you are already paying the $50, so a Forestry tag will not cost you any extra! Plus, you will get a tax deduction.

Tag	2005	2006	2007
Wildlife Federation	25,129	23,016	23,371
Environmental (Legacy)	15,741	13,416	12,577
Forever Wild	5,615	6,140	6,586
Alabama Forestry	**6,434**	**5,881**	**5,546**
Ducks Unlimited	5,225	4,505	4,654
ALFA	3,536	3,506	3,797

In 2007, among tags that support causes related to forestry and environmental issues, the Forestry license plate ranked fourth, substantially behind both the Alabama Wildlife Federation and Legacy.

How Can You Get in on the Action?

There are two ways you can get involved:

1) When you renew your tag in 2008, buy one of the great Forestry tags. Think about putting them on your company vehicles too. Remember, it's tax deductible!

2) Apply for a grant to support some of the forestry education projects you are working on this year. Grant applications will be available on September 1st, and grants will be awarded in January of 2009.

AFC Board of Commissioners Elects New Chair and Vice Chair

By *Elishia Ballentine,* Editor

Jerry M. Smith

As dictated by state law, election of new officers was the first order of business at the annual meeting of the Alabama Forestry Commission's Board of Commissioners on January 10th at the state forestry headquarters in Montgomery. The Board elected Jerry M. Smith of Vernon as the new Chairman and Melisa Love of Opelika as Vice-Chair. The two new Commission officers begin their duties immediately.

Jerry M. Smith is a Mid-Rotation Forester with Weyerhaeuser Company in Millport, Alabama, where he has been employed for 18 years. He is a 1989 graduate of Auburn University, with a Bachelors of Science degree in Forest Management. Prior to that he received an Associates Degree in Pre-Forestry at Tuskegee University. A member of both the Lamar County Forest Planning Committee and Weyerhaeuser Foundation Committee, Smith is also a member of the Vernon City Council. His other civic activities include serving as Vice President of the Lamar County Athletic Booster Club; Treasurer of the Vernon Pee Wee Football Program; and Representative on the Vernon Youth Basketball Program.

Melisa Love is self-employed as a consulting forester with Forestry Consultants, Inc., an Opelika company which she founded in 1984. Previously, she was employed as Senior Forester at Georgia Kraft Company (now MeadWestvaco) in Waverly. A 1976 graduate of Virginia Tech with a BS degree in Forest Resource Management, she also earned a Masters of Science degree in Forest Economics from Auburn University in 1995. Love is active as a member and officer in both the National and Alabama Chapters of the Association of Consulting Foresters. She has also served as a Trustee with the Bradley-Murphy Trust since 1996, where along with fellow Trustees she evaluates and approves funding for grants used in the Natural Resources field. Love's other professional and leadership activities include the Society of American Foresters; the Alabama Natural Resources Coordinating Council (formerly the Alabama Forest Planning Committee); Auburn University School of Forestry and Wildlife Sciences Extension Advisory Council; Longleaf Alliance; and the Alabama Forestry Association where she is not only a member but also a Tree Farm Inspector. She is a former member and officer on the Alabama State Board of Registration for Foresters.

Melisa Love

According to Alabama's State Forester Linda S. Casey, "Between Jerry Smith and Melisa Love they have nearly 40 years of experience in helping landowners and other users of Alabama's natural resources. Additionally, Jerry and Melisa support and are involved in their local communities. Both will be great assets as Chair and Co-Chair of the Commission."

Other members of the Alabama Forestry Commission include immediate past chairman, Don Heath of Hoover; Jett Freeman of Spanish Fort; Randy Gilmore of McCalla; Jerry Lacy of Fayette; and Kenneth Real of Detroit, Alabama. The seven-member board, appointed by the Governor, is responsible for setting policy for the agency.

Alabama Certified Burn Manager 2008 Training Schedule

CERTIFICATION COURSES

All courses are four days, 30 contact hours. All classes begin at 8 am and end at 5 pm each day. On the first day, students should arrive by 7:30 for check-in.

Students must pre-register for courses by sending a $50 registration fee (check made payable to AL CBM Course) to: Alabama Certified Burn Manager Certification Course, c/o Kent Hanby, 431 Dogwood Trail, Dadeville, AL 36853

Required Pre-Study: Students are expected to review the material at **www.pfmt.org/fire** in the history, science, and behavior sections. There will be a pre-study test on the first day of the course.

- **May 13-16, 2008 – Camden**
  Coastal Plain Alabama Cooperative Extension System Office
  Wilcox County
  1192 County Road 14
  Camden, AL 36726
  Ellis Landing Road about 2 miles north of Camden on Highway 28.

- **October 7-10, 2008 – Fayette**
  Fayette County Alabama Cooperative Extension System Office
  650 McConnell Loop
  Fayette, AL 35555
  (Mapquest: East off US Hwy 43 North)

CONTINUING EDUCATION WORKSHOPS

All workshops are one day, 6 contact hours, designed to satisfy the Alabama Certified Burn Manager continuing education requirement for re-certification; 8:30 am to 4:30 pm.

- **Wednesday, September 3, 2008 –**
  Clanton
  Alabama Power Company Conference Center (tentative)
  US 31 South of Clanton, Alabama,
  1 mile North of I-65 on east side

- **Wednesday, September 10, 2008 –**
  Andalusia
  LBW Community College
  Conference Room
  Hwy 84 East
  Andalusia, AL 36420-1418

SPONSORS:

- Alabama Forestry Commission (USFS National Fire Plan Funds)
- USDA NRCS (EQIP Funds)
- Alabama Cooperative Extension System

Special landowner support under EQIP: *If a forest landowner has signed up for NRCS prescribed burning support and is willing to receive training to become a Certified Burn Manager, the landowner may be eligible to "sign up" to receive a one-time payment of $375 upon providing proof of certification. This is a grant to cover registration, transportation, and lodging during the course. Detailed information may be obtained from county NRCS offices.*

For more information, contact Kent Hanby at **hanby@charter.net** or (256) 825-8593.

Answers to "Who Am I?"

(from page 23)

A. **Southern Pine Beetle** (*Dendroctonus frontalis*) – Infests the main bole of southern pines, usually loblolly and shortleaf pines.

B. **Ips Engraver Beetle** (*Ips avulsus, Ips grandicollis, Ips calligraphus*) – Infests the bole and stems of most southern pines (loblolly, longleaf, pond, sand, shortleaf, slash, and spruce pines).

C. **Black Turpentine Beetle** (*Dendroctonus terebrans*) – Infests the lower bole of most southern pines (loblolly, longleaf, pond, sand, shortleaf, slash, and spruce pines).

D. **Red Oak Borer** (*Enaphalodes rufulus*) – Usually associated with Oak Decline. Infests the bole and stems of red oaks.

For more information on these and other insects, visit the following websites: **www.forestry.alabama.gov**
www.forestryimages.org
www.bugwood.org
www.forestthreats.org/insects.

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Trees of Alabama

Poison Sumac

{Toxicodendron vernix)

By *Fred Nation*, Educator, Baldwin County

Poison sumac is a small tree with large, handsome leaves, masses of small white fruits that feed the birds, and brilliant orange and red fall foliage. These characteristics would make it an attractive, desirable ornamental, except for one problem: *Toxocodendron vernix* is one of the most toxic plants in North America, causing untold misery to thousands of people each year! It can be found scattered in swamps, marshes and wet forests throughout the eastern United States from Maine to Minnesota, south to central Florida, and westward to eastern Texas. In Alabama, poison sumac is most frequently seen in the southern two-thirds of the state, becoming rare or absent in the piedmont and ridge and valley sections.

Since it usually grows from a single stem to about 5 inches in diameter and occasionally reaches 25 or 30 feet in height, poison sumac is generally considered to be a small tree. The crown is open and irregular, with smooth, stout branches and a conical terminal bud about 1/4-inch long. The leaves are alternate, odd-pinnately compound, with a distinctive reddish or purple rachis (main stem). The leaflets are hairless, 7 to 15 in number, ovate, abruptly pointed, to about 4 inches long, with smooth edges. The bark is thin, gray or gray-brown, smooth except for a number of horizontal, raised corky lenticels.

An old folk name for poison sumac is "thunderwood," and old field guides placed it in the genus *Rhus*. The modern genus, *Toxicodendron*, is from two Greek words that mean literally "poison tree." The species name, *"vernix,"* is from the Latin and means "varnish," and therein lies an interesting story. The sap of poison sumac is clear, but upon exposure to air it thickens and darkens to an opaque black color. Despite the obvious dangers, a black fabric dye and a lustrous black varnish have been produced from the oxidized sap. In fact, the sap of the closely-related Japanese lacquer tree, *Toxicodendron vernicifluum*, is applied in many layers on wooden objects to produce authentic Japanese lacquerware.

Photos by Fred Nation

The toxic agent in poison sumac – and its two infamous relatives, poison oak and poison ivy – is urushiol, a sap phenol that causes the painful reaction called "allergic contact dermatitis." The sap is oily and non-volatile, which means that actual contact, usually from bruised leaves, is required to get the itch. The sap will adhere to smoke particles when burned, however, which can cause critical medical problems for some people, including swelling of the bronchial passages. Urushiol is very stable, and it is an incredibly potent substance. We can get the rash from indirect physical contact by untying our shoes after walking through poison ivy, by petting our dogs, from tool handles, or even from handling dried herbarium specimens that are many decades old. The misery of poison sumac is apparently limited to mankind. The fruits are foraged by birds and small animals, and the leaves are sometimes browsed by white-tailed deer with no ill effects.

Many states have recognized a state champion poison sumac tree, but *Toxicodendron vernix* is an open species in the current listing of *Champion Trees of Alabama* (available online, under the Publications heading, at **www.forestry.alabama.gov**). A specimen about 25 feet tall with a trunk circumference of 12 inches or so would be a very respectable state champion for this species, if you can convince a forester to measure it – very carefully!

ALABAMA FORESTRY COMMISSION

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