

ALABAMA'S

TREASURED FORESTS

A Publication of the Alabama Forestry Commission

Summer 2018

Message from the STATE FORESTER

After being in this role for over a year now, perhaps it's time to look back and see where we've been. We've accomplished a lot at the Alabama Forestry Commission, and I am proud of the men and women who work for this agency. Every day they invest their time with the goal of helping landowners protect and care for their land. They literally risk their lives when they fight a forest fire to protect your property.

Our staff has been through some tough situations this past year or so: a difficult wildfire season; very tight budgets and merit raise freezes; the death of a colleague, mentor, and close friend; as well as reorganization of the basic structure of the Commission and uncertainty of new management. They've literally been 'through the fire.'

I believe things are looking up at the AFC, and here's why . . . We've recently begun hiring new people to fill vacancies. When I became State Forester, the organization had 233 employees. Realistically, this is too small of a work force to do the task before us; but over the last year, through retirements and resignations, we dropped even lower to about 220. Over the last couple of months, we have hired four new foresters, two rangers, and brought back a retired forester to work in the northeast region. We also have four interns working with us this summer. On top of that, we have made offers to several others who will be starting in the next month!

As you meet these new people in the counties, please welcome them to the agency. Take the time to show them your forest and help them understand how important that legacy is to you and your family. When they see *your* love for the land, it will inspire them to want to help you manage it!

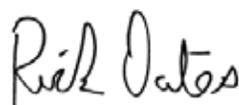
The agency is currently developing a replacement schedule for our heavy equipment and fleet of pickup trucks. The average age of our dozers is over 21 years and our pickup trucks, 11 years. Most of these trucks have between 150,000 to 200,000 miles. To start working on this problem, we are asking our field personnel to carefully evaluate their equipment. The oldest dozers and 'extra' trucks are being turned in and sold at auction. (Our guys like to keep an extra truck around because when their 'good' truck has 180,000 miles on it, it's likely to break down at any time! Who can blame them for that?) Anyway, we are beginning to get rid of expended property and, when possible, buy new equipment. We're in the process of buying two new dozers now. If all goes as expected with our finances at the end of the fiscal year, we will buy two more dozers and additional equipment and trucks in 2019. This doesn't mean the AFC is done with our financial difficulties, it just recognizes the fact that we **MUST** start replacing equipment in order to have dependable dozers if we are called to combat a fire on *your* land!

As I stated earlier, things are looking up for the Alabama Forestry Commission. The Legislature has been supportive of the agency, and Governor Ivey has been, and continues to be, a friend of forestry in Alabama. Be sure to thank your representative, senator, and others who help fund this agency. Also, thank our partners who have, and will continue, to go to bat for us: the Alabama Forestry Association, the Alabama Farmers Federation, volunteer fire departments across the state, and others!

Lastly, when you see our people at meetings, or in the field, let them know you appreciate the hard work they do to keep your forest – and all of Alabama's forests – safe, healthy, and productive.



Rick Oates, State Forester



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The Alabama Forestry Commission supports the Alabama Natural Resources Council's TREASURE Forest program. *Alabama's TREASURED Forests* magazine, published by the Alabama Forestry Commission, is intended to further encourage participation in and acceptance of this program by landowners in the state, offering valuable insight on forest management according to TREASURE Forest principles. TREASURE is an acronym that stands for **T**imber, **R**ecreation, **E**nvironment, and **A**esthetics for a **S**ustained **U**sable **R**esource.



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On the Cover:
*The fire tower (circa 1935) at
Flagg Mountain watches over
the beauty of Weogufka State
Forest. Read more about Flagg
Mountain on page 12.*
Photo by Cole Sikes

This publication is provided at no charge to the forest landowners of Alabama, with a circulation of approximately 14,000. Published three times each year, the magazine is filled with forestry information and technical assistance designed to assist landowners in making informed decisions about the management practices they apply to their land. Articles and photographs are contributed by AFC employees and other forestry or natural resources professionals.

Alabama's TREASURED Forests magazine is also available on-line! www.forestry.alabama.gov



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FOREST**
www.visitmyforest.org/

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WORTHY of a PRINCE



By Cole Sikes, Alabama Forestry Commission

In the town of Woodland in Randolph County, the Prince family owns much more than their 96 acres. They hold a property of their own, built for and by their family. This forest land contains beauty, wildlife, and enough memories to last a lifetime. It is this reason why Ronnie and Brenda Prince were recipients of the 2016 Helene Mosley TREASURE Forest Award.

During Ronnie's childhood, he frequently passed by the property because he lived a mere mile and a quarter up the road. Each time he would notice an abundance of debris lying among the trees because the previous owner, who operated a construction business near Atlanta, littered the property with faulty or old equipment and supplies instead of properly disposing of them. When Ronnie and Brenda purchased the initial 52 acres in 1997, they recall objects such as tires, gas tanks, cement blocks, a dump truck, track loaders, trailers, a school bus, and even a

crashed helicopter. The Prince family worked diligently with a local salvage company to clear the land and bring it back to its former glory. After seeing the progress made, they decided to purchase an additional 11 acres. They eventually acquired a final 33 acres and their management goals were in sight. The Princes had a total of 96 acres to call their own.

The property's timber consists of roughly 60 percent longleaf pine trees. The remaining timber population consists of hardwoods and a few loblolly pines. Ronnie established longleaf to be the dominant species; therefore, loblolly pines were removed from the initial stands. A stream flows through their forest along with man-made fire lanes that run in every direction through the property.

A three-acre portion of the land was cleared and designated for the Randolph County Classroom in the Forest. This 'outdoor classroom' is held every year in late spring to invite fifth-grade

“Leaving it in better shape than when you got it”



students from across the county, along with their teachers and parents, to learn about the forests around them. Being a retired teacher and sports coach for over 30 years, Ronnie has a passion for inspiring young minds, which is why he has held the annual event for over a decade. Each year about 50 or more students have attended. The children get out of their usual classroom environment and immerse themselves in the outdoor world surrounding them. During this field trip, students are taught about everyday products that are made from trees such as hairspray, pencils, and makeup. Then they are guided on a walk in the woods where they practice marking trees for removal as an actual forester would. Not only is everyone fed a meal, courtesy of the Princes, but they also indulge in homemade ice cream after lunch! It is most rewarding each year to give a child the opportunity – who normally wouldn't have such – to come outside and learn about their forests.

Their primary TREASURE Forest management objective is wildlife habitat enhancement. Ronnie and Brenda's son, Ryan, is a wildlife biologist for the Alabama Forestry Commission. Ryan has been helping his parents for years by providing guidance, advice, and assistance with the health of all forms of nature within their property. The superior condition of local wildlife during Ronnie's childhood had deteriorated by the time he purchased it in 1997. Prince believes that the change in wildlife quality was because of food supply. Growing up in Woodland, his neighbors planted row crops such as peas and corn. These crops provided an efficient amount of food for all surrounding species. Row cropping was gradually discontinued which, in turn, made the

wildlife population decline. With Ryan's method of planting warm and cool season crops for song birds, eastern wild turkey, and whitetail deer, wildlife numbers have increased over time.

The Princes usually use wheat, crimson clover, arrowleaf clover, and imperial white-tail clover blends as a cool season crop. Warm season plantings have included corn, soybeans, iron clay peas, and brown top millet. Nest boxes and martin gourds were placed in other plots as nesting opportunities for eastern blue birds and purple martins. Brenda also enjoys placing bird houses along the tree lines to promote a safe habitat for all songbirds in the area. Fruit-bearing trees including apple, pear, and thornless blackberry were also added at other openings. Normally, most vegetation will dry up in late summer from heat exposure, and die off during the coldest temperatures of winter. However, Ryan's planting schedule allows wildlife to have a source of food year-round, even in the most stressed times when food is scarcest such as late summer and the latter half of winter. Management results have been positive ever since implementing this planting strategy, with populations increasing.

The Princes' second TREASURE Forest management objective is timber production. Results of timber harvesting on the property prior to their ownership left much to be desired. There were areas where there were no trees, and others overstocked with advanced pine regeneration. Through the assistance of cost-share programs through the Natural Resources Conservation Service and the Alabama Forestry Commission, 45 acres of natural pine and hardwood stands were pre-commercially thinned. A herbicide application was also used in pine stands to help control hardwood sprouts from becoming an issue.

Prescribed burns are conducted in a two- to three-year rotation. Burning allows land to be thinned out with lost nutrients, such as organic matter, to be transferred back into the earth for future planting. Soil quality is improved immensely after this process. Fire has been utilized in all pine stands. The longleaf pines are burned on a two-year rotation to stimulate grasses and forbs within the stand. Remaining loblolly pines are burned on a three-year rotation for hardwood control and herbaceous plant

(Continued on page 6)



WORTHY OF A PRINCE

(Continued from page 5)

growth. Hardwood components are burned on a four- to five-year rotation.

Ronnie and Brenda believe that the primary philosophy for TREASURED forests is “leaving it in better shape than when you got it.” This is a simple, yet accurate statement for a TREASURED forest landowner to uphold. This objective is exactly what the Prince family has accomplished.

To this day, Ronnie and Brenda are thrilled by having land to share with their family. “I never thought I’d own it, but now I do, and that means a lot to me,” said Ronnie. When the Prince family has free time, they spend it on their land at every feasible opportunity. Family activities include hunting, riding four-wheelers, and exploring while discussing future land additions.

Above all, Ronnie and Brenda want longevity. As we all know, we are not meant to be here forever. Therefore, they want to ensure their family is ready and capable of managing the property for the future. Ronnie and Brenda plan to continue working with Ryan, and holding the Classroom in the Forest for many years to come. They hope to maintain this treasure, spending every moment possible there with loved ones. Their Woodland gem has been born anew, and that is what makes it worthy of a Prince. 🏡



Make Plans to Attend the 2018 Alabama Landowners Conference Oct. 14-16, 2018

Marriott Prattville Hotel & Conference Center at Capitol Hill
2500 Legends Circle, Prattville, AL 36066-7737

Pre-Registration Required



CONFERENCE EVENTS:

- ▶ Alabama TREASURE Forest Association Breakfast and Annual Meeting
- ▶ Luncheon & Awards
- ▶ Reception
- ▶ Banquet & Awards Ceremony

CONFERENCE TOPICS INCLUDE:

- ▶ Alabama Forests and Economic Development
- ▶ Continuing Your Legacy - Passing Your Land to the Next Generation
- ▶ Quality Deer Management
- ▶ Longleaf Fire & Density
- ▶ Threatened & Endangered Species

Plus LOCAL FORESTRY TOURS



For more information, contact ATFA's William Green
334-612-5235 | wmgreen@alfafarmers.org

www.TREASUREForest.org

FINDING TREASURE *With* OLD FRIENDS

A TREASURE Forest/Tree Farm Success Story



By Tim Browning, AFC Work Unit Manager

Sometimes it almost seems that behind each landowner visit is yet another success story. Over the last couple years, I have had the opportunity to visit and work with a past acquaintance, teacher, landowner, and Tree Farmer.

We all have those experiences throughout life, school, work, etc. that we just file away as good memories. When I was in seventh grade, I had an awesome science teacher . . . one of those teachers that leaves a lasting impression. Mrs. Steedley taught me a lot, not only about science, but also things about ‘life in general’ that I still apply today.

Answering the office phone one day, on the other end of the line I found myself talking with a young woman with whom I had attended school many years prior. She needed forestry advice, so after a brief catch up of the last 20 years, we were both excited to find that we would be working together soon. Her parents – one of which was the teacher just mentioned that I so dearly loved – wanted her to take on the role of land manager, so she needed an updated management plan. I was thrilled that I was about to have an opportunity to show my past teacher what I had learned.

Arriving early that morning, I found an elderly couple starting their day and just enjoying life. We sipped coffee and discussed their farm while the gentleman walked me through his property from the comfort of his living room, which of course overlooked most of his Tree Farm. At this point in their lives, he and his wife were passing along the responsibility of managing the place to their children. Their daughter and I left the house to tour the property, as she proceeded to show me every timber stand, property boundary, gate, unique feature, and historically significant spot that she knew existed for the duration of the morning. It was obvious that she had paid attention through the years as she

watched her father mold this place into what he desired it to be. We arrived back at the family home place around noon to enjoy lunch and ‘fill in the gaps’ about anything we missed, with her father of course.

Now, I know you are reading along in *Alabama's TREASURED Forests* magazine asking, what has all this got to do with TREASURE Forest? I hope that I can clear the air, so to speak, and begin to show you how everything works together for a common good. You see, I was still in college at Mississippi State, attaining my forestry degree, when I first noticed an article in the *West Alabama Gazette* depicting the Steedleys’ farm when it was first certified as a TREASURE Forest in 1995. Alabama Forestry Commission Forestry Specialist Karl Byrd had nominated this property in Lamar County as a TREASURE Forest. At the time, I didn’t have a clue what ‘TREASURE Forest’ stood for, but as my career would unfold, the meaning of the acronym would be revealed.

Today, TREASURE Forest is a recognition program exclusive to Alabama, whereby landowners are identified and acknowledged as managing their property for multiple-use, sustainable stewardship objectives that are important to them. Tree Farm is similar but differs in that it is a national certification program allowing a landowner’s property to be ‘third-party certified’ as sustainable. Internationally recognized, the certified wood can then be sold to mills trying to satisfy consumer desires for a product grown/produced in an environmentally sound manner.

The relevance of what we do comes to us in surprising ways sometimes. Here we were having lunch in an ‘outdoor classroom’ for two retired school teachers, while bridging the gap from one generation to the next about how to manage the ‘family forest.’ 🌲

New TREASURE Forest Certifications

Landowner	County	TF Number	Acres
Roy Barnette	Perry	2666	650
Graham Creek Nature Preserve	Baldwin	2664	480
Heath Boyd	Franklin	2662	70
Jett Freeman	Baldwin	2663	37
Alice Williams	Clarke	2665	120
Total Acres			1,357

Congratulations to the five landowners who recently earned their TREASURE Forest certifications! Alabama currently has 2,096 TREASURE Forest landowners with a total of 1,914,960 certified acres being managed under the AFC's TREASURE Forest program. 🌲

Coming this Fall . . .

HARDWOOD MANAGEMENT WORKSHOPS

Two hardwood management workshops are scheduled for the fall, one each in **Jackson** and **Lawrence** counties, intended to provide landowners with information that will assist them in making proper timber management decisions on their properties. Topics will include marking timber for sale, managing stands after thinning, tree identification, and avoiding impacts to federally-listed tree bats. There will also be a hardwood mill tour! Both workshops are sponsored jointly by the local County Forestry Planning Committees and Soil & Water Conservation Districts.

Jackson County
September 11-12

Lawrence County
October 10-11

FOR MORE INFORMATION, PLEASE CALL (334) 887-4573
USDA NATURAL RESOURCES CONSERVATION SERVICE

CLASSIFYING YOUR HARDWOOD TIMBER

WHEN PLANNING A PARTIAL HARVEST

By David C. Mercker, University of Tennessee Extension Forester

As hardwood forests develop, growth progresses through various stages. In a broad sense, this includes: stand initialization, stand development, and stand maturity. Timber harvesting often begins during the middle (stand development) stage, for three reasons: 1) timber is large enough to interest the wood industry, 2) timber has value, and 3) timber hasn't gone 'too far' and begun losing value.

Timber harvesting typically occurs either to thin premature stands (often called a partial harvest) or to regenerate mature stands (usually called a clearcut harvest). This article focuses on partial harvesting, specifically how to determine which timber to liquidate and which to hold for the future.

Sometime ago Putnam et al. (1960) developed four 'classes' of growing stock to aid foresters and landowners with the decision of identifying timber either for harvest, or for retention. These timber classes were developed with timber production as the primary goal, although the categories could be modified to suit wildlife, aesthetic, or other goals.

Some of the classes that follow use the phrase 'growing stock.' Think of growing stock as timber found in the forest that is not to be harvested at the moment, but is being held over either for future harvest, or to protect and enhance other timber that is intended for future harvest.

The process of classifying hardwood timber for partial cutting is involved, and landowners should embrace professional foresters for assistance. The consequences of handling partial cutting incorrectly are lasting.



PREFERRED GROWING STOCK:

Timber that is not yet chosen for harvest, but has very good potential for future harvest. Such trees are healthy and vigorous, are of desirable species with good form and grade, and have strong crown position (receiving adequate sunlight).

RESERVE GROWING STOCK:

Includes timber that is not to be harvested right now, is generally in good condition, but for various reasons does not meet landowner objectives. These trees may have a lower market value due to species or quality. Their retention is needed to maintain proper stocking for continued development of the preferred growing stock.

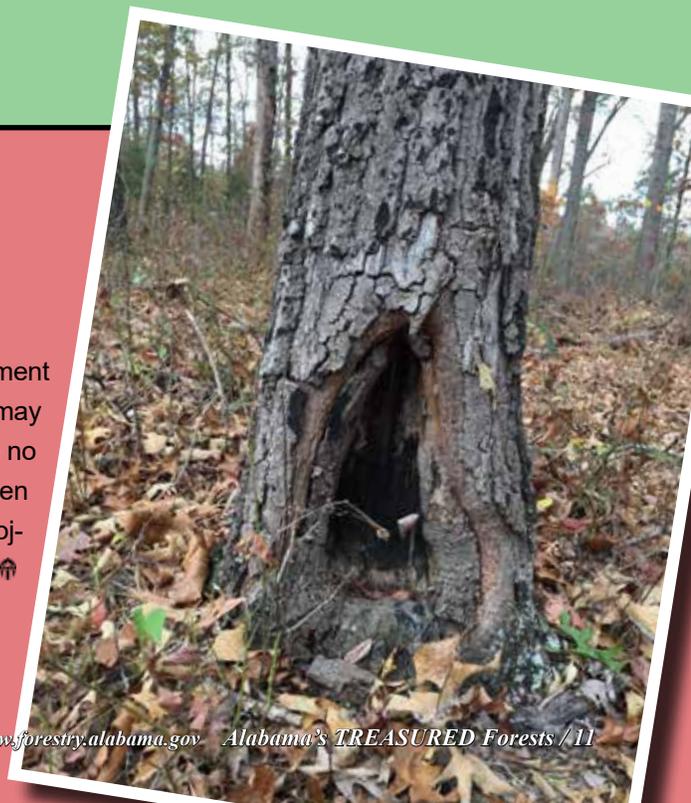


CUTTING STOCK:

Timber that is ready for harvest. Such trees are not likely to increase in value and may even decline if retained for future harvest. Meadow and Goelz (1999) summarize cutting stock as trees that “. . . may be in poor condition, may pose a significant risk of mortality or degrade in merchantability, or may be of a species that is unsuitable for the site or for management objectives. This class includes trees that are over-mature, damaged, diseased, poorly formed, or otherwise undesirable. They are likely to die or to suffer significant decay or degrade in the near future and are, therefore, expected to decrease in value if left after partial cutting.”

CULL STOCK:

Timber that has declined to the point that it cannot meet management goals. Sound cull stock can have some usable wood, and therefore may be harvested for lower value wood products. Unsound culls have no value for wood production. When cull stock cannot be salvaged, often the decision is either to deaden it (in a timber stand improvement project) or, if not too abundant, retain it for wildlife benefit. ♣





A FLAGG OVER WEOGUFKA

By Cole Sikes, Alabama Forestry Commission

As the sun rises each day over the hills of Coosa County, it reveals an icon that marks the beginning of the Appalachian Mountain Range. Perched over 1,100 feet above sea level, Flagg Mountain contains a history-filled gentle giant made of stone with walls over two feet thick. In the past, Flagg Mountain fire tower served as one of many ‘all-seeing eyes’ in state forest management efforts. It stands today at the southernmost peak of the Appalachian Trail within Weogufka State Forest as a tribute not only to the young men who built it, but also to those who served by providing protection of Alabama’s beautiful forests.

During the Great Depression, job availability was miniscule. In efforts to create more jobs in the 1930s, President Franklin Delano Roosevelt established the Civilian Conservation Corps (CCC). The corps’s main objective was to operate as a construction organization, building housing, monuments, and what was necessary at the time. Composed of 216 men from New York and New Jersey, CCC Company #260 was instructed to build a state park in the community of Weogufka, Alabama. Aspirations for the park were high in the imaginations of Capt. Guy D. Field, company commander, and Roy E. Parke, park superintendent. Original plans for Weogufka State Park contained picnic areas, a beach beside Weogufka Creek, swimming pools, 11 cabins for housing, a caretaker’s home, and an observation tower where vis-

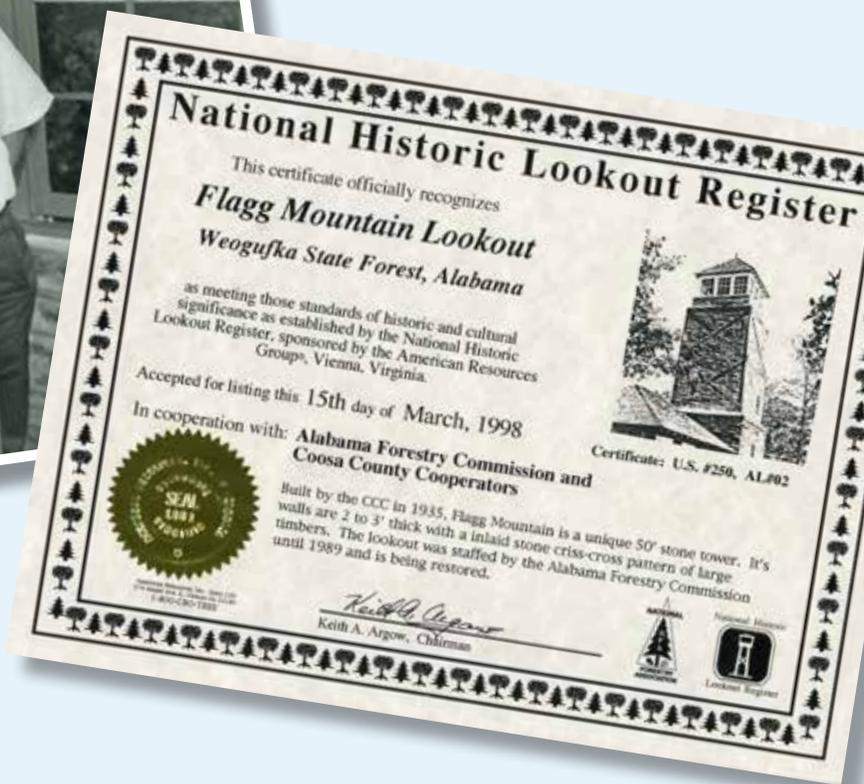
itors could see for endless miles in a 360-degree view. The tower was to be built using the very earth surrounding the mountain in Coosa County. Although the plans were expressed, the entire park was never completed. Construction ended in 1935, leaving the property abandoned. Within the next few years, the park and all its existing establishments were placed under the responsibilities of the Alabama Forestry Commission (AFC).

The AFC saw the lookout tower as a powerful tool that could be used for spotting wildfires. Flagg’s elevated views allowed someone to see across seven counties on a clear day. The tower had new purpose. For more than 40 years, its duties included extending communication from headquarters in Montgomery via radio antennas, and triangulating the source of forest fires by coordinating with other fire towers nearby.

To operate the radios, Weogufka resident Kate Prater stationed herself atop the tower. Employed by the AFC in 1950, she served as the sole radio relay for all north Alabama while keeping watch for forest fires. For 90 dollars a month, she dedicated her days to the protection of Alabama’s forests. As lookout, Prater often worked alongside Coosa County Forest Ranger L.D. Roberts. A Luverne native, Roberts served his beloved Weogufka turf for 25 years with the AFC. Each day on duty the duo operated as a well-oiled machine, using equipment and devoting themselves to Flagg Mountain and its surrounding area. Roberts’s forest ranger



[Above]: Kate Prater and L.D. Roberts working alongside each other in Coosa County



[Right]: Flagg Mountain's official certification on the National Historic Lookout Register

days were cut short in 1968 when he suffered a heart attack while fighting a wildfire at Stewartville nearby in Coosa County. He was one of few on-duty fatalities since the AFC's creation in 1924. Prater retired in 1989 after 39 years with the Commission.

Also in 1989, the tower was deemed obsolete when the AFC began utilizing aircraft to spot forest fires. The remaining cabins and fire tower was leased shortly after by the Coosa County Cooperators, a volunteer organization, to restore the properties to their near-original condition.

Since 1989, the 50-foot structure has rested in its original place, keeping watch over 240 acres in Weogufka State Forest. One decade after its decommissioning, Flagg was listed as number 250 of 1,000 towers on the National Historic Lookout Register in 1998 because of its aesthetics and former utilization by the Forestry Commission. It shares a spot on the register with only one other lookout location in Alabama.

Flagg Mountain also shares the beginning of the 335-mile Pinhoti Trail that runs from Weogufka to north Georgia, close to the Tennessee line. The Pinhoti is a section of the larger-in-scale Eastern Continental Trail beginning in Key West, Florida, and concluding in Newfoundland. To accommodate traffic through the trail, the Alabama Forestry Commission signed a memorandum of agreement with the Alabama Hiking Trail Society (AHTS) in 2003. This agreement gave the AHTS responsibility of maintaining the trails and remaining residential CCC cabins throughout the property.

Many hikers and visitors have documented their journey to the mountain in the 'guestbook' – a spiral notebook lying on a rustic table inside the stone structure connected to the base of the tower. Some stories date back decades. One entry mentions the writer's great grandfather work-



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A FLAGG OVER WEOGUFKA

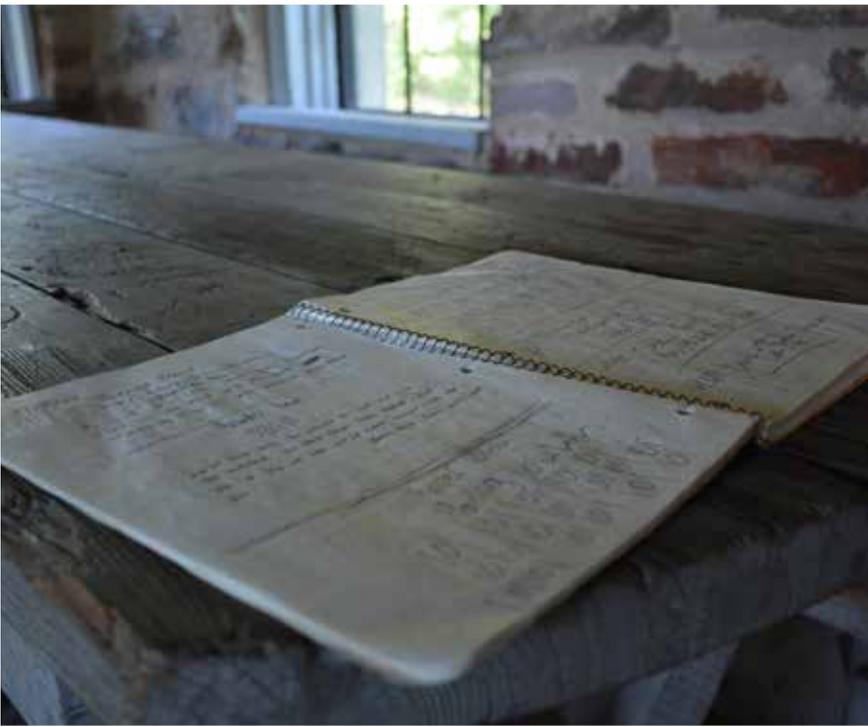
(Continued from page 13)

ing with the crew of CCC Company #260. Others include hikers traveling through Flagg Mountain from states as far as Maine.

With restoration efforts in effect and more hikers adding the Pinhoti to their checklist, the AHTS coordinated with the AFC to appoint a property caretaker. Meredith 'Sunny' Eberhart is a long-distance hiker and current caretaker of Flagg Mountain as of January 2018. Being a retired Florida doctor of almost 30 years, Eberhart wanted a change from his usual scenery in examination rooms. Always having a passion for the outdoors, he began hiking after moving to Dahlonega, Georgia, in the early '80s on Nimblewill Creek. He has now completed all 11 National Scenic Trails, recently including Route 66 running from Chicago to Santa Monica, California, in 2017. These feats earned him the nickname 'Nimblewill Nomad.' His ability to work with others and notoriety in the AHTS made him the perfect candidate for Flagg Mountain. Eberhart is elated to have this honor bestowed upon him, and would like to see hikers use the mountain as a hostel on their journeys. After likely completing his own last long-distance hike, he calls Flagg home.

All grounds are open to the public while its caretaker is present, and visitors can even stay overnight in the cabins just as Flagg's predecessors did. Although the tower can't be ascended as of this article's publication, the AFC plans to reconstruct the tower staircase and establish a bathhouse to accommodate guests in the future.

A glimpse back in time is the goal for the mountain's restoration. One might say that time even travels slower while experiencing history and adoring Flagg's scenic views. Dedication from many agencies, organizations, and individuals demonstrate how much this property is loved. The contributions from our hard-working Americans, past and present, are why Weogufka State Forest remains beautiful, its trails still wind, and its Flagg still flies. 🏠



Finding & Making Walking Sticks

A fun hobby for forest landowners



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

Walking sticks are great. They are especially meaningful when you find one on your own property and make it yourself. Sure, you can buy one at a state park, roadside park, or even a Stuckey's Pecan Shoppe. However, those store-bought sticks don't compare to the ones you find on your own property. The pecan logs from Stuckey's are worth the drive, though!

You can find a good walking stick just about anywhere in the woods, but I always look for a unique one with a vine wrapped around it. You know, the ones that look like a snake. I find most of my best walking sticks down in the hardwood bottoms along a river or stream. This is also where you find a lot of vines growing around trees that help give this curved or twisted look.

My favorite species to work with is green ash (*Fraxinus pennsylvanica* var. *lanceolata* (Borkh.) Sarg.). The bark comes off easily, especially in late winter or early spring. Green ash has a nice white or ivory color to it when it is sanded. Best of all, it is abundantly available in the river bottoms.

I try to remove the bark as soon as I cut my walking stick. If you wait too long – I found out the hard way – the bark of some species is very difficult to strip off. After removing the bark, I

let the stick dry a week or so before sanding or working with it. If the walking stick is a real prize or I don't want it to be ruined from splitting or cracking, I soak it in sugar water. This prevents it from cracking which sometimes occurs in the drying stage. I will not elaborate on this process of wood shrinking and cracking as it dries, because my ignorance would be revealed ever so quickly. Just take my word for it – the sugar water works.

Once the stick has dried, you can begin the carving or sanding process. Carving is a tedious and difficult task. I have decided to just allow the God-given beauty of my walking stick to be the focal point. (In other words, I'm not a good carver.)

To sand the walking stick, I begin with a coarse-grit sandpaper and follow up with a fine-grit sandpaper. After the sanding is complete, I go over the walking stick with a fine steel wool pad. This prepares it for a polyurethane clear-gloss finish. Three or four coats of spray are necessary for the best results.

Well, that's it. It took less than 500 words to tell you everything I know about making walking sticks, and I have been enjoying this hobby for over 30 years. Maybe you will find it helpful. I know you will find it fun! 🍷



Where there's Smoke, there's Life

the Role of Fire on Alabama's Wildlands

Part Two of a Two-Part Series

Salt Marsh by Will Underwood

By John McGuire, Vice President, Attack-One Fire Management

The first article of this series dealt with the role of fire in Alabama's major forest types. The grouping of these habitats was largely a first attempt to explain landscape fire within Alabama in simple terms. Even when making significant assumptions and grouping of habitats, there are many fire-maintained areas within Alabama that do not fit neatly into a defined forest listing and must be looked at separately. The following are some of those areas. They are not included second because they are less significant or less imperiled than other fire-maintained habitats in the state. Some of these areas are more ecologically significant, more imperiled, and more uniquely Alabama than those forests described in Part 1. The commonality with those forests described in Part 1 is that fire is tied to the perpetuation of these areas. Further, like those fires described in Part 1, multi-generational exclusion of fire has caused many of these areas to become largely uncommon (and forgotten) in our state.

Prairies

Prairies are perhaps the least understood of Alabama's historic habitats because so little of it remains today. The largest and most well-known is the Central Prairie Region (also called the Blackbelt Prairie or Canebrake Region) that once covered nearly 3 million acres of Alabama. Though capable of growing some species of trees, as the name implies, this habitat type was predominately treeless, earning it the local name of 'bald prairie.' Fire's role in historic Alabama blackbelt prairie is neither well studied nor well documented. However, the tall-grass prairie systems of the central U.S. are good examples to refer to for further understanding. Fire likely carried across these bald prairies every one to three years, continuing into the canebrakes adjacent to the numerous

streams in the region. Without appreciable fire, many of these blackbelt prairie areas grow up thick with eastern redcedar and their associated canebrakes languish.

Within the Coosa Valley in the Cleburne County area, and embedded within the larger Coosa Flatwoods, were once small pockets of bald prairie. The extent of the Coosa Prairies is not known. But like tallgrass prairies elsewhere, frequent fires kept woody plants from encroaching, therefore allowing unique plants such as the giant whorled sunflower (*Helianthus verticillatus*) to flourish.

Confounding the defining of prairies within Alabama were areas once known as 'wooded prairies.' These areas covered less of the landscape, were often colloquial [local] in naming, and even less understood because they are largely eliminated. However, of these, the Post Oak-Flatwoods of west central Alabama were perhaps the most well-known. This wooded prairie was on the southern end of the Blackbelt Prairie (the southern part of Sumter and middle of Marengo County once covering approximately 200,000 acres). Unlike the post oak-flatwoods growing on dry, sandy soils in the Midwest, this wooded prairie grew on what was locally called 'post oak clay.' Widely spaced post oaks allowed a great deal of light to reach the forest floor allowing groundcover plants to thrive; a prairie scattered with trees. Though the prevailing tree was post oak, shortleaf pine and blackjack oak were also found in lesser densities.

From the Post Oak-Flatwoods, a list of colloquial prairies can be generated. Some include the shell prairies that could be found in Wilcox, Choctaw, and Clarke counties. This soil type containing large fossil deposits was primarily treeless. Others include the Cowikee Prairie in Barbour County found on 'hog-wallow clay.' This prairie was sparsely scattered with longleaf pine and



Prairie by Joe McGown

hickories, with white and red oaks growing together (an unusual combination). Beeswax flatwoods also found in Barbour County could be found with a nearly pure overstory of black jack oak sparsely scattered over prairie grasslands.

Whether the prairie was treeless or populated with widely scattered, fire-tolerant tree species, fire played an important role in its perpetuation. Although Alabama's prairies are extinct functionally speaking, their legacy lives on through grassroots prairie restoration efforts. The restoration of fire will be needed to fuel this effort.

Embedded Glades

The term 'glade' (sometimes called flatrocks or cedar glades) is a generic term used to describe small pockets of largely treeless, rocky outcrops embedded within a larger, forested area. Glades



Embedded Glade by Rachel McGuire

in Alabama are largely a product of an underlying geology of limestone, sandstone, or (less often) granite.

In the thin soils and exposed rocks of the glades, only the hardiest of plants can survive. Nonetheless this largely inhospitable habitat contains unique communities of plants and lichens. In some areas of the glades, a thin layer of topsoil allows a unique assemblage of plants to establish such as Nuttall's rayless-goldenrod (*Bigelovia nuttallii*), dwarf blazing star (*Liatris microcephala*), or the Boynton's oak (*Quercus boyntonii*).

The glades themselves are fairly devoid of fuel, making the intensity and frequency of fire carrying across them typically unimpressive. However, fire from the surrounding woodlands is necessary to combat the encroachment of trees and shrubs from shading the glade's margins. Where fire can carry across the glades, it may help prevent the primary tree competitor (eastern redcedar) from taking over. Today, the best known are the Bibb County glades, some of which are managed by The Nature Conservancy. However, glades in varying forms of disrepair can be found throughout central and north Alabama.

Embedded Bogs and Seepage Slopes

Across many acres and counties of Alabama, bogs or seepage areas can be found embedded within a larger, woodland matrix. Pitcher plant bogs in South Alabama are perhaps the best known of these. Usually treeless (or low-density forested) areas, these grassy expanses (also called wet meadows or prairies) can host several species of carnivorous pitcher plants from the white-topped pitcher plant (*Sarracenia leucophylla*) to the purple pitcher plant (*Sarracenia purpurea*).

In Autauga and Chilton counties, a particularly rare pitcher plant called the Alabama canebrake pitcher plant (*Sarracenia alabamensis*) can be found growing in seepage areas on hillsides surrounded by longleaf pine forests. In these seepage areas, flames move quickly across slopes with the help of rivercane and other grasses to further its spread.

The green pitcher plant (*Sarracenia oreophila*), once historically abundant north of the Fall Line, is associated with a unique micro-habitat embedded within the shortleaf/mixed oak forest type. This micro-habitat historically spanned several geographic provinces in Alabama and until 1979, could be found as far south as Russell County.

These wetland areas where frequent fire occurred every one to seven years, kept shrub growth under control allowing these small, embedded bogs to thrive. Without fire, the areas become entangled with shrubs and trees subsequently shading out these rare, unique plants. The fact that most of Alabama's pitcher plant species are in significant decline speaks to the concurrent, precipitous decline of fire.

Embedded Bayheads

Unique wetland areas called bayheads (or baygalls), can often be found immediately downslope of longleaf or slash pine flatwoods. Such wetlands can be common features in southern Baldwin and Mobile counties. Bayhead areas are often dominated with trees such as laurel oak, sweetbay magnolia, swamp blackgum, swamp redbay, and slash pine. A dense midstory can

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the Role of Fire on Alabama's Wildlands
(Continued from page 17)

form consisting of fetterbush (*Lyonia lucida*), swamp titi (*Cyrilla racemiflora*), little-leaf gallberry (*Ilex glabra*), and dahoon holly (*Ilex cassine*). Often braided, Coastal Plain streams can be found originating from these areas.

Under typical conditions, fire moves from the pine flatwoods and only chips away at the edges of this habitat. It is at these edges where fire ebbs and flows, that rich biodiversity can be found. One of showier of the plants in these ecotones is the panhandle lily (*Lilium iridollae*) found in Baldwin, Escambia, Covington, and Geneva counties. Periods of extended drying that occurs every few decades can allow these bayhead areas to burn, resulting in high intensity flames that kill back both the trees and shrubs.

In reality, fire spreads in bayheads as a mosaic, leaving a spotted pattern of burned and unburned patches. Where trees and shrubs are knocked back, a rich understory of plants dominated by ferns and mats of *Sphagnum* may take advantage of abundant sunlight now reaching the forest floor. They'll maintain dominance until they are shaded out once again by the resprouting trees and shrubs. Sometimes fire can smolder in this habitat

only to re-emerge back in the pine flatwood habitat weeks or months later, allowing more ground to burn.

Embedded Canebrakes

This term typically refers to transitional areas between uplands and wetlands where the South's three species of native bamboo were once found in great abundance throughout Alabama. Scottish geologist Sir Charles Lyell stated in 1846, "we admired the canes on the border of the river between Tuscaloosa and Demopolis, some of which I found to be thirty feet high."

In 1818, John Audubon makes further note of the canebrakes, "the cane brake is composed of a dense growth of cane measuring twenty or thirty feet in height and packed so closely that a man's body requires to be forced between the shafts of cane."

The greatest concentration was found in Dallas, Lowndes, Marengo, and Wilcox counties covering up to 193,000 acres in that region. The role of fire in canebrakes is complex; however, fire moving through a canebrake is a memorable one, (again) best described by Audubon: "water collected in the separate joints explodes like a shell . . . we believed the Indians were advancing with volleys of musketry."

Fire every three to five years is ideal for spread and density; however, the extensive, mature canebrakes as described historically were likely burning much less often, perhaps every few decades.

Canebreak by John McGuire



Canebreak Pitcher Plant by Rachel McGuire





Atlantic White-Cedar

Atlantic White-Cedar Forests

Following the passage of the Ice Age, Atlantic white-cedar forests became constrained to the four southernmost counties of Alabama. The best examples of what remains is found along the sandy swamps of the Escambia and Perdido rivers in Baldwin County. Historic descriptions call these areas ‘juniper, titi’ swamps which accurately define this habitat niche: adequately wet areas. Similarly, the term ‘impassable swamp’ was often associated with them and described the unique role fire plays. As previously stated, frequent low-intensity fires tend to keep forests open and easily passable. Fire that returned every 35 to 200 years was of high intensity and considered ‘stand replacing.’ The unique relationship formed between fire and Atlantic white-cedar is that the seeds will readily re-sprout after their parent trees are killed by this periodic, intense conflagration.

Marsh

Marshes are often broadly defined and thus challenging to determine their historical extent. They are commonly identified as low-lying, frequently water-logged, treeless areas dominated by grasses, rushes, or sedges. By this loose definition, a once-forested area that was flooded by beaver dams next to a creek could be described as a marsh, if all the trees had died back due to past inundation. However, most of the true marshes in Alabama are those discovered close to or adjacent to the coast in Baldwin and Mobile counties.

Sawgrass marshes (*Cladium jamaicense*) were most often found in shallow, fresh-water, or brackish areas in these counties. Fires occurring on average every decade, historically kept these sawgrass marshes free of trees. In absence of fire, trees (such as aggressive colonizers like red maple) can invade and shade out the grass.

Salt-water marshes are those found in the coastal estuaries and typically dominated with species such as black-needle rush (*Juncus roemerianus*) and salt meadow cordgrass (*Spartina patens*). Fires historically fingered out into this habitat from the adjacent pine flatwoods, on average, every several years. In absence of fire

in these estuary marshes, plant productivity has been shown to decline with a buildup of thatch.

Most often, the ability of these marsh grasses to survive fire is tied to water depth and soil moisture at the time the fire occurs. However, one challenge in maintaining these coastal marshes is the persistent invasion of non-native plants. Of these, *Phragmites*, also known as common reed, has been especially aggressive in colonizing historic marsh areas. As this reed burns at exceptionally high temperatures, the combination of its intense combustion and rapid regrowth following a fire gives it an advantage over many native plants and animals.

Conclusion

Over these past two articles, the message that most of Alabama’s rich and unique natural currency is tied to frequent fire is one that hopefully resonates. Significant changes to the landscape have occurred over the past century in large part due to the absence of this process. However, the message of appreciating and perhaps trying to restore landscape fire to Alabama should be viewed more than a feel-good, left of center, ‘green’ message. Restoring frequent fire also has socio-economic value. The message of trying to remove fire from Alabama’s forests, creating a ticking time bomb of fuel accumulation in its place, is one that is gaining acceptance.

In short, we have merely replaced low-intensity, frequent fire with infrequent, high intensity fires to the peril of those who live in close proximity to the forest’s margins. Similarly, if Alabama seriously considers restoring much of its fire-maintained habitats, tourism dollars are likely to follow as people flock to hunt quail in the Blackbelt Prairie, chase songbirds in the shortleaf pine/oak woodlands, or horseback ride through oak/hickory forests manicured by fire. As a state, we met our objectives set forth in the 1930s to completely control malicious burning. With that done, now is the time to begin to apply restorative and beneficial burning in its place. 🌲



Panhandle Lilly by John McGuire

American Beech: Nature's Historic Drawing Board

By Johnna Franks, Winston County Forestry Specialist, Alabama Forestry Commission

American Beech trees . . . they have a story to tell. Their canvas tells stories of love, secret messages, trail paths, and recordings of important events. These stories were told through arborglyphs, also known as tree writing, by carving words or pictures into the bark of a tree.

The American Beech is also known as the 'Witness Tree' so marked for establishing property boundary corners and was described by the famous American poet Robert Frost as "truth's established and borne out, though circumstanced with dark and doubt" in his poem "Beech" in 1942.

Fagus grandifolia, the American Beech, typically grows to heights of 65-120 feet, stands tall and straight preferring shady areas with rich, moist soil. Its leaves are oval, 3-4 inches long, pointed at the apex and coarsely toothed. Beech trees produce a fruit known as beechnuts that are favored by wildlife such as squirrels and turkeys but can also be eaten by people. The nuts are known to be quite tasty once the husk and inner shell is peeled back, but it can take up to 40 years for the tree to produce them. The bark is light colored and thin, and the tree retains some leaves during winter which turn a paper ivory color as the season progresses.

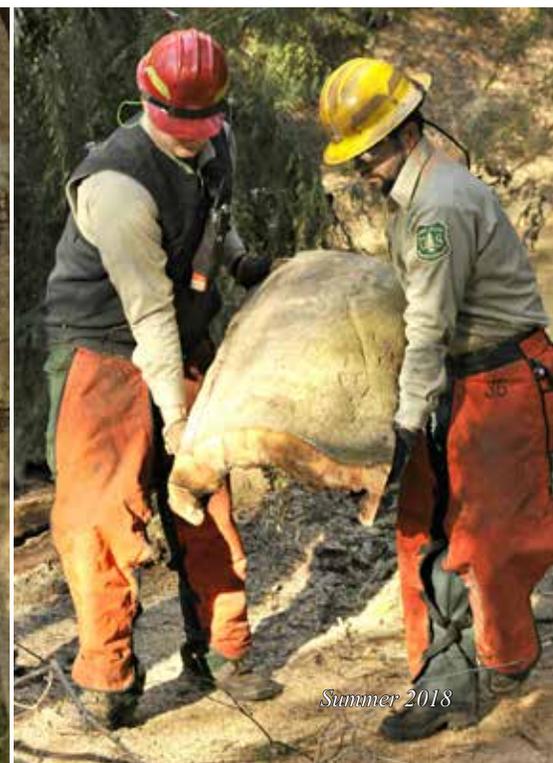
There are many uses of beech wood which include flooring, furniture, veneer plywood, and ties. The beech is also favored as

fuel wood because of its high density and good burning qualities. Beech leaves were also used as an alternative to tobacco by the German army in World War I.

A discovery was made deep in the Bankhead National Forest around 1992. The journey leading to this find began on a Forest Service road and followed a worn path until it disappeared into the brush. Trekking down into a steep canyon across streams, through the hemlock groves and beautiful green ferns, just beyond a massive 70-foot waterfall stood the 'Indian Bird Man,' carved into the smooth greyish-colored canvas of a beech tree. An odd carving it is . . . a bird-like stick man figure. This particular arborglyph has been found throughout the South, carved into rocks and trees with other American Indian markings. Yet nobody seems to know what this carving means. The Native Americans had no language or alphabet for many years so they relied on signs and symbols for communication.

In 2011 when a storm came through the area, another tree fell on and damaged the Bird Man tree. Through efforts by the Bankhead National Forest and a group of local volunteers who wanted to save the Bird Man carving, the tree was allowed to be cut. The Bird Man was preserved and is now on display at the Indian Oakville Mound Museum in Lawrence County for everyone to see and enjoy. 🌲

Damaged during a 2011 storm, the historic 'Bird Man' beech tree was cut so that the carving could be preserved





Urban Forest Strike Team Deploys to Jacksonville State University



By Will Liner, AFC Urban and Community Forestry Partnership Coordinator

On the evening of March 19, 2018, a devastating EF-3 tornado ripped through Jacksonville with winds up to 150 miles per hour. Thankfully, there were no fatalities, but the storm left behind a path of destruction up to 2,000 yards wide. Caught in the center of the tornado's track was Jacksonville State University (JSU). Several university buildings were severely damaged, lamp posts were snapped or bent, the softball field lights and outfield fence were torn apart, and many windows were broken across campus. Tragically, among the wreckage were hundreds of bent, broken, and toppled trees that were a signature of JSU's beautiful campus.

Only two days after the tornado, the Alabama Emergency Management Agency (AEMA) recognized the need for the Urban Forest Strike Team (UFST) and submitted a request through their web-based resource ordering system, WebEOC. After the Alabama Forestry Commission's (AFC) Urban and Community Forestry group traveled to Jacksonville and conducted an initial reconnaissance, it was determined that out-of-state UFST help would be beneficial and that the Jacksonville State University campus would be the area of focus for the team. David Thompson, the Director of Physical Plant at Jacksonville State University, worked with AFC Urban Forestry Coordinator Dale Dickens to organize the necessary logistics.

The Urban Forest Strike Team is a group of International Society of Arboriculture (ISA) Certified Arborists highly trained to provide disaster planning, tree risk assessment, and Federal Emergency Management Agency (FEMA) public assistance information to communities following natural disasters, including tornados. The need for this type of service was first recognized in the aftermath of Hurricane Katrina when multiple communities on the gulf coast severely underestimated the cost of tree and debris removal. During Hurricane Katrina recovery, it

was also recognized that many of the seemingly healthy trees left behind by contractors had critical structural damage and represented a hazard to the public, while many of the trees marked for removal could be saved by proper tree care practices. These observations ultimately led to the creation of the Urban Forest Strike Team in 2007, with support from the Southern Group of State Foresters and the USDA Forest Service. Since then, the program has grown to cover most of the eastern United States, and has responded to disasters including ice storms, floods, tornados, and hurricanes.

The UFST has three primary functions that are of value to a community following a disaster event:

1. To locate, mark, and document storm-damaged trees that are a threat to property and people,
2. Identify trees affected by the disaster, but that can be saved by proper tree care. This is an important step to speeding the recovery of a community's tree canopy.
3. To provide quick and accurate debris estimation for FEMA reporting and community planning.

These three functions save the community money, protect citizens from hazardous trees, and help the community start to rebuild the destroyed tree canopy. Trees are a defining characteristic of our communities and their presence is interwoven into our sense of place. For JSU the magnolias by the President's house or the stately loblolly pines within Trustees Circle served this purpose. For many of us, it may be a hickory at the house where you grew up, an oak tree with a rope swing, or a distinctive pine you used as a landmark.

After a disaster event, many of these mature trees are damaged or completely destroyed. In fact, while working at JSU a state trooper stopped one of our crews to talk about how different campus looked without the large trees and asked how long it

would take to regrow the lost mature trees. Unfortunately, it takes many years for trees to grow to that size, which is why it is so important to protect and save them following a disaster when possible. However, storm-damaged trees can be extremely hazardous and should be evaluated by an ISA Certified Arborist to make sure they are safe to leave.

The UFST deployment officially began on March 26, and crews started collecting data on the 27, a mere eight days after the tornado struck campus. This was the first time an Urban Forest Strike Team had been deployed in Alabama, and the first time in the history of the UFST program that a multi-state team began work within eight days of a disaster.

The team deployed in Jacksonville was led by UFST Team Leader Will Liner of the Alabama Forestry Commission and was comprised of five additional arborists: Dale Dickens, AFC; Joe Burgess and Seth Hawkins, Georgia Forestry Commission; as well as Todd Matthews and Tympel Harrison, Mississippi Forestry Commission. Abi Dhakal of the AFC was another vital member of the team, providing the crews with technical support for their data collectors and setting up the requisite mapping software. Dudley Hartel, the Science Delivery and Technology Coordinator for Urban Forestry in the USDA Forest Service Southern Region (Region 8), was also an invaluable resource as he helped Dale Dickens, Will Liner, and Abi Dhakal properly organize and set up the deployment.

Over the course of two days, the team collected data on 432 trees spread across campus and marked them for removal with orange paint, or for pruning with white paint. Data was only collected for publicly-owned trees with storm damage, so the team actually surveyed more trees than the 432 that appear on the map. For each tree assessed, the university was provided GPS coordinates, tree species, diameter of the tree, the damaged part of the tree, action (remove or prune) recommended by the crew, and what action (if any) FEMA will reimburse if a federal emergency declaration is made. At the time of deployment, no federal emergency declaration had been made, but AEMA officials, campus officials, and municipal officials were collecting information to make this determination.

Natural disasters can occur at any time and the Alabama Forestry Commission stands ready to assist the citizens of Alabama whenever and wherever these disasters strike. The Urban Forest Strike Team is one of many ways the AFC assists communities impacted by natural disasters. Chainsaw crews, wildland firefighters, and aerial photography are other ways the agency can assist communities in need. Municipal officials are encouraged to submit requests to the Alabama Emergency Management Agency when disasters impact the trees in their communities. They can also contact either Dale Dickens, Urban Forestry Coordinator at (334) 240-9360 or Will Liner, Urban and Community Forestry Partnership Coordinator at (334) 240-9306. 📍



Summer 2018

Gopher Tortoise Conservation at Geneva State Forest

By Ray Metzler, AFC Certified Wildlife Biologist/Threatened & Endangered Species Specialist

Gopher tortoise populations at Geneva State Forest (GSF) have grown in recent years as a result of habitat improvement efforts associated with longleaf pine restoration. While a density of 0.4 tortoises/hectare is needed to be considered a minimum viable population, the latest line transect data at GSF indicates there is a density of 0.27 tortoises/hectare. The staff has increased prescribed fire activities in recent years, making more habitat available to gopher tortoises. Hopefully these and future habitat improvement activities at GSF, and throughout the range, will lead to higher tortoise densities, possibly precluding the need to list the tortoise as a threatened or endangered species.

Ideally, gopher tortoises should be left alone, wherever they may be. However, on rare occasions they must be moved for their safety. Relocation efforts are very costly and are utilized only on a case-by-case basis when necessary. Since gopher tortoises are a protected species, they cannot be relocated without being held in an enclosure for six months to a year. Research has shown that when released outside of an enclosure, tortoises try to travel back to their home and are often victims of highway mortality.

Ericha Nix with the Division of Wildlife and Freshwater Fisheries (WFF) Nongame Wildlife Program approached the Alabama Forestry Commission to gauge our interest in constructing a second enclosure at GSF to act as a holding pen for gopher tortoises confiscated from individuals possessing them illegally. The U.S. Forest Service provided funding for materials to construct a 3.5 acre enclosure in an area with suitable habitat but low tortoise density. Then in February 2018, employees from AFC, WFF, and the Longleaf Alliance all participated in construction of the enclosure.

Two tortoises were released into the enclosure in April 2018, which were confiscated from an individual holding them illegally in Baldwin County. A prescribed burn will be conducted within and around the enclosure during the winter of 2018/2019 to burn through the silt fencing, allowing the tortoises to escape the enclosure and become part of the GSF gopher tortoise population in the spring of 2019. Tortoises enclosed for 6-12 months lose their homing instinct and tend to incorporate into the local population.

When several burrows located immediately outside of the new enclosure site were 'scoped' in February, no tortoises were seen. Five other burrows located in an area adjacent to the GSF headquarters were scoped as well, and three of them were occupied by tortoises. Fresh tracks outside the burrow indicated the tortoises had been active earlier in the day. This particular area is scheduled to be thinned in the near future. A clause inserted into the logging contract prohibits heavy equipment from being oper-

ated within 15 feet of a burrow entrance. Adherence to this clause minimizes the opportunity for causing the burrow to collapse.

Tortoise burrows are known to be utilized by hundreds of species, many of which are imperiled, ranging from crickets and invertebrates to small mammals and birds including bobwhite quail. Additional information regarding gopher tortoise activities in Alabama can be found at Outdoor Alabama. 📍



[Above Left]: Alabama Forestry Commission, Wildlife & Freshwater Fisheries, and the Longleaf Alliance combine efforts to insert silt fence into strategically dug trenches.

[Right/Top]: A 'scope' camera is inserted into a hole to potentially locate a gopher tortoise.

[Right/Bottom]: The camera detects the presence of a burrowed gopher tortoise.

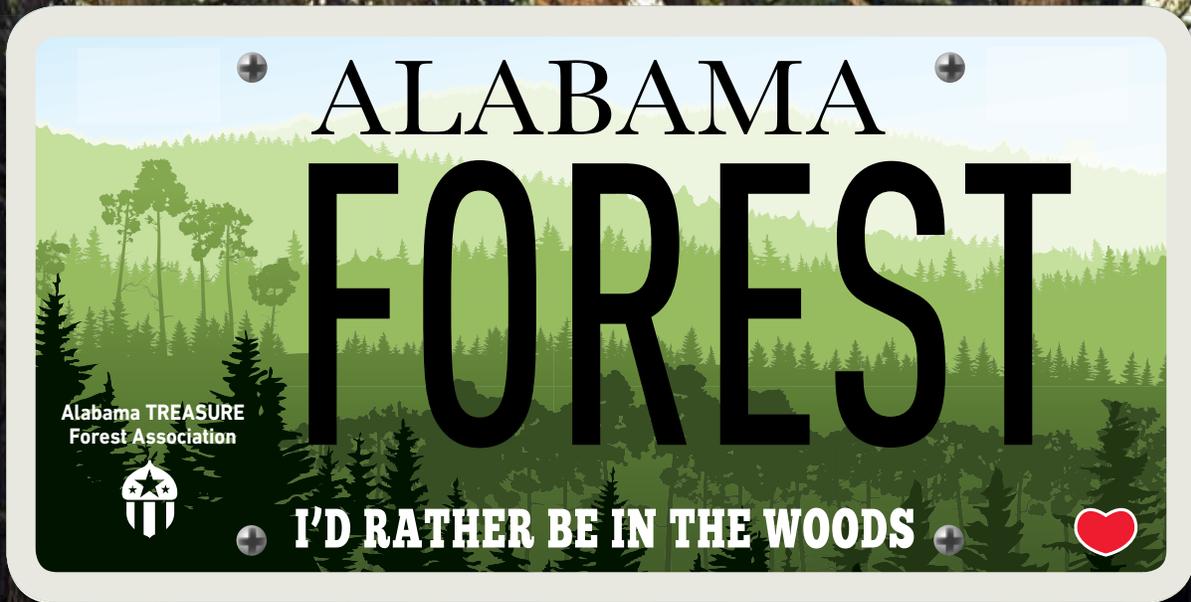


How You Can Help!

With approximately 95 percent of gopher tortoise habitat in Alabama in private ownership, the Alabama Tortoise Alliance needs your help with identifying and assessing gopher tortoise populations. Established to help protect the species as well as others living within its ecosystem, the Alabama Tortoise Alliance is a coalition comprised of public agencies and private organizations/companies such as the Alabama Forestry Association, Westervelt, Weyerhaeuser, and Rayonier.

Surveys of tracts with more than 50 tortoise burrows are needed to supplement data obtained from public lands. Private land surveys will be instrumental in demonstrating that populations across Alabama are viable.

A series of landowner engagement meetings will be held during the fall of 2018 to provide private landowners with a gopher tortoise status update and request their assistance in obtaining additional population distribution information. If you are a landowner with more than 50 burrows on your property and would like to attend one of the landowner engagement meetings, please contact Ray Metzler, Wildlife Biologist, Alabama Forestry Commission at telephone: (334) 240-9373 or email: Ray.Metzler@forestry.alabama.gov



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Preservation Or Conservation?

By Bruce W. Todd, Certified Wildlife Biologist, Alabama Division of Wildlife & Freshwater Fisheries

The words ‘preservation’ and ‘conservation’ are often used interchangeably. This may be because the term ‘preserve’ is often associated with food, as in preserving food through canning or freezing. Sometimes landowners assign the name ‘preserve’ to the family land that they hunt, fish, and use for recreation. Let’s look a little closer at the true meaning of preservation.

In land management, preserve means to leave the land untouched with no management. However, even that will bring about change. The choice to leave something alone and let nature take its course also brings about change. A cleared field, through natural succession, will grow a shrub layer pretty quickly and, left alone, will become a forest in just a few years. An old growth forest will begin to die a little at a time. As trees mature, they become susceptible to wind, pests, or disease, and will eventually die and fall to the ground. Seed from the forest plants, now exposed to sunlight and with more abundant water and mineral resources, will sprout and the natural cycle will begin all over again. So, you see, there is no such thing as ‘preservation’ in the strictest sense of the word. Often, those who manage a piece of land to sustain certain aspects of it may not be making use of the resources, but they are still conserving the merits of the land that they judge important.

Conservation, by definition, is the wise use of our natural resources. Our world is in a constant state of change. Man is always making some modification to the environment. An increasing number of people are moving out of the cities to suburban and urban areas. As a result, more natural habitat is being converted from forest, fields, and wetlands to home sites, shopping malls, and office complexes. Without conservation efforts, many of

our natural resources would be lost. Both forests and wildlife resources can be conserved with proper planning and practices.

Those interested in wildlife may utilize a conservation plan to make wise use of that resource. Utilizing the art and science of wildlife management is necessary to help keep wildlife populations balanced within the habitat. One example of an animal in need of management is the white-tailed deer. Without the benefit of hunting, the prolific deer would soon deplete the natural browse and food sources. Deer looking for alternate food sources would destroy crops, ornamentals, and gardens. Not only that, but deer health would decline, and disease and vehicle collisions would increase. Without intervention, there eventually could be a large die-off of deer and a reduction in the population.

Non-game animals such as songbirds also need to be conserved. They require protection and habitat management for their populations to be sustained at healthy levels. Many land management practices that benefit game animals also benefit other populations of less prolific non-game animals. Forest management practices such as prescribed burning, timber thinning, and small clearcuts that are maintained as forest openings may conserve and enhance habitats for deer, quail, and turkey populations, but also populations of gopher tortoises, woodpeckers, and songbirds.

Before undertaking conservation practices on your land, seek out the wisdom of other landowners, resource professionals, and wildlife managers to develop a plan that will best help achieve your conservation goals. Remember, preservation is virtually impossible because change is inevitable. With proper planning, you can guide change in a way that benefits both yourself and the resource. 🌲

MEMORIALS

Dr. John Mims 1920-2018

LEGACY

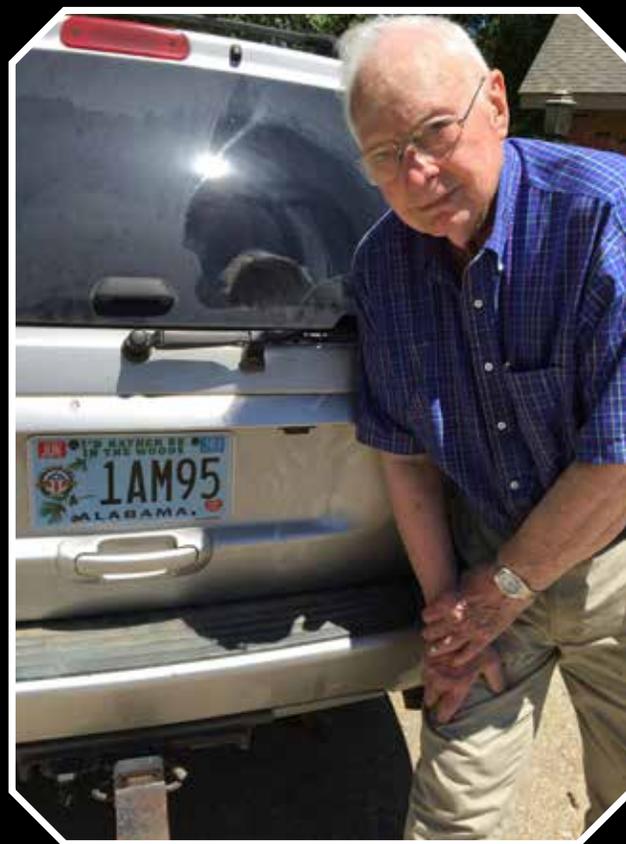
By Billy Rye, President, Forest Management Specialists, Inc., Florence, Alabama

The Merriam-Webster dictionary defines legacy as 'something transmitted by or received from an ancestor or predecessor or from the past.' No word could more aptly describe what Dr. John P. Mims left for his family, his community, and the forest landowners in Alabama.

Dr. Mims was born November 10, 1920, in Chilton County, Alabama, and was raised on a farm near Billingsley. He and his siblings enjoyed playing in the forests near their home. It was this place, most likely, that piqued his interest in nature and the great outdoors. John told me that forests taught him a lot about science. Once, he learned the aspects of physics such as tension, loading, and trajectory when he used a hickory sapling to catapult one of his younger brothers through the air with the greatest of ease. Rather than complain about his obvious physical injuries upon landing, his brother excitedly shared with his flight crew that he could see the skyline of a nearby town while airborne.

Eventually, Dr. Mims grew up and left the homestead for Auburn University. He had only completed one year at Auburn when the U.S. entered World War II, and he enlisted in the Naval Air Corps as a pilot. John served primarily in the South and Mid Pacific, where he flew supply planes to remote locations and conducted submarine patrols as well as search and rescue. Dr. Mims shared with me that during flight training, someone in his company knocked over an outhouse with the wingtip of his airplane, forcing the occupant of the structure to scramble for safety before her attire had been successfully secured. This incident was no laughing matter when the airman faced the ire of his superior officers. I always suspected that Dr. Mims was the guilty party.

Following the war, John returned to Auburn where he graduated, and then entered The University of Alabama School of Medicine. After earning his M.D., he completed a residency in



Dr. John Mims enjoyed his TREASURE Forest license plate, joking that it keeps women from wanting to borrow his car.

General Surgery at Vanderbilt, with additional training in obstetrics and women's surgery at the University of Pennsylvania.

Family members, Bitsy and Lawrence Beck, persuaded him to consider the Shoals area for private practice. Because he knew good hunting and fishing were nearby, he agreed and opened a clinic in downtown Tusculumbia in 1958 where he treated patients for the next 40 years. Perhaps no service was as enjoyable to him as his role on the Deshler High School sidelines as team doctor. For his 96th birthday, he was recognized for his service during halftime of the last home game and was made an honorary graduate of DHS.

Anyone who knew Dr. Mims was impressed with his vitality and longevity. After retiring from the medical field, he worked with students at a local trade school on woodworking, assisting with the construction of many pieces of furniture which were sold for fundraisers. At age 96, he was as interested in educating himself on current forestry and wildlife topics as most landowners are at age 36. Once, when he was 88, I watched him climb a 20-foot-high stack of lumber, and even rode around with him on ATVs when he was 91.

Dr. Mims was also a natural born leader, encouraging people to follow by setting an example. He was a deacon, a trustee for Samford University, and served on medical mission trips. He was recognized for his forest stewardship efforts with TREASURE Forest certification and the Helene Moseley Memorial TREASURE Forest Award, and was presented with the Lifelong Achievement Award from the Alabama Natural Resources Council, just to name a few. At the age of 86, he became a Certified Burn Prescriptionist and even conducted demonstration burns to educate landowners on the proper use of fire. He hosted multiple 'Classroom in the Forest/Forest in the Classroom' events to communicate the role of private lands and private landowners in benefiting all of the people of Alabama. It was his love for private land ownership that served as impetus to become a founding member of the Alabama TREASURE Forest Association.

Of course, his most important legacy is the love that he had for his family and his heritage. John loved to talk about his ancestors, and even had cuttings from several of the vines planted by his granddaddy's granddaddy during the 1820s on the original family homestead in Chilton County. His love for his family was evident

in our conversations as he never failed to mention his wife, Mary, one of his three children (Park, Rosemary, and Emelyn), or one of his beloved grandchildren.

I first met Dr. Mims in the fall of 1988 as a newly-employed Staff Forester for the Alabama Forestry Commission's District 9 office. While in this position, I coordinated the TREASURE Forest program for Northwest Alabama. John, who was already heavily involved in the various forest management programs and landowner groups in our area, could see how inexperienced I was and took it upon himself to mentor me. I would spend hours riding over his property listening to his vision for the land and the results of his forest management efforts (some good, some bad). He was always willing to share his experience with anyone who would listen.

Dr. Mims was more than just a client to me. He was a mentor, a hero, and a friend. It was his encouragement that gave me the courage to step out in 1996 and start Forest Management Specialists, Inc. His wisdom, charm, and love of the outdoors will be missed by all who were blessed enough to know him. However, his legacy will forever live on in the hearts and minds of those who were touched by his life. 🙏

Chris Jaworowski

1973-2018

By Dana Johnson

The wildlife community lost a great person when Mr. Christopher Lamar Jaworowski passed away on May 18, 2018, at the age of 45. Christopher, better known as Chris, was born in Montgomery on January 17, 1973. His passion for the outdoors at a young age led Chris to pursue a career in it.

After graduating from Auburn University with a degree in Wildlife Science, Chris was hired as the Lowndes County Wildlife Management Area Biologist by the Alabama Department of Conservation and Natural Resources (ADCNR). It is here where he fine-tuned his knowledge about feral swine. Sharing his expertise about these animals with thousands of people over the years, he became known as the state's 'pig biologist.' In fact, Chris was often asked to be a key-note speaker at feral swine and trapping seminars around the country.

Following a lengthy career with the ADCNR, Chris finally hung up his tractor keys and was then hired as a Regional Extension Agent by the Alabama Cooperative Extension System. In this position, he worked with individuals addressing

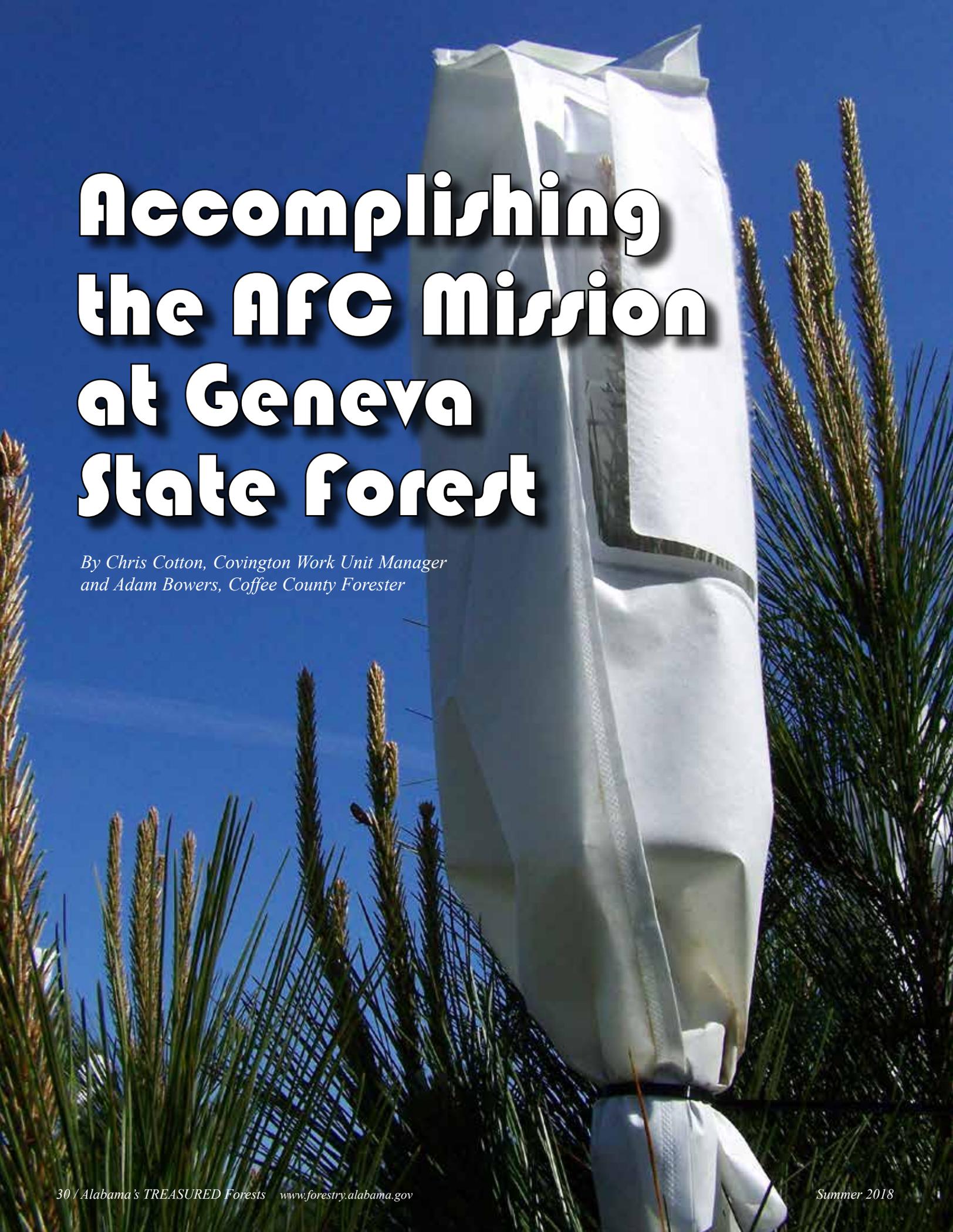


By Billy Pope/ADCNR

Chris Jaworowski, Wildlife Biologist

many wildlife issues, and started a feral swine trapping program for landowners.

Chris leaves behind his wife, Monica; two daughters, Jasmine and Sasha; mother, Sue Jaworowski; and sister, Dawn Jaworowski; along with many other family members. The family requests that any donations in his memory be sent to Buckmasters Youth Life Hunt Program at BADF Disabled Services, 10540 Daystar Drive, Tuscaloosa, AL 35405 or contact dsullivan@buckmasters.com. 🙏



Accomplishing the AFC Mission at Geneva State Forest

*By Chris Cotton, Covington Work Unit Manager
and Adam Bowers, Coffee County Forester*



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The Alabama Forestry Commission's mission is to "Protect the forests of Alabama from all harmful agents; Sustain our forest resources through service and assistance by employing professionally applied stewardship principles; and Educate the public about the value of our forests in ensuring both a healthy economy and environment." This three-fold mission is complex and challenging, taking hard work and dedication to accomplish. Our 'Genetically Improved Seed Orchards' at Geneva State Forest (GSF) are a perfect example of how we are striving to accomplish this mission.

Protection from Disease – In cooperation with International Forest Company (IFCO), the Alabama Forestry Commission conducts developmental breeding in the seed orchards at Geneva State Forest. The goal is to breed and develop trees that are more resistant to disease and pathogens. This process is highly labor-intensive and requires great care to ensure the best genetic crosses are made to produce the desired seedlings. These crosses are replicated over and over, which in turn produce millions of seedlings that are sold and planted across the state of Alabama, as well as neighboring states.

Sustaining our Forest Resources – Seeds produced from the developmental breeding are harvested and sent to be sown at the IFCO nursery in Pine Hill, Alabama. Without these high quality, disease resistant seedlings, landowners would face increased risks in sustaining a healthy stand. Also, landowners are more likely to reforest after a final harvest with advanced genetic seedlings due to increased profitability. These factors help ensure that the forest landscape across Alabama is sustained for future generations.

Educating the Public – Every year Geneva State Forest hosts several groups during the breeding season to showcase and explain the developmental seedling process. Landowners, consultant foresters, industry representatives, as well as civic leaders take great interest in the strides being undertaken at GSF to develop better seedlings. Educating these groups about available genetics allows them to make informed decisions as to what seedlings would best suit their particular management objectives.

Geneva State Forest is accomplishing not only the AFC mission, but also a mission to supply future generations with advanced genetic seedlings that are suited to take on ever-evolving challenges. 🌲





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Yellow Fringed Orchid

(Platanthera ciliaris)

By Fred Nation, Environmental Services, Baldwin County

Of the 52 native orchid species in Alabama (Alabama Plant Atlas), *Platanthera ciliaris* is one of the largest and most spectacular. The plants are two to four feet tall, with a large cone-shaped terminal raceme of 30 to 75 dark yellow or orange flowers. Flowers have a fringed lip, about an inch long. As they develop, the flowers have the curious habit of rotating 180 degrees to move this lip to the bottom of each flower, where it seems to function as a landing platform for large butterflies and other insect pollinators.

The range of yellow fringed orchid is very large, from Michigan to New England, south through all of the eastern states, west into Oklahoma and eastern Texas. In Alabama it occurs nearly statewide. Flowering is in late summer, mainly from July into September. The large bright orange flower clusters are easy to spot in pitcher plant bogs, freshwater marshes, moist pine forests, and other open, acidic sites.

Like many herbaceous plants that are found beneath pine trees, yellow fringed orchids are fire-dependent. They rely on periodic burns for nutrient release and to maintain the open, sunny growing conditions which they require.

Cherokee and Seminole Indian tribes collected and used yellow-fringed orchids for medicinal purposes. The roots were used to make infusions to treat intestinal issues. The tuberous roots were also used for snakebites, and the flowers were remedies for digestive problems.

Orchids are true flowering plants, and they produce tiny, nearly microscopic seeds with almost no nutrient reserves for germination. They have developed mysterious, special relationships with soil fungi, which assist with germination and nutrient absorption. These fungal relationships make terrestrial orchids, including *Platanthera ciliaris*, extremely difficult to transplant.

Yellow fringed orchids should be left wild and free, undisturbed in Alabama's glorious piney woods and pitcher plant bogs. Future visitors, including the swallowtail butterflies, will be grateful. 🌿



Photo by Fred Nation