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A Publication of the Alabama Forestry Commission

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On The Cover: This centuries-old longleaf pine still stands in Talladega National Forest. See story on page 18.

Photo by McKenzie Gay

This publication is provided at no charge to the forest landowners of Alabama, with a circulation of approximately 13,000. Published four 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







GoodFIRES www.goodfires.org/



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

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Message from the STATE FORESTER

ontinuing our look at the history of the AFC in recognition of our 100th anniversary, this quarter I want to focus on the job of a 'towerman.' Until the 1980s, when wildfire detection turned to utilizing aircraft, fires were mainly spotted from the many fire towers that dotted Alabama's landscape.

Back in the day, these towers were manned by 'towermen,' hired by the Alabama Forestry Commission. Though

they were called towermen, there were also many women who served in this role. What follows is information and exerts from a 1962 book, *Instructions for Towermen*.

Upon being hired, towermen were given extensive training that consisted of several days of group training and additional on-the-job training. In some cases, if the new employee was not acquainted with the territory, he or she was given several days of exploration in the area to be covered by the tower. Among other topics, the training consisted of map orientation and reading, familiarity with local landmarks, the precise method of reporting fires, the proper use of telephones and radios, peculiarities of the local situation in regard to smoke and wind, tower care, and fire reporting.

Some of a towerman's responsibilities include:

- 1. The towerman is the "eyes" of the fire control organization. He is relied upon to see smoke clearly and report it accurately. Quick discovery saves time in the "get away" and accurate reporting sends fire fighters directly to the fire.
- 2. The American flag shall be flown at all times when the towerman is on the tower. If the flag is flown when the towerman is not on the tower, it will be grounds for dismissal. Absence from the tower without authorization will be grounds for dismissal.
- 3. Reading on the tower, other than official papers or instructions, is not permitted. This interferes with the constant watchfulness which is necessary.
- 4. The towerman will keep his tower and the grounds clean and in orderly condition at all times.

Towermen were required to keep a daily diary. Below is a sample from June 1, 1962.

- 8:30 a.m. Entered on duty at Oak Knob Tower; reported in to dispatcher; telephone line in good working order; visibility good; checked orientation of map.
- 8:40 a.m. Tested line to Pine Mtn. Tower by calling Towerman Rodgers; line clear.
- 9:00 a.m. Sighted smoke; azimuth reading 35 in approximate place where J.W. Smith notified ranger that he expected to burn brush; reported smoke and checked with dispatcher, who stated it was an authorized fire.
- 10:00 a.m. Patrolman Jim Green and crew of 3 men came to tower standing by on orders of ranger because of high hazard; men started repairing tools and checking truck.
- 10:45 a.m. Sighted smoke; azimuth reading 70; fire spreading; reported to dispatcher.
- 10:55 a.m. Dispatcher called to request Patrolman Green and crew be sent to fire which was also sighted by Pine Mtn. Tower; fire located near Mt. Olive Church.
- 12:00 p.m. Smoke going down; fire apparently well under control.
- 12:30 p.m. Patrolman Green called on his portable phone; fire out, is on way back to tower.
- 2:00 p.m. Light general rain; reported fact to dispatcher.
- 3:00 p.m. Rain stopped; reported to dispatcher who ordered Patrolman Smith and Crew to cut brush along telephone line to Pine Mtn. Tower; ordered me to help Smith.
- 3:15 p.m. Closed tower and started to brush out line.
- 6:00 p.m. *Quit for the day.*

I hope you find this look at an AFC Towerman's job interesting and enjoyed this unique piece of Alabama history!



Rick Oates, State Forester

Governor Kay Ivey

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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 Timber, Recreation, Environment, and Aesthetics for a Sustained Usable REsource.

By McKenzie Gay | Communications and PR Specialist | Alabama Forestry Commission here are some places where roots run deep. . . places ment. For years, Jennings has been in the forestry business and

here are some places where roots run deep. . . places that just mean more. Mr. Bobby Jennings knows all about that. As the 2011 Helene Mosley Award recipient and owner of a TREASURE Forest in Tallapoosa County, Jennings set his mind on digging into the heritage of the land in which he takes so much pride.

Mr. Jennings purchased 237 acres of land on Doss Mountain back in 2009. Consisting of all-natural mostly hardwoods, he claims it is the most challenging piece of property he has ever owned. However it's land that he has fought to maintain and keep together for the purpose of its profound heritage, because a portion of it originally belonged to the Langley family. To say that he has been successful in this journey would be a vast understate-

ment. For years, Jennings has been in the forestry business and kept this beloved land thriving, but his success story is a bit more extensive than being an accomplished landowner in terms of harvesting and growing. Bobby has also been triumphant in savoring a deep-rooted heritage that traces back through many generations.

The story dates back to 1762, when Mary Anne Malone was born in Virginia. Her family had previously set sail to America from Ireland. At the ripe age of 15, Mary Anne married a soldier in the Revolutionary War, Alexander Haralson, and the two of them raised their family in South Carolina. One of their daughters, Tahpenese Haralson, eventually became espoused to Mr. John Langley. The two of them can be credited with creating the 'Langley Legacy.'

(Continued on page 6)

The Langley Legacy

(Continued from page 5)

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Land Conveyance of 196 acres to Manning Langley

Records indicate that Manning and Tahpenese rode horseback and by wagon all the way from South Carolina to Alabama in 1838. They purchased and settled on 196 acres of land along the banks of Hillabee Creek in Tallapoosa County.

If a place could talk, one can only imagine the stories that this land in Tallapoosa County would tell. Manning Langley and his wife, Tahpenese, had 11 children – nine boys and two girls. Six of the Langley boys joined the Confederacy and served in the Civil War, each of them experiencing their own grueling trials and spine-chilling encounters in several battles, yet they all returned back home – sweet home Tallapoosa County. Although Mr. Langley passed away and was buried before the boys were discharged from the army, his decision to move to Alabama and buy land had laid a foundation for a legacy that still endures to the present day.

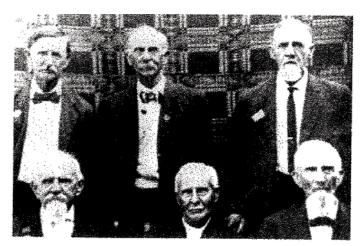
This is the same land that would later become part of the property that Bobby Jennings and his wife, Marilyn, owned and adored. Pieces of that land have remained in the Langley family for almost two centuries – 186 years to be exact – from the time the Langleys settled on the land, until present day, as Marilyn Langley Jennings, was the great, great, great granddaughter of



(1805 - 1896)

Tahpenese and Manning. Ms. Marilyn passed away in the summer of 2021, but not before Bobby brought the Langley Legacy to completion. Although the two of them had not always owned every acre of land that was owned by the 'original' Langley family, Bobby purchased the remaining bit of acreage (including the homeplace and family cemetery) that would complete the legacy just a few years before his wife died.

Before this dream was completed, Jennings had steadily purchased more and more acreage throughout the years. He planted hundreds of thousands of loblolly pine seedlings on approximately 700 acres. After years of growing trees, he set out to become an expert in prescribed burning. He attended seminars, trained, and learned everything he could about controlled fire. He invested



Langley Brothers



in longleaf pines as well, knowing that they had the ability to be burned on a regular basis and were more quail friendly. Timber production for income was the primary objective of the land, with most of the work being accomplished solely by Jennings himself. His second forest management objective was focused on wildlife, with an emphasis on quail specifically.

Over the years, Jennings has worked hard to ensure that his investment in the land was worthwhile. Not long into his time as a landowner, he had two goals that he yearned for and set himself to achieve: to one day become a certified Tree Farm and to be selected for the Helene Mosley Award. Bobby Jennings accomplished those goals with flying colors! Not only did he achieve Tree Farm status and earn TREASURE Forest recognition for the property, but he also was named the 2008 Tree Farmer of the Year, qualified as one of three Southeast Region finalists for Outstanding Tree Farmer of the Year at the national level in 2009, and was a recipient of the 2011 Helene Mosley Award.

It is evident that Bobby Jennings has created his own legacy that will continue to live on. Not only has he been an accomplished landowner, but he has also made it a mission for himself to pass the torch...to share the knowledge and inspiration that was instilled in him many years ago when he began stewarding the land. Jennings takes pride in his work and the value of his property, and he has transmitted his own wisdom and motivation to other landowners through hosting tours and prioritizing the education of other proprietors.

Bobby has expressed his abundant wealth, not necessarily in physical dollars, but rather in personal achievement, support from family and friends, and in the opportunity to devote so much time to something he has been passionate about for quite some time. devotion to a rich family legacy...and to a true TREASURE.

Author's note: Much of this historical information and photos came from *The Heritage of Tallapoosa County, Alabama*.





Bobby Jennings, wife Marilyn Langley Jennings, with their family



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LET'S DO THE WORK.



By Tim Browning | Registered Forester | Work Unit Manager | Alabama Forestry Commission

rom Georgia to Mississippi, and Tennessee to Florida,
Alabama is a beautiful state. Majestic mountains display
magical colors of foliage in the fall in the north, and
sandy beaches are dampened by the Gulf of Mexico in
the south. Alabama is also blessed with natural resources, with
water and timber being two of the most abundant. Although timber provides our state with a robust economy, most landowners
do not maximize the potential values of their woodlands.

Alabama is comprised of more than 23 million acres of forest land. These forests provide habitat for wildlife such as deer, turkey, squirrels, rabbits, waterfowl, and even non-game species such as songbirds and a host of other animals. Forests are responsible for cleaning the air, filtering the waters, providing topsoil and nutrients, storing carbon, and providing areas to live or develop into home sites. The forests also provide an area to recreate, whether it be for hiking, horseback riding, ATV/UTV trails, hunting, fishing, camping, or viewing wildlife.

Alabama landowners have a resource in the Alabama TREA-SURE Forest Association (ATFA). A primary goal of the Association is to teach others about responsible forest management. In the fall of 2013, ATFA enhanced these efforts by partnering with the largest landowner organization in the state, the Alabama Farmers Federation (Alfa). This affiliation leverages Alfa's grassroots organization of over 350,000 members, as well as its strength in the public policy, research, and promotion areas to achieve ATFA goals.

Started in 1974, the TREASURE Forest Program locates and publicly recognizes forests that men and women manage for all the resources which the land is suited. The name TREASURE is an acronym for Timber, Recreation, Environment, Aesthetics, Sustainable, Usable, Resource. Anyone interested in having their property recognized as a TREASURE Forest must follow a process for doing so. Someone must first submit the landowner's name to the county forester, or any local representative of ATFA or the county forestry planning committee. This can be done by the landowner or someone else. Nomination forms are available at a local/county Alabama Forestry Commission (AFC) office or other cooperating agency, or online at treasureforest.org/certification/treasure-forest-nomination.

Recognizing a TREASURE Forest begins with a landowner identifying his/her primary forest goals and or objectives. The property must have a written forest management plan that may be drafted by the landowner, an AFC forester, a consulting forester,

(Continued on page 10)

TREASURE Forest Recognition

(Continued from page 9)



a stewardship forester, or an industry forester. The plan itself would include maps, stand descriptions, and recommendations to address such as fire, insects, disease, Best Management Practices, special sites, wildlife, and other areas of conservation.

The property must be inspected by a registered forester and a wildlife biologist, which will be arranged for you at no cost. The nomination and inspection report must be submitted to the stewardship program manager of the Alabama Forestry Commission. The nomination will then be reviewed by the TREASURE Forest nomination review committee. Once approved for recognition, the landowner is contacted, and a time will be arranged to make a public presentation of certificate and signage denoting the property does qualify to be recognized as a TREASURE Forest.

Two things of note: After 10 years, the forest management plan must be renewed. Landowners can contact their local/county Alabama Forestry Commission office for this service. Also, if the property changes ownership, it will need to be recognized under the new owner's name.

TREASURE Forest recognition is important for several reasons. First, it is a prestigious acknowledgment that the landowner is managing his or her property in a way that promotes sustainability of the natural resources. It may also serve as way to help promote the sale of their timber or fiber at the time of harvest. Recognition is also a way to share ideas and things learned along the way with school children, other like-minded landowners, and yes, even natural resource professionals.

Through the efforts of these dedicated TREASURE Forest landowners, the next generations will have a chance to enjoy the multiple benefits of Alabama's forest land for years to come.

New TREASURE Forest Landowners

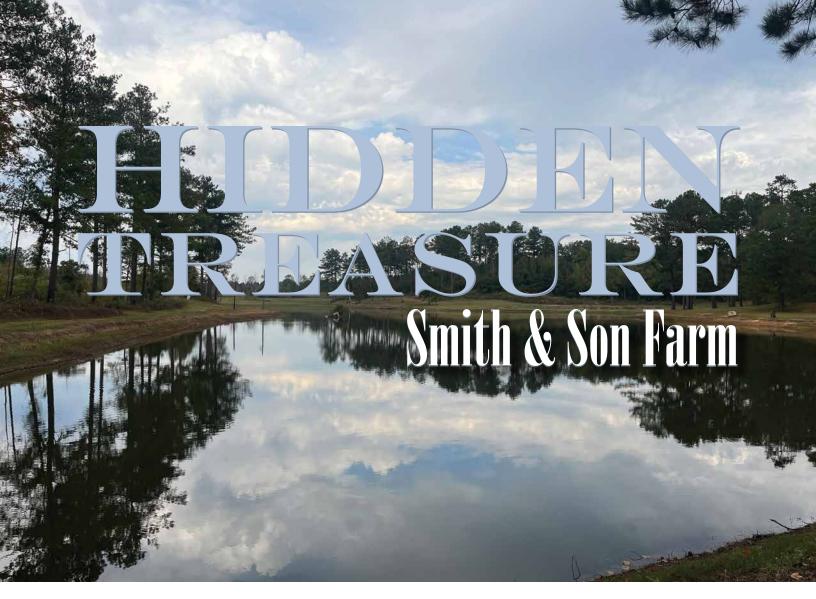
reated in 1974 by the Alabama Forestry Commission under the vision of former State Forester Bill Moody, TREASURE Forest designation is earned by private forest landowners who affirm the principles of multiple-use forest management. It is this forest landowner recognition program that inspired the national Forest Stewardship Program which began in 1991. TREASURE is an acronym for Timber, Recreation, Environment, and Aesthetics for a Sustained Usable REsource.

Congratulations to these new TREASURE Forest landowners!

Landowner	County
Robert Beadles	Macon
Jay David	Houston
Carter England	Jackson
Norman Lowery	Butler
Martin Marne III	Limestone
Derek Peterson	Henry
Wade Stepler	Houston







By Samuel Boswell | Registered Forester | Alabama Forestry Commission

ocated in the heart of the Black Belt in Greene County and just a few miles north of Eutaw, Alabama, sits the 356-acre Smith and Sons Farm. Consisting of two 5-acre fishing lakes, approximately 50 acres of natural-growth hardwoods, approximately 280 acres in pines, and a historic cemetery, this TREASURE Forest property is managed by four of the five remaining Smith brothers: Andrew Smith, Jr., Scott Smith, Hodges Smith, and Carl Smith. Jimmy Smith is now deceased. The farm has been in the family since the 1800s.

The Smith family can trace the history of their property and family back to a man named Abram Smith, a former slave who spent his life farming this land. Eventually, he became a free man and began to lease and row-crop the property until he was able to purchase it for himself. The land has remained in the Smith family since then. In 1970, Andrew Smith, Sr., father of the five brothers, had the estate incorporated as Smith and Sons Farm. It won the prestigious *Helene Mosley Memorial TREASURE Forest* Award in the year 2000.

Since the farm's official establishment, the Smiths have focused the forest management of their property on aesthetics, wildlife production, and timber, including about 150 acres of pine stands they recently harvested. The brothers have been managing the lakes and wildlife openings for recreational hunting and fishing, selling leases for both to help generate income for the property so that the next generation will have an inheritance. They have also maintained a historic family cemetery that has been on the property since the 1800s.

Smith and Sons Farm remains a beautiful, well-managed place with a rich history where you can enjoy some quality hunting and fishing while reconnecting with nature.



www.forestry.alabama.gov Alabama's TREASURED Forests / 11



VOLUNTEER FIRE DEPARTMENTS

provide a necessary community service

By Bill Carlisle | Southwest Region Fire Specialist | Alabama Forestry Commission

hen Americans need emergency services, we call the universal emergency number 911. A dispatcher then answers and directs the appropriate response. The person in distress expects emergency services to rush to their need. In the case of a 911 call for a fire in Alabama, the fire trucks that respond will more than likely be staffed by volunteers. According to the Federal Emergency Management Agency (FEMA), almost 80 percent of fire departments in Alabama are volunteer. Most of the state's 'professional' fire departments are located in larger cities which have budgets to staff and maintain professional fire services. A 911 call is the same, whether it's a home on fire in a suburb of Birmingham, or on a rural county road an hour away from the closest Walmart. The goal is the same: extinguish the flames, protect property, and save lives. Fire doesn't discriminate between professional and volunteer services.

Insurance companies across the nation have formed an independent, for-profit organization called Insurance Services Office (ISO). The ISO scores fire departments on how they are doing against its organization's standards to determine property insurance costs. The ISO Fire Suppression Rating Schedule (FSRS) evaluates four primary categories of fire suppression — fire

department, emergency communications, water supply, and community risk reduction. The FSRS includes standards set by the National Fire Protection Association (NFPA) which apply to volunteer and professional fire department coverage areas across the nation. Homeowner, business owner, and property owner insurance rates are greatly affected by this rating. To maintain a rating in a community with volunteer fire resources only, the volunteer fire department (VFD) is required to obtain and maintain personnel training, fire suppression apparatus, and communications, as well as follow all safety standards set by NFPA – the same as any professional fire department. Volunteer fire departments need funding to operate efficiently and provide the service expected by a 911 caller in rural Alabama, just the same as professional fire departments would be expected to provide a 911 caller in a large city.

The workforce of VFDs across America consists of people from all backgrounds who see the need to provide this necessary community service. At any local VFD training session, you may see a doctor, teacher, mechanic, electrician, lawyer, farmer, truck driver, mill worker, department store clerk, company executive, or retiree learning to operate and maintain the facilities and apparatus of the department. These volunteers are required by ISO to maintain and record a minimum amount of training hours per











year. In addition to courses provided by the Alabama Forestry Commission, the Alabama Fire College has mobile resources, instructors, and facilities throughout the state to help provide various levels of training for VFDs.

How do certified VFDs in Alabama operate?

Alabama Code, Section 9-3-17, authorizes and directs the Alabama Forestry Commission to certify volunteer fire departments. These VFDs must meet the minimum requirements as identified in the Alabama Code, Section 9-3-12. The departments must be incorporated under the laws of the State of Alabama as a nonprofit organization or as an authority of a municipality, fire district, or other legal subdivision. Through this certification, the VFD must have a board of directors. The certification enables a VFD in Alabama to participate in various grant and local tax funding opportunities. VFDs are funded differently across the state, with some of these certified VFDs only receiving monies from local fund raisers, donations, and the Alabama Financial Assistance Grant provided annually by the Alabama Legislature. There are other opportunities for them to apply for competitive grants through various federal and state agencies or private organizations. Some Alabama counties have local tax funding in various forms to assist their VFDs. The amounts of these local tax monies can range from a few thousand dollars a year per VFD up to tens of thousands of dollars per VFD. The Alabama Department of Examiners of Public Accounts sets financial and compliance guidelines for certified VFDs in the state. These guidelines provide not only clear definitions for restricted and unrestricted funding, but also minimum record keeping and accounting requirements for the VFD Board of Directors to maintain. All these accounts and records are subject to audit.

How can you help your local volunteer fire department?

VFDs in Alabama are always looking for ways to recruit new firefighters, retain current firefighters, and increase training opportunities. If you are interested in becoming a volunteer firefighter, please visit your local VFD and start training right away. Some people may not be physically able to carry out the laborious duties of firefighting, but still want to help. There is a lot of work behind the scenes at VFDs such as keeping personnel training records, fire reports, bank accounts, inventory of equipment, and property maintenance – all of which are important responsibilities. Maybe you could serve as a board member for your local VFD. Everyone is busy with jobs, family activities, and hobbies; however, your support for your local volunteer fire department can be achieved in many ways and will be greatly appreciated.

VFDs are valuable partners to the AFC in fighting wildland fires.



Southern Pine Beetle Pheromone Trapping and Population Trends

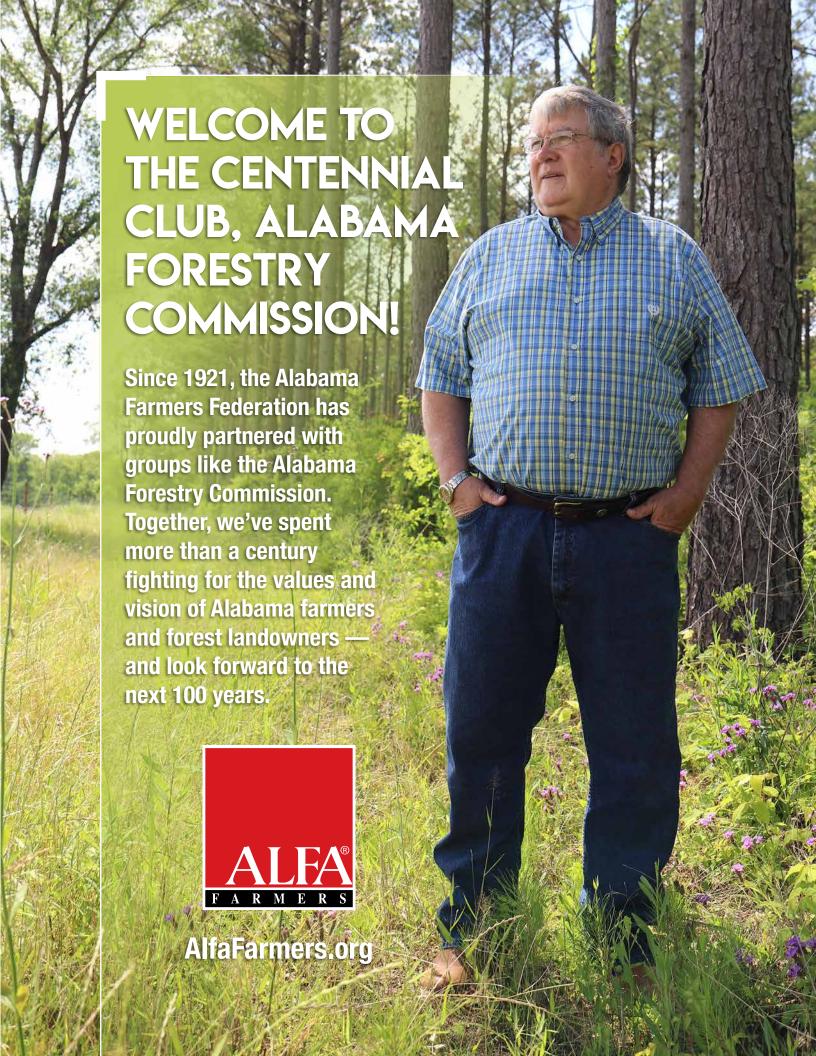
By Drew Metzler
Forest Health Coordinator | Registered Forester | Certified Associate Wildlife Biologist
Alabama Forestry Commission

outhern pine beetle is widely considered to be the most destructive forest pest of pine plantations throughout Alabama and the Southeast, Populations of southern pine beetle (SPB) are always present on the landscape, but outbreaks are typically cyclical in nature, occurring on average every six to ten years although patterns can vary. During outbreak years, SPB can attack and cause mortality in healthy pine stands by overwhelming the natural defense system of pine trees. Therefore, considerable time and efforts are spent monitoring SPB populations to respond to potential outbreaks. Every year, the Alabama Forestry Commission (AFC) and the U.S. Department of Agriculture Forest Service conduct spring pheromone trapping for SPB to monitor population numbers and predict where outbreaks may occur. Counties surveyed this year included Winston, Bibb, Talladega, Cleburne, Clay, Tallapoosa, Bullock, Lowndes, and Choctaw. SPB numbers were much higher at all trap locations compared to the past four years, indicating an increase in SPB populations in the state.

Trapping for SPB is an interesting practice. Trap locations are placed on a mix of public and private land, with three traps located within each county surveyed. The devices used for collecting SPB are known as Lindgren funnel traps. These traps are deployed with three attractants per trap comprised of frontalin, endo-brevicomin, and alpha pinene (Sirex lure). The first two of these lures are natural pheromones emitted by pine beetles upon successfully attacking a tree. The latter component to these lures is a concentrated organic compound found in pine trees. Insects caught in each trap are placed in jars with alcohol and transported to the AFC headquarters in Montgomery for identification and analysis. The SPB and clerid beetles caught, as well as total number of trap days are summed for each trap. The average number of SPB caught per trap per day and percent SPB are used to predict the population trend for each county surveyed.

At the conclusion of the trapping period this spring, SPB numbers were up significantly compared to last year. These numbers are not surprising, given the drought conditions last fall. Drought plays a large role in the ability of bark beetles to build up in population. A large portion of the northern half of the state was under "Severe" drought conditions (D3) for a prolonged period of time. Drought stress reduces the sap flow of pines and weakens their ability to 'pitch' out attacking bark beetles and other insects. Although SPB numbers were up, only one of the four counties surveyed by the AFC (Tallapoosa) fell under the High (Continued on page 31)

Photo by Ray Metzler







SUSTAINABLE

FORESTRY

By Todd Langston | Registered Forester | Alabama Forestry Commission



ustainable forestry is the management of forest land for resources that we need now and for the future. Sustainable forestry encompasses a broad spectrum of resources such as timber resources, natural resources, and wildlife habitat.

Timber resources are important for the advancement of our civilizations. Without timber resources we would not be able to provide building materials needed to expand the cities and towns in which we live. Timber resources also provide by-products that are used in everyday items such as toothpaste, soda, and paper products.

Timber is a renewable resource that if managed properly, can provide for many generations. Make no mistake, timber should be intensively managed, which means it needs to be harvested throughout its life stages and at maturity. While softwoods can be replanted after a harvest, hardwoods do better if allowed to regenerate through the coppice system of regeneration. Coppice is a silvicultural term which means that a stump can regrow the tree from the already established root system. This method of regeneration is practiced mostly in the Appalachian Region of the Southeast. When planning a harvest, it is best to consider using a logger that is a Professional Logging Manager (PLM) or Master Logger because of the extensive training these individuals must maintain to receive those certifications. PLM and Master Loggers are well versed on Alabama's Best Management Practices and harvesting in a sustainable manner.

Natural resources encompass the understory trees and shrubs, as well as soil and water, which are very important to the balance and productivity of the forest. Understory trees and shrubs provide browse and soft mass foods for many wildlife species. Smaller game species use these trees and shrubs for protection from predators as well as a food source. By harvesting timber in a sustainable manner we also protect our soil resources from erosion. Sustainable harvesting should be performed in a manner where soil resources are taken into consideration. Harvest strategies need to be carefully planned,

with terrain and water control being at the top of the list. Permanent water control structures should be installed after the harvest, in order to prevent soil erosion on permanent and temporary roads.

Clean water is also a necessary resource, not only for the forest but for us as well. By implementing state Best Management Practices from trained loggers, we ensure that our water resources will not be polluted by sediment and siltation. We also ensure that any aquatic plants and animals will still have the habitat in which to flourish.

Wildlife habitat is very important to most forest managers. A healthy population of large and small game species, as well as non-game species, means that you have a balanced forest. Improving wildlife habitat by harvesting trees and creating 'openings' through these harvests helps to increase the production of 'natural' food sources. Most of these natural food sources contain more digestible proteins than anything we could introduce through supplemental feeding or cool/warm season food plots. For example, introducing soybeans through supplemental feeding provides roughly 18 percent crude protein. Most natural grasses and forbes contain protein in the 25-30 percentage range. These natural proteins are also more digestible and can be utilized by the animal's body in a more efficient manner.

Providing travel corridors through buffer strips or streamside management zones is also an important practice to help protect game and non-game species from predators. Prescribed fire should also be considered in both hardwood and softwood stands. Most prescribed fire advocates would say that our forests should be on a regular fire regime of burning every three to five years. Prescribed burning helps reduce fuel layers which in turn helps protect against wildfires. Prescribed fire also helps protect against forest pests, disease, and invasive species. Fire restores carbon to the soil and helps promote regeneration of natural forbes and grasses. Fire is also the cheapest tool you have in your 'management tool box.'

Intensive forest management is not easy or cheap. You will not see immediate results. You have to exercise patience and persistence, and you cannot be afraid to make mistakes. It is also important to seek advice from a trained professional. In Alabama you can reach out to the Alabama Forestry Commission, Alabama Forestry Association, USDA Natural Resources Conservation Service, or county planning committees.





Photos courtesy of Todd Langston

Revisiting Alabama's Historical TIREE 249-3

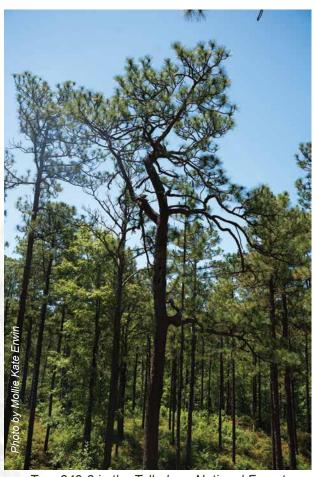
By Joel Naron | Registered Forester | Alabama Forestry Commission

he year 2024 marks the one hundredth year that the Alabama Forestry Commission has been assisting landowners and protecting the state's forests. While our agency has been around for a century, some trees in Alabama have been here nearly four times as long! One such tree is a longleaf pine that can be found in Bibb County. At 392 years old, this tree is alive and well within the Talladega National Forest.

Currently, the 19-inch diameter tree is being used as a cavity tree for the red-cockaded woodpecker preservation effort by the U.S. Department of Agriculture, Forest Service. Named 'Tree 3 in Colony 249' in 1977, today it is called simply "Tree 249-3." In 1986, an increment core was taken as part of the cavity tree study, which revealed the tree's age.

A plaque from the Alabama Forestry Commission sits at the base of the pine that gives a short history of this tree: "This longleaf pine was a seedling in 1632. During its lifespan, it was part of a vast, nearly contiguous longleaf forest covering 60 million acres. In 1938, these cutover, burned-over brushlands were made part of the Talladega National Forest."

Because of all the interesting state and national history witnessed by Tree 249-3, we searched the archives and we're re-running the adjacent article which originally appeared in *Alabama's TREASURED Forests* magazine back in Spring of 1992 (see pages 19-22). We hope you enjoy reading this history-rich story as part of the AFC's Centennial celebration!



Tree 249-3 in the Talladega National Forest.



Aged plaque still exists at the base of Tree 249-3.

TREE 249-3

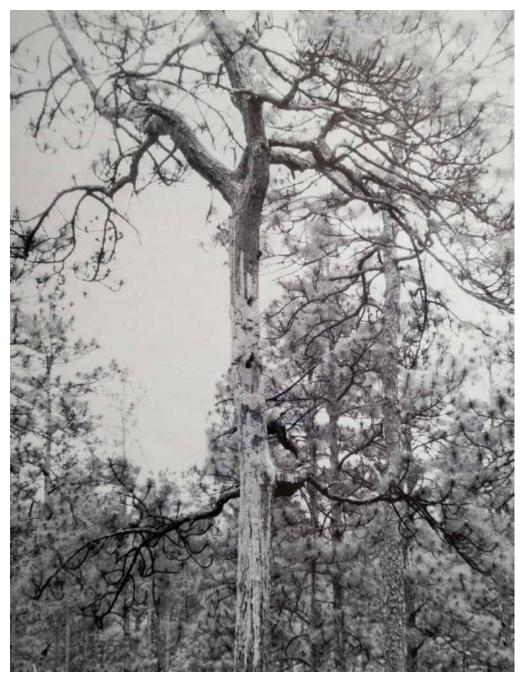
by Larry Hedrick, U.S. Forest Service Hot Springs, Arkansas

(Reprinted from Spring 1992, Alabama's TREASURED Forests)

'n August of 1632 in the hilly rolling country between the Black Warrior and Cahaba Rivers near the western boundary of present-day Bibb County, long-needled trees in open pine forest were laden with large green cones. This abundance of cones followed several years with few to none. Fox squirrels were first to notice. They ranged the canopy and, judging by criteria known only to fox squirrels, took the best. Gray squirrels ventured out of the oak woods in the hollows to contest their larger cousins. Squirrels know that pine seeds are nutritious and are available at a time in the annual cycle when the fruits of spring are gone and those of autumn are not yet available. Cone scales rained down upon the forest floor. White-footed mice, quail, and wild turkeys scurried and scratched among the debris for leftovers. Many cones and seed were thus pilfered. Some were not.

Pine trees and squirrels have traveled the aeons together. Between good seed years, the several intervening years of little or no seed production help to ensure that populations of pilferers do not build to levels high enough to entirely destroy the periodic seed crops. This secures the future for new pine trees and ensures pine seeds for future pilferers.

In October, cool dry winds opened the remaining cones, and they spilled their one-winged seeds to earth. Most seeds fell near the parent trees because longleaf seeds are heavy and even in high winds do not travel far. This was an uncommonly favorable year. Not only was there heavy seed production, but the seed landed upon receptive ground prepared by a lightning-set April fire. The flames had cleared away several years' accumulation of pine needles and reduced the sparkle-



Tree 249-3 supports an active red-cockaded woodpecker cavity.

berry and dogwood shrubs to small sprouts. One such seed landed directly under the crown of its parent tree. Within a week, having escaped detection by roving flocks and coveys, it germinated. Primary needles appeared as the root tip penetrated the sandy soil. The newlysprouted resembled the blades of slender grasses.

The Seedling Grows

After one full growing season, the number of needles had greatly increased. They clustered about the terminal bud just above ground level, making the seedling appear even more like a clump of low-growing grass. All the while its

root system developed rapidly. Nearby, other longleaf seedlings developed similarly.

In the spring of 1636, some robust seedlings fortunate enough to have germinated in an opening created by the death of a lightning-killed canopy tree, began rapid height growth. Ours did not. It languished in the partial shade of the parent tree. In April of 1639, fully seven years after germination, our seedling finally began to grow skyward. Rapidly at first, then ever more slowly it grew, having to content itself with what sun light filtered through the canopy far above. It persisted.

The long wait between 1639 and 1917 was largely uneventful for the tree. There were years of abundant rainfall and years

of drought. For dominant canopy trees and those seedlings fortunate enough to grow in an opening, these weather vagaries were recorded by wide growth rings in years of abundant rainfall, and narrower rings when rainfall was scarce. For our suppressed tree, good years and bad were recorded in rings averaging 66 to the inch and uniformly narrow as to be nearly indistinguishable to the naked eye. Such is the price a longleaf pine pays for growing in the shade. Over the centuries, squirrels still feasted on August pine cones in every year they were available. Lightning fires occasionally burned and new seedlings became established. Our tree languished but hung on with the dogged tenacity peculiar to longleaf.

The Eighteenth Century

If these 278 or so years were uneventful for our tree, truly momentous events were afoot on the land. In the early years, men in deerskin loincloths periodically passed nearby, or less frequently camped in the open forest. They occasionally started ground fires to aid hunting activities and to attract game animals to the nutritious re-growth that immediately followed such burns. For our tree, now having achieved enough height growth so that its foliage escaped the reach of ground fire flames, and its stem now largely protected by a sufficiently thick insulating layer of bark, these fires posed little threat.

By the year 1700, a new era was beginning. The tree, now 68 years old, had achieved a diameter-at-breast-height (DBH) of about 4 inches. The land on which it grew having long been located between the Choctaw and Creek Nations, an area claimed by neither, but used by both, was now strategically located between the ambitious French in Louisiana and the equally ambitious English to the East. These were two of the three European giants locked in rivalry to decide the issue of dominance in North America. That this rivalry would extend to these lands was inevitable. The French came first. The LeMoyne brothers, Pierre LeMoyne, Sieur D'Iberville, and Jean Baptist LeMoyne, Sieur D'Bienville, founded Mobile some 200 miles to the southwest of our tree in 1702. The French also built Ft. Toulouse, at the junction of the Coosa and Tallapoosa Rivers 100 miles to the southeast in 1717, and Ft.

Tombecbe, some 100 miles to the southwest on the river by that name, in 1735.

However, by 1714 the English had already developed a trade network within the Creek Nation west of the Chattahoochee River. The French and English competed fiercely for trade with the Indians. The object of their common quest was deer skins. The continental rivalry simmered and ultimately flamed into open conflict in Pennsylvania, New York, New England, and Canada in the French and Indian War, after which French influence in North America waned. Mobile and Alabama were ceded to England. Louisiana and New Orleans came under Spanish influence. Thus ended the year 1763.

In the 1770s, a new struggle erupted to decide human questions more fundamental than those concerning mere dominance among nations. The events at Boston, Philadelphia, and Yorktown, and the fledgling nation that resulted, would truly set history on a new course. However, upon these events the growth rings of the longleaf offer no commentary. For the period 1700-1799, the tree garnered the canopy-filtered sunlight of 100 springs and summers. This is recorded in 200 extremely narrow and alternating rings, light wood of spring and dark wood of summer. The accumulated capital from these 100 years of subsistence was but 2 inches of diameter growth. The tree was 167 years old and 6 inches DBH.

The Nineteenth Century

During the first decade of the nineteenth century, entrepreneurs from the east continued to venture into the Alabama territory to trade with the Creeks, Choctaws, Cherokees, and Chickasaws. But increasingly, they were accompanied by a trickle of restless folk seeking not trade, but rather land upon which to settle. The decade 1810-1819 would prove important. In 1812, the infant Republic, through force of arms, was able to firmly establish itself among the nations of the world. In 1814, the Creeks, being first to feel the effects of encroachment by white settlers from the east, arose to drive the invaders from their lands. However, their efforts were short-lived. They were caught by Andrew Jackson and his militiamen near the Tallapoosa River and destroyed at the battle of Horseshoe Bend. Following the end of hostilities, the Mahan brothers,

veterans of Jackson's campaign, returned to the Alabama territory to settle at the site of an abandoned Indian village on the banks of the Cahaba River some 9 miles east of our longleaf tree, thus founding what would become the town of Centreville. In 1816 the Choctaws ceded most of the western portion of the Alabama territory to the United States. The trickle of white settlers became a flood. With them came slaves to first clear, then work cotton fields in the fertile river valleys and in that vast rich crescent of dark prairie soils known as the Black Belt. Statehood came in 1819.

In 1833, the Choctaws, Cherokees, Creeks, and Chickasaws, after having been forced to relinquish all claims to the land, were forced to relinquish even their presence. The exodus of these "Civilized Tribes" from their ancestral lands along the "Trail of Tears" marked the end of perhaps a 10,000-year tenure on the lands called Alabama.

The white settlers that replaced them had very different views about the relationship between men and the land. These new residents carved small homesteads from the forest and built sturdy permanent structures from the ubiquitous longleaf pine. They allowed their cattle and hogs to freely range the surrounding woodlands. The latter proved especially damaging because of their propensity for uprooting and feeding upon longleaf seedlings. The settlers, like the Indians before them and from whom they learned the practice, burned the woodlands. However, unlike the Indians, they almost always burned the forest to 'sweeten' cattle forage instead of to aid hunting, and they burned with a greater frequency, usually annually, than had their predecessors.

Longleaf seedlings are vulnerable to ground fires only during the first few years following emergence from the grass stage and then, only until they have achieved sufficient height growth to put their foliage out of the reach of flames. Irregular fires set either by lightning or Indians allowed sufficient fire-free intervals so that many seedlings successfully passed the period of vulnerability and became saplings. Annual burning by settlers allowed no such fire-free intervals. Consequently, these years saw few longleaf seedlings established in the forest.

In April of 1861, at age 229 and 6.8 inches DBH, our tree prepared to lay on its small annual increment of spring

wood. It remained subordinate to the overtopping crowns of the surrounding forest dominants. Its growth rings are mute as to whether or not it sensed the growing tension between the increasingly industrialized northern states and those of the slave-holding agrarian South. The batteries surrounding Ft. Sumter began the struggle to decide if the Union of States would survive and if the promise of its founding principles would be redeemed for all people. However, these batteries were far distant. So too were those at Shiloh in 1862 and at Gettysburg in 1863.

However, in 1864, it is entirely possible that units of Bedford Forrest's cavalry passed through Bibb County on their way to engage Colonel Wilson's force and forestall an attack on the armory at nearby Selma. They may even have passed by our tree. Whether that was the case or not, the conflict among brothers mercifully ceased at Appomattox Courthouse in 1865. Our tree's growth rings for the years 1861-65 give no recognition to these tumultuous affairs of men. They differ not at all from rings laid down in years immediately before or after.

The period between 1865 and 1899 would see significant milestones. In 1871, the Elyton Land Company offered for sale lots surrounding a proposed railroad junction in the area of Jefferson County that would become Birmingham. The reunified nation celebrated its first centennial in 1876. It was also a time of reckless exploitation of the seemingly inexhaustible natural resources of forests and wildlife across the nation. Lumbermen, having already felled the forests of New England, were rapidly doing the same to those of the Lake States. Buffalo were mercilessly hunted, first for their hides, then to feed the vast track-building armies of the railroads and finally, to deprive the Great Plains Indian tribes of their sustenance.

Messages crackled along telegraph wires all over the East with news of the latest movements of passenger pigeons. Market hunters were quick to follow. By millions, pigeons were shot, packed in barrels and shipped to the Eastern metropolitan areas. Huge numbers of ducks and geese were killed annually on Chesapeake Bay to meet the demand of gourmet palates in Baltimore, Philadelphia, and New York. This profligate use would ultimately result in extinction for the pigeon, near-extinction for the buffalo, and severe depletion of waterfowl populations. For the first

time, it became clear that forests and wildlife were not inexhaustible. With this realization came also the beginnings of the conservation movement in this country.

However, it was not until the last decade of the waning century that the first significant conservation action was taken. At the behest of Dr. Bernhard Fernow and the American Forestry Association, Congress in 1891 authorized the withdrawal of lands from the public domain for a system of Forest Reserves to protect the watersheds of navigable rivers and to secure a future supply of wood products for a growing nation. Predictably, the first additions to this new system came in the far West. At the time, no such future was envisioned for any forestlands in Alabama where there was little land in the public domain.

At the end of the nineteenth century, our tree had persisted for yet another 100 years and accumulated another 1.9 inches in diameter growth. The forest in which it grew was largely intact. At 268 years of age, the tree measured some 7.9 inches DBH. Remarkably though, owing perhaps in part to its subordinate canopy position, and in part to its advanced age, fully 80 percent of this girth was comprised of heartwood. This factor would ultimately prove significant.

The Twentieth Century

The first decade of the twentieth century was one of vigorous economic growth, peace, and prosperity. But the days of the virgin longleaf pine forest were numbered. The vast pineries of the Lake States were exhausted. The lumbermen, hard-eyed industrialists every one, were now in the South. Their attention was directed first at the magnificent longleaf pine forests. The liquidation began in the Carolinas, Georgia, and Florida, but soon spread westward throughout the entire range of the longleaf forest. Rail lines were constructed to haul timber to newly constructed sawmills. Professor H. H. Chapman of the Yale School of Forestry hurried south with his students to Tyler County, Texas, to study a virgin longleaf forest before the arrival of the loggers' saws. He had time for only a rudimentary glance.

The decade 1910-1919 marked the passage of the Weeks Law in 1911, which allowed purchase of private lands for addition to the National Forest system. It witnessed the death in 1914 of the passenger pigeon Martha, the last of her kind,

thus closing the biological chapter of a species and eliminating the product of a million years' evolution. This occurrence made not a ripple in Bibb County, for the passenger pigeon had long since ceased to journey there and Martha had died alone, in confinement, at the Cincinnati Zoo. The decade saw the beginning and the end of the first World War, the "war to end all wars," or so it was thought at the time. It also brought logging crews of the Kaul Lumber Company to the longleaf forests of Bibb County.

In 1917 the longleaf stand containing our tree was logged. All accessible trees meeting merchantability standards were taken. Owing to its small size (8.4 in DBH) and its subordinate position in a forest of large high-quality trees, our suppressed tree and others like it were not taken. For our tree, this release from the shading effects of the overtopping forest dominants was of singular importance, and at the age of 285 years it responded with an increased growth rate. This patient ability of longleaf pine to respond to release at advanced ages receives no mention in modern forestry texts. Perhaps this is due to the simple reason that trees such as ours escaped the attention of the writers of those texts. Further, the virgin forests that might have contained the complete ecological template were gone long before the writing of the first text was ever undertaken,

At or about this same time another significant event occurred. The fungus *Phellinus pini* gained entrance to the heartwood of our tree, perhaps through breakage or natural pruning of a shaded lower limb, and began its work of softening the hard, pitch-laden heartwood. Thus occurred a third significant biological event in the life of our longleaf.

The years 1920-1929 would first bring delight and then despair as the stock market crashed and the Great Depression took all but a very few human fortunes to a low ebb. For the longleaf growing in Bibb County, these were excellent years.

The years 1920-1929 would first bring delight and then despair as the stock market crashed and the Great Depression took all but a very few human fortunes to a low ebb. For the longleaf growing in Bibb County, these were excellent years. Rejoicing in its now unfettered place in the sun, with its crown expanding rapidly, it grew at a rate far surpassing that of its previous years. The redheart fungus continued its inexorable progress in the

heartwood both upward and downward from its initial entry point.

The 1930s brought the "alphabet" conservation agencies, the CCC and WPA among others, and their government programs designed to provide employment for desperate hordes and reap conservation benefits from their labors. To Bibb County came the Farm Security Administration. In 1936, the lands in western Bibb County were purchased from the Kaul Lumber Company under provisions of the National Recovery Act. A presidential proclamation in 1938 would make these lands a part of the Talladega National Forest under the responsibility of the Forest Service. The lumbermen were happy to sell these lands, stripped as they were of their centuries-in-themaking economic and biologic capital. Besides, the attention of all lumbermen was now riveted on the vast virgin forests of the West.

On these newly acquired lands in Bibb County, the Forest Service inherited less a forest and more a cutover, burned-over expanse of brushland with an occasional abandoned and eroding agricultural field. Initial work was directed at providing protection for existing seedlings from fires and the depredations of feral hogs, healing soil erosion, and beginning the job of reforestation where no seedlings existed. Millions of longleaf seedlings were planted, many by Farm Security Administration crews. A new forest of seedlings and saplings thus came into being, presided over by the residual sentinels from the virgin forest. Presiding over one small patch of this regenerating forest was our tree. In 1937, at 305 years of age and having acquired more growth in the last 20 years than it had accumulated in the previous 100, the tree was 11.6 inches in diameter.

The early 1940s brought yet another conflict and unleashed the most awesome weaponry yet devised by human technology. From 1941 through 1945 many Bibb Countians were occupied with this new World War. Back home, the stands of seedlings and saplings were growing rapidly. The 1950s and early 1960s would see continued forest growth, both of young trees and old. Longleaf seedling-sapling stands had now become stands of thrifty pole-sized trees. The crowns of these young trees and those of the virgin forest relicts, like ours, gradually mingled. Once again, the hills of Bibb

County were green mantled with a longleaf forest. And for the first time since the cutting of the virgin forest many years before, this new forest began to produce wood products as the dense young stands were thinned to increase growth of residual trees.

In the late 1960s, with the continued maturing of the forests, another species whose fate is closely linked with longleaf pine, the red-cockaded woodpecker, reappeared. This social species, which in 1970 would be listed among those in danger of extinction, lives in family groups called clans and requires old pines infected with redheart fungus in which to excavate its roost and nest cavities. In longleaf forests, it usually selects trees at least 100 years old for cavity excavation. Sometime, most likely in the early 1970s, one member of one such red-cockaded woodpecker clan excavated a roost cavity in our tree. Remaining clan members excavated cavities in other nearby relict longleafs. It is a matter for speculation just how a species so dependent upon old trees survived the period between the cutting of the virgin longleaf forest and the maturing of the second-growth forest. No doubt relict trees in unknown places played a critical role.

A Remarkable Story Unveiled

As part of a red-cockaded woodpecker habitat mapping project in 1977, our longleaf was designated as tree 3 in colony 249. It was painted with a blue band and given a metal tag marked 249-3, signifying that status. In a 1986 study of cavity tree ages, an increment core was taken from tree 249-3 and its remarkable story was unveiled.

Today, in its 360th year, with a diameter approaching 14 inches and still supporting an active red-cockaded woodpecker cavity, tree 249-3 stands in the northwest portion of Section 7, T23N, R8E in Compartment 11 of the Oakmulgee Ranger District, Talladega National Forest. During its lifespan, tree 249-3 was first part of a vast nearly continuous longleaf forest encompassing 60 million acres and stretching along the Atlantic and Gulf Coastal Plains from southeastern Virginia to eastern Texas. Its long-needled foliage was perhaps shaken by the storm of passing passenger pigeon flocks. Next, it was a remnant tree standing guard over a nearly treeless landscape under completely pigeonless skies. Finally, it became part of a new but terribly diminished longleaf forest that today encompasses barely 4 million acres. For all of its 360 years it has avoided the pitfalls of catastrophic natural events like crown fires, lightning strikes, tornadoes, and insect depredation, and some unnatural ones like the foraging of free-ranging hogs, to become a part of our modern landscape.

The story of 249-3 is not entirely unique, for there are many such longleaf trees in the Talladega National Forest. The original forest of which they were a part is gone and, with it, the possibility to completely know the ecological workings of a virgin old-growth longleaf forest. Still, one wonders what knowledge about the ecological functioning of that forest can yet be gleaned from the study of these relict members. Regardless of the store of biological information that we may or may not be successful in obtaining from them, a simple reverence for antiquity, a sense of history, and an appreciation for tenacity dictate that these old trees and the modern-day longleaf forest of which they are a part, be accorded a special place in the treasured forests of Alabama.

Acknowledgements

Robert Riser, Jerry Davis, James Guldin, R.N. Conner, and Rhett Johnson reviewed and made helpful comments on a previous draft of this manuscript. Archeologist and historian extraordinaire Bob Pasquill provided advice concerning the political context of the early 1700s and information concerning the activities of the Farm Security Administration in Bibb County. Thomas Lightsey provided details of the purchase of lands in Section 7, T23N, R8E from the Kaul Lumber Company. The author is indebted to these friends and colleagues.

Author's Note: for those who would like to learn more about the magnificent longleaf pine, see Thomas C. Croker's Longleaf Pine — A History of Man and a Forest, Forestry Report R8-FR7, October 1987; USDA Forest Service, 1720 Peachtree Rd. NW, Atlanta, GA 30367-9102.



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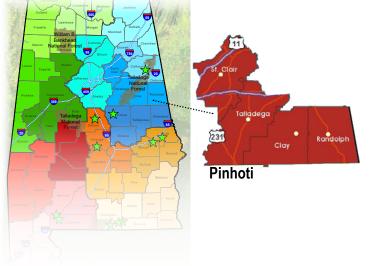
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By Tyler Givens | Registered Forester Work Unit Manager | Alabama Forestry Commission

he four counties in the Pinhoti Work Unit include Clay, Randolph, Saint Clair, and Talladega. As a group, we collectively decided to name the work unit 'Pinhoti' because the Pinhoti Trail cuts through our territory, and we all have a passion for chasing the ol' thunder chickens. Pinhoti is the Muscogee Creek's word for turkey!

Each of the four counties is separated by a major geographical feature. St. Clair and Talladega are separated by the Coosa River. Talladega and Clay are separated by the Talladega National Forest. Clay and Randolph are separated by the Tallapoosa River. Though there are borders that define the territory, the staff of Pinhoti embrace a team effort to get the job done. Every member of Pinhoti brings their individual skills and assets to every county to help one another reach our goals. Without each other, we would all fall short. The presence of the Talladega National Forest presents opportunities for the AFC to support timber sale preparation and management. The work unit has a strong working relationship with the U.S. Department of Agriculture Forest Service out of Talladega and we can depend on each other for help when possible.

Pinhoti is currently staffed with six people: Wildlife Biologist Ryan Prince, Forestry Specialist Supervisor Josh Benefield, Forester Andrew Hyche, Forest Ranger Tally Keith, Forester Chris Ott, and Work Unit Manager Tyler Givens. We provide all means of forestry assistance to landowners, from single tree assessments in the growing urban cities and communities, to traditional forestry recommendations for small- and large-scale forest landowners, as well as firebreak installation and prescribed burning. With 21 incorporated towns within the work unit, education and urban forestry are also areas of focus and growth. A strong education program continues to expand which targets both school-aged children and forest landowners in the area. Located between Birmingham and Atlanta which are connected by Interstate 20 that runs through the work unit, we are seeing an expansion in population in areas that were traditionally rural. This growth will eventually affect the forest management work we do, as well as the types of wildfires we will fight going forward.

While the Pinhoti Work Unit is generally in the lower middle ranks for wildfires, Talladega County is an outlier, usually in the top 10 counties statewide for fire occurrence. The AFC has trained and produced skilled wildland firefighters who fight fires on steep and rocky ground with shear rock faces that drop tens of feet at a time. For fiscal year 2024, Pinhoti has fought 117 wildfires averaging 15.6 acres in size with a total acreage burned of 1,820 acres. In Talladega County alone, we have fought 48 wildfires so far.

When it comes to forest industry, there are several primary and secondary wood markets within the Pinhoti Work Unit. St. Clair County has two cabinet/countertop mills, one roof and floor truss mill, one barrel plant, and two trailer manufacturers. Talladega County is home to one wood pallet mill, one lumber mill, one cabinet manufacturer, one chip mill, and one fluff pulp mill. Clay County has one wood pallet mill, two lumber and tie mills, one roof and floor truss mill, and four cabinet and furniture manufacturers. In Randolph County, there is one door manufacturer.





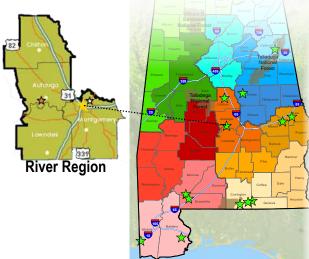


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River Region Work Unit

By Brian Smith | Registered Forester Work Unit Manager | Alabama Forestry Commission



ater, water, water everywhere! The River Region Work Unit is blessed with waters of all kinds which is where it gets its name. From the smallest of branches to the largest of rivers, this work unit has them all. The Coosa River forms the eastern boundary of Chilton County and flows south to meet the Tallapoosa River on Montgomery County's northern border. From there, they form the Alabama River that flows all the way to Mobile Bay. These rivers are home to many people, not to mention the countless hours of fishing, hunting, recreating, and touring these waterways offer.

The River Region Work Unit covers Chilton, Autauga, Montgomery, and Lowndes counties. Chilton County is home to Clanton, Jemison, Thorsby, Maplesville, and Verbena. Boise Cascade Company and Taylor Made Lumber Company offer jobs in the forest industry that are supported by a large community of loggers, timber buyers, and foresters. Peaches are also a very important crop that provides countless jobs in the farming community.

Just south of Chilton County, you will find Autauga County that is home to Prattville, one of the fastest growing cities around. Prattville has a vast expanding business community that offers a family-friendly environment with numerous restaurants, hotels, and golf courses. International Paper's Prattville Containerboard Mill is located here that supplies many of our packaging needs. The county is also home to the Autauga Wildlife Management Area which provides over 10,000 acres of both small and large game hunting.

Further south is Montgomery County and our capital city of Montgomery! It offers a plethora of museums, restaurants, and special venues such as the Shakespeare Festival and Montgomery Zoo. It is also home to the Montgomery Biscuits baseball team, a Double-A affiliate of the Tampa Bay Rays. Montgomery is not just the state's political center, but also a family-friendly place to tour and experience.

Lowndes County is home to the county seat of Hayneville. This county is known for its Black Belt soils that are known to be very fertile. Farms and loblolly pine plantations can be found throughout the county which provide many jobs. If you want to see what true country living looks like, look no further than the country roads of Lowndes County.

One of the major driving forces behind the economics of the area is forestry, making the presence of the AFC very important. The River Region Work Unit consists of nine employees. Forester Charles Stuart, Forestry Specialist Supervisor Adam Worthington, and Forest Ranger Specialist Walter Nolan work out of the Mont-

gomery County office. Forester Logan Hicks is joined by Forest Rangers Brett Boyd and Johnathan Sheppard in Autauga County. Work Unit Manager Brian Smith is joined by Forest Rangers Carson Riley and Cadric Laird in Chilton County. Most of our time is spent in education and outreach, landowner services, and wildfire suppression. Educational events and programs include Arbor Day tree giveaways, water festivals, Classroom in the Forest, landowner tours, and Professional Logging Managers workshops. Active natural resource councils in the counties share goals with the AFC to help accomplish these programs annually. When it comes time to either conduct a prescribed burn for a landowner or protect the forests and landowner's possessions from a wildfire, the AFC guys in this work unit pull together to get the job done and we enjoy doing it!









Aquatic Partnership Success:

the Trispot Darter!



(Below) Undersized culvert that was removed for the benefit of upstream trispot darter habitat.





Courtesy of
U.S. Fish & Wildlife Service and
Manulife Investment Management

anulife Investment Management (Manulife), a global wealth and asset management company that manages timber landholdings in Alabama and across the globe for its investors, partnered with the U.S. Fish and Wildlife Service (USFWS) to benefit the federally-listed trispot darter in St. Clair County. During surveys in conjunction with USFWS, the trispot darter was found in three locations within Manulife's managed timber property.

A roadway with an undersized culvert provided the only access to a large tract and served as the driveway to a neighbor's residence and farm. This culvert limited access to potential upstream spawning habitat and provided an opportunity to improve access to Manulife-managed timberland, the neighbor's property, and to trispot darter habitat. An agreement was put in place for the USFWS to remove the undersized culvert and replace it with a bottomless arch structure, restoring the stream to its natural condition and promoting upstream migration during the trispot darter's winter breeding season.

Manulife agreed to modify or decommission two other creek crossings within the trispot darter habitat in cooperation with the USFWS, who would replace the undersized culvert with the bottomless arch structure. Nearly the entire project costs were covered by USFWS via funding under the Bipartisan Infrastructure Law. Now complete, these three improvements have provided better access to 2-½ miles of quality spawning habitat for the trispot darter.

"As our first joint project, I was a little apprehensive to work with the federal government because things can take a while and be very cumbersome, but they made it very easy for us," said Robert Colville, Manulife's Area Forester for East Central Alabama. "There was a lot of behind-the-scenes work to streamline the process, but it went smoothly, and the project turned out great."

Robert Milstead, Central Region Manager with Manulife stated, "Where others may see species such as trispot darter as a liability, we see them as an asset. We believe that good stewardship is good business, and our foresters work with our partners on projects like this to turn that belief into action."

Their willingness to partner with the USFWS not only resulted in a highly beneficial conservation action and reliable long-term access for timber management activities, but also developed the 'trust factor' needed for future efforts. Milstead stated that the USFWS was easy to work with on this project and Manulife would be open to future conservation partnerships. Lee Holt, USFWS Biologist in the Partners for Fish and Wildlife Program, was thankful for Manulife's efforts and was hopeful this conservation achievement "could be a model for other public-private partnerships throughout the Southeast."

Most *Alabama's TREASURED Forests* readers have a deep sense of stewardship and conservation of our natural resources. Hopefully, the success of this trispot darter project and aquatics partnership will lead to increased private forest landowner engagement in efforts to benefit Alabama's threatened, endangered, and at-risk species. In addition to your local AFC office, landowners interested in improving riparian habitats or assessing existing fish, mussel, and snail populations can reach out to the following individuals:

Ray Metzler, Wildlife Biologist Alabama Forestry Commission Ray.metzler@forestry.alabama.gov

Whit Carroll, Biologist Alabama Forestry Association wcarroll@alaforestry.org

Todd Fobian, Environmental Affairs Supervisor Alabama Wildlife and Freshwater Fisheries Division Todd.Fobian@dcnr.alabama.gov

Cooperative conservation works!



Source: Fishes of Alabama







FAWN

By Tyler Robison, Forester Alabama Forestry Commission

hat is FAWN, you may ask? It is an acronym used for "Forestry Awareness Week Now" (FAWN), which originated in the state of Louisiana in 1986. FAWN made its debut in Morgan County, Alabama, in 1994 and has since been celebrated annually throughout different counties in the state.

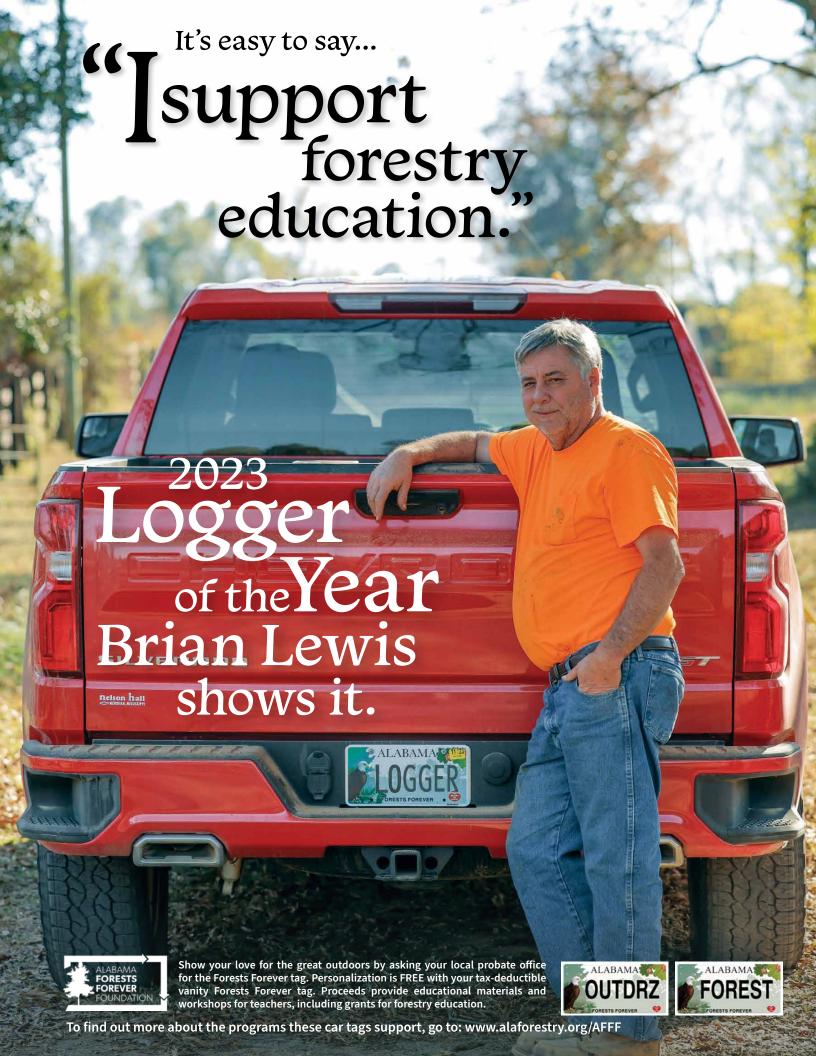
For approximately 25 years, all sixth graders within Marion County have been taught about forestry's positive environmental impact, as well as the forests' available natural resources. On average, Marion County has close to 400 students in attendance each year with an approximate total of 10,000 kids that have been through the program. According to the 2022 Census, the county's population was 29,156, meaning that 34 percent of its citizens have experienced FAWN. Not only is this an incredible accomplishment, but it is part of the reason why people's attitudes toward the environment have improved, why there are not as many arsonists, and why people are concerned about doing the right things to protect our planet.

When people learn about something new, they typically can't help but become more invested in the topic than they originally were. Marion County retired forester Tony Avery said, "the biggest way for FAWN to be a success each year was for the kids to learn what trees provide for us, such as oxygen, fruit, and paper products, as well as know that trees are beneficial to wildlife." He also wanted the kids to know that it is okay to harvest trees.

Another recently retired forester in Marion County, Robert Clement, said, "FAWN is kind of a rare opportunity for kids that have never been exposed to the woods and the environment surrounding them." He also mentioned that the program helps students learn to appreciate the forest, because "if they don't understand, then how will they ever appreciate it?"

FAWN is usually a two-day event where every school within the county attends the program and spends the day outside learning about topics such as forest management, forest products, forest history, soils, wildlife, tree and plant identification, water quality, and Project Learning Tree (PLT). Typically, there are about eight stations that students rotate through, learning about different topics at each stop. This past year, Marion County had stations that included topics such as honeybees, wildlife management, forest management, fire safety, skulls and skins, forest soils, medical plants, and drones. The students seem to enjoy these topics and retain much of the information for years to come.

As a student from Marion County myself, I remember going through the program while in the sixth grade, and then going on to become a guide for the FAWN program during my junior year of high school. It's cool to know that I am now a part of overseeing the program that gets planned and presented each year within the county. FAWN is very important for students to learn what forestry is about and potentially impact their thoughts about the forest industry. Hopefully, we can continue to carry on this program for many more years to come!



MEMORIAL



JOEL GLOVER
(1962-2024)



Blake Kelley (left) shared Joel's last turkey hunt.

By Ray Metzler | Certified Wildlife Biologist | Alabama Forestry Commission

oel Dean Glover, a longtime resident of Rockford, Alabama, was called home on April 6, 2024, at the age of 61 after an extended fight with melanoma and subsequent health issues. Services were held at Rockford Baptist Church on April 12 and burial was on April 13 at the Greenhill Cemetery in Lauderdale County. Joel is survived by his wife of 36 years, Melanie Glover of Rockford; children, Justin Dean Glover of Portland, Maine, and Caleb Thomas Glover of Rockford.

Joel was born on May 9, 1962, in Florence, Alabama, to Donald Dean Glover and Mary Ann Huff Glover. He graduated from Mississippi State University with a master's degree in wildlife ecology prior to beginning a long career as a certified wildlife biologist with the Alabama Division of Wildlife and Freshwater Fisheries.

In addition to being a loving father and husband, Joel was an avid hunter who especially loved to chase Alabama's wild turkeys. Although he will be greatly missed, I like to think he is in a place where turkeys gobble as often and as loud as booming thunder in a severe storm. Joel was a story-teller extraordinaire, and during a visit to his house, he was excited to tell me the story of his last turkey hunt and kill that occurred just days before his

passing. Melanie wasn't sure who was more excited about the hunt – Joel or Blake Kelley, retired AFC Coosa County forester who shared the hunt with Joel.

At the time of his passing, Joel had authored three books featuring short stories related to his life's work and faith in God. A fourth book entitled *He's Still Shooting* was finished posthumously by his wife, Melanie, and was published in June. He shared his passion for conservation and stewardship of natural resources every chance he got in many formats, including the *Alabama's TREASURED Forests* magazine.

As a long-standing member of the Coosa County Forestry Planning Committee, Joel positively influenced many young students who went on to work in natural resources across the country. His guiding principles were rooted in a deep-seated land ethic to enhance wildlife habitat and the relationships between people and the land. [See story on page 11 of *Alabama's TREA-SURED Forests* Issue No. 1, 2024.] Joel was an integral part of the TREASURE Forest Committee for many years and strived to promote its stewardship principles with everyone, but especially Coosa County landowners. Alabama's natural resources benefitted greatly from his commitment to make Alabama a better place for future generations.

SOUTHERN PINE BEETLE Pheromone Trapping and Population Trends

(Continued from page 14)



In the spring, southern pine beetles (SPB) begin to disperse and find new stands to infest and cause potential major mortality. These spring pheromone surveys using Lindgren funnel traps allow us to monitor SPB populations as well as their natural predator, the checkered clerid beetle. These results will be shared with forestry professionals and landowners, helping with informed decision making during the summer months.

Category of the prediction model developed by Dr. Ron Billings of the Texas A&M Forest Service. Choctaw and Bullock counties are predicted at Static/Moderate populations, and Lowndes at Low populations. The counties with low to moderate predictions can be attributed to the high population of checkered clerid beetles trapped at these locations. Clerid beetles serve as a primary predator of southern pine beetles and help to keep SPB populations in check. Both the adult and larval stages of this predator feed on all life stages of southern pine beetle, as well as many other native pine beetle species in Alabama.

Surveys conducted by the Forest Service on the National Forests were slightly more alarming, with numbers collected falling within the High to Severe Outbreak category. These counties included Winston, Talladega, Cleburne, and Clay counties. Based

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on the prediction model, it can be expected that these counties will have some beetle activity this summer. These survey locations by the Forest Service did fall in the regions of the state where drought conditions were more severe, hence leading to more residual stressed timber stands in the region.

The National Weather Service does currently predict an above-average rainfall chance for the summer months, which should aid the recovery of stressed forests. This prediction in combination with high clerid beetle populations in portions of the state should reduce the chances of southern pine beetle outbreaks and issues with other bark beetles such as black turpentine beetle and Ips engraver beetles. However, land managers and landowners should remain vigilant and pay close attention to pine stands located in the northwest, northeast, and east-central regions of Alabama this summer. Even for counties with lower SPB population levels, these survey results are for entire counties, and there is always the possibility of sporadic and localized beetle activity in counties with overall predictions of low population levels.

The Alabama Forestry Commission is already conducting aerial flights to monitor beetle activity and will conduct further detailed flights during the summer months to alert landowners of beetle activity. If you suspect bark beetle activity on your property this summer, please contact your local AFC office for identification and control recommendations.





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By Dan Chappell, Assistant Director, Forest Management Division, Alabama Forestry Commission

his might be bending the rules a little, but for the purpose of this article, we may need to call it "Trees in Alabama" instead of "Trees of Alabama." In fact, typically a non-native such as Leyland cypress would not be a top tree to consider for this space. However, as it is common across our state (including Rocket Park at the US Space and Rocket Center), and has a fascinating history, it is worth a look.

Leyland cypress is not a species I was asked to learn back in forestry school. In fact, as best as I can remember, my impression of this tree back then was that somehow it wasn't quite a 'real' tree but was closer to being a garden plant. We do not tally it in Forest Inventory and Analysis, not even as an invasive species, although it is not a native.

So, where does this tree come from? Believe it or not, Great Britain, by way of the Pacific Northwest and California. There is an estate in Montgomeryshire, Wales, known as Leighton Hall. A certain Mr. C. J. Leyland had several New World species planted on the grounds. Among these was Nootka cypress, a native of the Pacific Coast ranging from southern Alaska, down the length of British Columbia, and reaching the Cascades of Washington and Oregon, typically in areas receiving high rainfall. Nearby in the same garden was growing a Monterey cypress. Although also native to the Pacific Coast of North America, it was only known to grow naturally, as a glacial relict, in two groves near Carmel, California, and thus these two would not have the opportunity to cross-pollinate in nature.

At Leighton Hall, however, the two species did cross in 1888, with the Nootka cypress producing seeds that grew six individuals that were different in appearance to any young Nootka cypress that had come before. Those six hybrids were transplanted to Haggerston Castle in England, where they grew well. (In fact, five of them still live.) Then 23 years later in 1911, again at Leighton Hall, the cross occurred again, but in the opposite direction, this time the seeds and resulting seedlings coming from the

cones of the Monterey cypress, and the rapid growth of those seedlings was remarkable. The four best-growing specimens were even named: Haggerston Grey, Green Spire, Leighton Green, and Naylor's Blue.

Samples of these amazing seedlings were taken to an expert, William Dallimore, who determined the parentage of the hybrids and named them *Cupressus x lelandii* to honor Mr. Leyland. As the successful cross pollination turns out to be something of a 'one-in-a-million' event (approximately 20 known instances total), and as hybrids, the Leylands themselves do not produce viable seeds: new trees must be grown from cuttings of existing trees. Any Leyland cypress you encounter today can almost certainly trace its history back to the "Haggerston Grey" individual!

This tree was first brought to the United States in 1941 but began gaining popularity in the mid-1960s largely because of Clemson University's support and distribution to nurseries. It can grow very well throughout Alabama, the Southeast, and in fact across much of the US. The tree tolerates a wide variety of soils, and not surprisingly based on its lineage, is not averse to cold and snowfall, although the preference is for full sun.

Leyland cypress is grown as an ornamental, or often as a visual screen and windbreak. As it has no native habitat, it is not surprising that there is little to no wildlife benefit beyond possible use as cover. Being sterile, it is not known to escape cultivation. However, those who choose to plant it do need to account for its remarkable growth when locating it on a property. The tallest example is known to be 115+ feet tall, but it is the aggressive lateral growth which makes it either a perfect hedge or a point of contention between neighbors. Lifespan in the warm Southeastern US can also be a concern, as the shallow root structure makes the tree susceptible to both drought and blowdown due to being top-heavy in general. Unlike the five original examples still surviving into their second century in England, Leyland cypresses planted in Alabama are not likely to make it to their 50th year.