# REASURED FORESTS

A Publication of the Alabama Forestry Commission















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State Forester Jake Stauffer



AFC personnel from Marion County



AFC personnel preparing for a prescribed burn

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











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### Message from the STATE FORESTER

hroughout the years, we have responded to the challenges set before us. Our people have always made the difference."

- Bill Moody, State Forester, 1984 Annual Report

Over the past year, we have celebrated 100 years of the Alabama Forestry Commission's efforts to protect and sustain the abundant natural resources with which our state has been blessed. In this letter, I wanted to take one last



Rick Oates, State Forester

look at the past through the lens of previous annual reports of the agency. Then, later in the magazine, I asked some of our staff to predict how forestry will look in the year 2124. I hope you find both articles interesting.

"The year 1927 comprised the fourth annual period of the State's work in furtherance of forestry. The year was exceptional in a number of ways. The forest fire hazard was the highest since 1924 ... The increasing interest in the practice of forestry on the part of landowners and others strained to the utmost the facilities of the Commission to comply with the most urgent requests."

#### – Page S. Bunker, State Forester, 1927 Annual Report

"The forests of Alabama have been able to sustain the steadily increasing drain by reason of the state's forestry program ... The significance of a productive forest resource to the economic welfare of the state culminated in the passage of Act No. 764 approved September 12, 1969, which placed Alabama's forestry program [once again] in a separate department designated the State Forestry Commission."

#### - J. M Stauffer, State Forester, 1969 Annual Report

"Our trees are the priceless heritage of all Alabamians. Their shade, beauty, serenity, the air they purify, the modifying effect they have on the temperature, the water they help absorb into underground aquifers, and the moisture they transpire into the atmosphere, are equally possessed by us all. And the conditions in which the trees and forests remain when we are gone will be the legacy all of us will leave equally to our children."

#### - Bill Moody, State Forester, 1973 Annual Report

"A significant event of 2007 was the drought situation which presented difficulties and challenges affecting our associates' roles as both protectors and managers of the state's forests. For most of the year, precautionary steps were imposed across the state to prevent potentially devastating wildfires – both in number and size."

#### - Linda Casey, State Forester, 2007 Annual Report

"I believe 2020 can be summed up with the quote, 'If you want to make God laugh, tell him your plans.' From the beginning to the end, unusual circumstances and extraordinary events made it a year we will never forget ... wildfires, hurricanes, and a pandemic. The men and the women of the AFC did their best to continue fulfilling our agency mission ... all while we were learning to mask up, self-quarantine, and social distance."

#### - Rick Oates, State Forester, 2020 Annual Report

These quotes indicate some of the issues the Alabama Forestry Commission has encountered over the last 100 years. Whether it is a heavy demand for our services, the economic importance of forestry to Alabama, the legacy created by good forest management, or unexpected disasters, the Alabama Forestry Commission has risen to the challenge.

I point you again to Mr. Moody's quote at the beginning of this letter: the agency has always responded to the challenges it faced. And, as he succinctly noted in 1984, it is because of our people. Whether they retired 60 years ago, have worked with us for 45 years, or just started with the agency last month, our people serve out the mission of the Alabama Forestry Commission. Without them, there would be no Forestry Commission, and I dare say that forestry in Alabama would be significantly different.

I am thankful for the men and women, past, present, and future, who have been part of this agency, from our foresters, firefighters, accountants, attorneys, commissioners, and others. They get up every day, as they have for 100 years, with forestry on their minds. Their dedication has made a difference in Alabama.

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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.

# Pineland Today

## TREASURE Forest #1

By Bayne Moore, Forester/Work Unit Manager, Alabama Forestry Commission



(Continued on page 6)

## Pineland Today (Continued from page 5)

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The legacy of Pineland, TREASURE Forest #1, is far more than just hardwood and pine trees, clean water, abundant wildlife, and people; it is the ideology of merging all of these concepts into one – each not more important than the other.

**ララ** 

ineland, located just south of Myrtlewood in Marengo County, was the homeplace of W. Kelly Mosley of Atlanta, Georgia. Retiring from Southern Bell in 1963 as an electrical engineer, Mr. Mosley needed a retirement activity. He decided to enhance the timber, wildlife, and recreation at the homeplace. To do so, he began extensively using the knowledge of public agencies, local timber consultants, and logging contractors.

Unforeseen by Mr. Mosley, his strategy employed the same standards of the TREASURE Forest Program that would be adopted in 1974 by the Alabama Forestry Planning Commit-

tee (later known as the Alabama Natural Resources Council). The multiple-use forest management tenets of the TREASURE Forest Program were highlighted in its name - Timber, Recreation, Environment, Aesthetic, Sustained, Usable, REsource. An exemplar was needed to reflect these management and sustainability standards being set by the Committee. In July of 1975, Pineland was selected as the first property to be certified as a TREASURE Forest because Mr. Mosley had been managing according to the multiple-use principles of the program for several years.

When Pineland's enhancement process began, Mr. Mosley knew making a profit for all involved parties would be difficult. Mr. Mosley stated, "In situations like this, where there's little or no profit to be made by either party, a right approach can cause both logger and landowner to see

benefits that will accrue to them in the future. It's fitting that the landowner should give a little on stumpage (price) to get the job he wants, and a logger needs to know that he'll get a fair play when the good stuff comes up for cutting."

This same management style continued until his passing in May of 2001. More than just managing land, property, timber, wildlife, conservation, sustainability, and aesthetics, Mr. Mosley was able to manage relationships with forest, wildlife, and conservation professionals. Through this, he established working friendships that lasted a lifetime and are still paying dividends to this day.

One of the principal contributors to Mosley's success was logging contractor, Mr. A. W. "Buck" Compton. Mr. Mosley said, "I don't own any machinery bigger than an axe." Mr. Compton handled everything — timber harvesting, building roads, installing wildlife food plots, maintaining roads, swamping out the

game trails, hand-spraying clearcuts, and planting seedlings. This relationship continued after Mr. Mosley's passing, as Mr. Compton continued contracting with Mosley's daughter, Anne Mosley Brown. In 2004, Mr. Compton and his wife, Barbara, purchased Pineland from Mrs. Brown. During his ownership of the property, he continued to manage it as he had for Mr. Mosley.

To carry on the property management principles first forged by Mr. Mosley and then through Mr. Compton, Pineland was sold in 2015 to the latter's daughter and son-in-law, Jan Compton Holley and Wood Holley. When they took possession, Pineland was composed of 984 acres of bottomland hardwoods, hardwood streamside management zones (SMZs), loblolly pine plantations, wildlife food plots, two ponds, and a camp house. Before purchasing Pineland, the Holleys had acquired 400 acres of

loblolly pine plantation in 2011. That's in addition to 82 acres of mixed-age loblolly pine and hardwoods purchased in 2013 which were contiguous to Pineland on the northeast and east, bringing the total acreage to 1,466 acres.



A good match! In 1963, friends advised Kelly Mosley to meet Buck Compton, an ag major from Auburn.

Mr. Mosley drove his car into the hay field to meet Mr. Compton while he was baling hay. Mosley became Compton's friend and mentor. Compton is shown receiving the W. Kelly Mosley Environmental Award in 1981.

Holley stated that timberland owners of today have had to adapt to changing markets and the increased size of harvesting operations. Mr. Compton and other timber owners of his era would cut a little timber annually and keep money flowing in. This was possible when a timber harvesting crew could make a living hauling two or three loads per day. Today, however, even small timber harvesting operations work on a production model that involves more hauls from larger acreage tracts just to give them a fighting chance at survival. Landowners and their timber managers have had to adjust by harvesting larger acreage tracts which often include clear-cutting instead of select cutting/thinning.

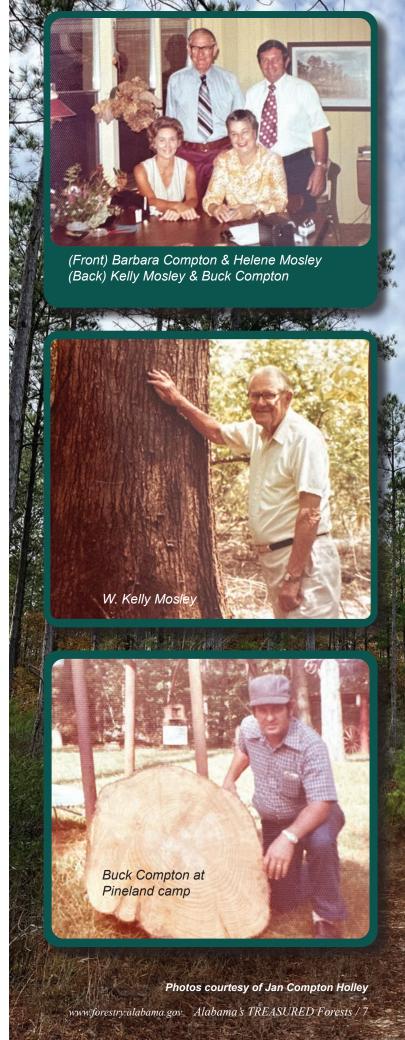
Like many timberland owners, the Holleys have full-time jobs. Wood is employed by Linden Lumber Co. as a lumber salesman, and Jan raises registered cattle under her father's brand, Compton Charolais. Wood manages Pineland with the help of timber consultant Harold Quinney of Canebrake Forestry, and he contracts with different entities to maintain roads and plant food plots.

The property is still being managed in the footsteps of Mr. Mosley and the essence of TREASURE for timber production, income, wildlife habitat enhancement, and recreation. Wood is an avid fisherman but has grown to love turkey hunting since 2004. At the time of publication, Pineland is in the process of being re-certified as a TREASURE Forest under Jan and Wood Holley, and the property will keep the TREASURE Forest '#1' label.

The Holleys have prioritized the following forest management activities and enhancement techniques since purchasing Pineland:

- Repair the dam on the pond adjacent to the camp house.
- Stock the pond with bass and bream.
- Harvest timber in the form of first thinnings, second thinnings, or re-generation cuts as each stand's harvesting criteria are met. Loblolly stands range from 3-32 years and total 749 acres.
- Manage predominately old-growth hardwoods along Beaver Creek and smaller tributaries for deer and turkey habitat, 151 acres.
- Manage mature bottomland hardwood, 381 acres.
- Plant wildlife food plots annually, 21 acres.
- Maintain 14-plus miles of road annually by bush-hogging with a tractor and reshaping the roads with a dozer as needed.
- Enhance wildlife habitat, primarily for deer and turkey, which they then hunt.
- Try to eradicate the wild hog population.
- Install firebreaks and perform timber stand improvement (TSI)/understory burns in the loblolly pine stands.
- Treat invasives as they are found (privet, cogongrass, etc.).
- Monitor for pine decline, Southern pine beetle attacks, etc.

One cannot build, grow, and enhance the guiding standards of TREASURE Forest without first and continuously building, growing, and enhancing relationships with all parties involved. Mr. Mosley's success in creating and managing Pineland to achieve the standards set by TREASURE Forest was a direct result of relationships with resource professionals, such as Mr. Compton. Through relationships, TREASURE Forest #1 has survived through time and continues to embody Mr. Mosley's guiding forest management principles.



#### ALABAMAS STATE FORESTERS

1924 - 1939

1939 - 1942

1942 - 1970

1970 - 1993









By Elishia Ballentine, Editor, Communications & Public Relations Manager, Alabama Forestry Commission

ith the Forestry Act of 1923, Alabama's State Legislature established the State Commission of Forestry.
A State Forester was appointed in 1924 and the agency headquarters were established in Montgomery.

Colonel Page S. Bunker was named Alabama's first State Forester, serving 15 years from 1924 to 1939. Under his leadership, the Commission not only started most of the forest conservation program in Alabama but also initiated the formation and development of an organized state parks system.

Born in 1875 in Menominee, Wisconsin, Bunker acquired an interest in forestry as a boy. He would go on to lead an extraordinary life. After attending the universities of Wisconsin and Chicago, he moved to Montana to work for the Northern Pacific Railway. Truly a pioneer, in 1904 he became the first graduate of Montana State University to enter the forestry profession. Upon graduation, he was appointed Forest Ranger with the US Department of the Interior on the Lewis and Clark Forest Reserve in Montana. He was later promoted to Forest Supervisor at Flathead National Forest. Before coming to Alabama in 1924, he served as Assistant State Forester in Texas.

If anyone ever qualified for the title of 'The Man, the Myth, the Legend,' it was Page Bunker. Feats from his younger days included winning the pistol shooting championship in Montana in 1912 and taking the same honor in Idaho in 1913. That shooting skill would come in handy. One day when he and a fellow forester were patrolling and spotting forest fires across 5,000 square miles of Montana wilderness, he stumbled upon seven grizzly bears. While outrunning the fastest one to a nearby tree, he soon discovered the tree was too big to climb. Luckily, he was armed with his six-gun and dropped the bear just in time.

Page Bunker was a U.S. Army veteran of both the Spanish-American War and World War I, retiring as a full colonel. During World War II, he was appointed as an administrative analyst with the 'Air Force' [a division of the Army at that time].

In 1930, he earned a private airplane pilot's license. Flying his 165-horsepower monoplane across the skies of Alabama, he

soared above the thousands of acres of timberlands below for which he felt responsible as the State Forester.

Bunker navigated both Alabama's Forestry Commission and State Parks system through the Great Depression years of the 1930s. It was during this time that recreational facilities were developed greatly through the camps of the Civilian Conservation Corps (CCC).

After finding several of the big, forested areas that would become future parks, he surveyed and bought them. Upon discovering that Mount Cheaha was the highest point in Alabama, he drove his Model T as far up the mountain as it could go. Then he rode a mule as far as it would go. Finally, he went on foot, pacing off 80 acres on the summit of the mountain. He then rushed down to the owner and bought the whole thing for \$5 an acre – \$400 total. Today, the tower atop the mountain at Cheaha State Park bears his name.

The State Commission of Forestry retained management of the state parks until 1939 when Alabama's State Legislature enacted the Department of Conservation Act. Page Bunker served as State Forester until shortly after this act which abolished the State Commission of Forestry. At this time, the forestry program was placed in the newly created Division of Forestry, along with the new Division of State Parks, both within the newly formed Alabama Department of Conservation.

**Joseph "Brooks" Toler** succeeded Col. Bunker, serving as Alabama's State Forester and Chief of the Division of Forestry from **1939 to 1942**. During his three-year term, Alabama became the first southern state to adopt a Tree Farm program.

Born in 1906 and a native of Louisiana, he received a B.S. in Forestry from Louisiana State University in 1928. In 1930 he was appointed district forester with the Mississippi Forestry Commission, then served as Extension Forester of Mississippi State College from 1934 to 1939. Upon Mr. Toler's resignation as State Forester in Alabama in 1942, he returned to Mississippi. For the next six years, he worked as Manager of Land, Timber, and Wood for the Masonite Corp. in Laurel.

#### THE FIRST 100 YEARS

1993 - 2006

2007 - 2014

2014 - 2016

2017 - PRESENT









RICK OATES

J.M. "Jake" Stauffer became Alabama's third State Forester and had the longest tenure, serving from 1942-1970.

A native of Pennsylvania, he was born in 1902. At an early age, he knew that he wanted to be a forester, then graduated in 1925 from the Pennsylvania State Forestry School. In 1926, Stauffer accepted employment as a forest inspector with Alabama's State Commission of Forestry. The next year, he left to work with the US Forest Service at Dix National Forest in New Jersey. After only three months, he returned to Alabama (and the Commission of Forestry) permanently.

Promoted to Associate Forester in 1933, he earned respect as he supervised the work done in 26 CCC camps across the state. He rose to Assistant State Forester in 1937, the position he held for five years until 1942 when he was named State Forester. In 1960 he was also named chief of the Division of Forestry. Stauffer's interest in research and history led to the publication of *A History of State Forestry in Alabama* in 1961. He retired in 1970 after 28 years of leading the state's forestry program.

In 1969, the modern era of the Alabama Forestry Commission began as the agency became independent once again. Just as in 1939 when legislation passed that combined Forestry with the Department of Conservation, 30 years later in 1969, legislation again spun the agency off as a separate entity, which is how it remains today.

C.W. "Bill" Moody served as Alabama's State Forester from 1970-1993. A native of Georgia, he received a Bachelor of Science in Forestry in 1956 from the University of Florida. Before settling in Alabama, he worked at International Paper for a few years, was a consulting forester for a time, and was employed by the Florida Forest Service for several years. When he accepted the position at the Alabama Forestry Commission, he became the youngest state forester in the nation. Moody is credited with organizing the Alabama Forestry Planning Committee and establishing the TREASURE Forest Program. Much has been written about his accomplishments during his 23-year tenure at the helm. One such story can be found in the Fall 2019 edition of *Alabama's TREASURED Forests* magazine.

**Timothy C. Boyce** was Alabama's State Forester for 12 years from **1993-2006**. He is a native of Ohio and a graduate of the University of Georgia with a degree in Forest Resource Management. Boyce had previously served as Assistant State Forester. Before taking the top job, he already had 22 years with the Forestry Commission in a variety of positions.

Linda Casey served as Alabama's State Forester for six years from 2007-2014. She is a native of Virginia, receiving a Bachelor of Science in Forestry & Wildlife Management from Virginia Polytechnic Institute & State University (Virginia Tech). Prior to assuming the top position in Alabama, Casey was employed with International Paper Company, from which she retired in 2006 with more than 34 years of service.

Greg Pate was Alabama's State Forester from 2014-2016. A native of Alabama, he received a Bachelor of Science in Forest Management from Auburn University in 1981. He had a total of 30 years of experience in forestry before returning to Alabama: five years in the private sector and 25 years with the North Carolina Forest Service where he served in various capacities including forest management, fire, nursery and genetics, and becoming the State Forester of North Carolina in 2012.

Rick Oates, Alabama's current State Forester was appointed in 2017, (seven years and counting)! A native of Texas, he received a Bachelor of Science in Natural Resources from The University of the South (Sewanee) in 1990 and a master's degree in forestry from Auburn University in 1993. Oates had previously served as forestry division director at the Alabama Farmers Federation (ALFA), where he was also executive director of the Alabama TREASURE Forest Association and director of the organization's catfish and wildlife divisions. Before that, he served as chief of staff for the Commissioner of the Alabama Department of Agriculture & Industries, and he had also held several positions with the Alabama Forestry Association.

## Celebrating the AFC Centennial Looking Back:

I would like to acknowledge the AFC's success in working in emergency situations with other organizations (wildfires, tornados, hurricanes, oil spills, trucker strikes...). The talents, skills, and work ethic of its employees are most remarkable and highly praised by state leaders.

Of course, the AFC's interest in customer service and loyalty to forest landowners is always at the top of its employees' priorities.



I have made the Alabama Forestry Commission my career primarly because of working with landowners, helping them manage their land. I am an outdoors person and with the Forestry Commission, you can be outside and do a variety of jobs. I was fortunate to be hired in the county in which I live. I have always been blessed to have great supervisors. During my years of employment, I have worked with some great people who have become very good lifelong friends. The Alabama Forestry Commission has come a long way in my 30-plus years. At the end of the day, the AFC is a great place to work for me!

-- James Barker, Forestry Specialist Supervisor

Working for over 50 years has been quite a growing experience. I've had a great group of co-workers who have made coming to work fun. When you're young and getting established on your own, you work because you have to. It is a plus that you enjoy the work you must do to make whatever vision you have possible. My dad was not always thrilled with his job, but he was thrilled with what it allowed him to provide for his family. He always told me to try and find a job I loved doing, and I would never work a day in my life. He was right!! It's more like therapy for me today. I am 72 years old with a radiated brain that cancer could not even find, so I hope working helps keep me sharp.

-- Mary BurtonSelf, Northeast Regional Office

When I was hired, I was told the following: "When you come to work here, it is not just a job, it is a lifestyle." I told everyone I hired for nearly 40 years the same thing. Another is "The AFC is not just a group of coworkers, it is a family."



-- Gary Cole, AFC Retired

It was early spring of 1980 and fire season was ablaze! I was headed to a live fire situation with Mike Lanier in Baldwin County. Of course, we had plenty of equipment malfunctions that day so fighting fires had become quite a challenge.

As Mike and I approached the area of concern, we noticed in the distance a group of four kids of various ages running away from an old, abandoned building that went up in smoke and flames before our eyes. We put the truck in high gear, bouncing with dust flying as we approached the kids, who were by then running for dear life at the sight of the red light coming for

them. We noticed that two of the older boys had long guns. While the boys were running, the two younger boys tripped over their feet and fell. Mike jumped out of the truck as I skidded to a stop. He took off after the older boys, so I approached the younger boys. As I pulled them up, I said, "What are y'all doing?"

The boys, trembling with fear, were too shaken to give a good answer. As Mike came back with the two older boys, it was determined that they had started the fire at the abandoned building to run a fox out of it. The guns were claimed to be in use because they were 'hummingbird hunting' to which I replied, "We need to contact the Game Warden," as I held back my laughter.

I radioed Dispatch for a Sheriff's Deputy to be sent to my location because of the four juveniles I had detained for arson. It wasn't long before Mr. Moody and David Frederick arrived on the scene. Mr. Moody approached the youngsters stating, "You boys are in serious trouble." Then he asked David, "How many years can they get for arson?"

David replied, "About 20." The youngest boy, who was about 8 years old, wailed up with tears. Mr. Moody got down at eye level with him and said, "And just what are you crying about?"

The young boy replied, "My mama isn't even going to recognize me when I get out of prison!"

Mr. Moody stepped behind the truck, holding back his laughter. We ended up letting the boys go back into the custody of their very angry mother and grandmother, which may have been worse than Juvenile Detention!



If it's going to happen, good or bad, it'll happen in the Southwest Region. We have it all...

"Take a number and get in line." When you go inside a fast-food restaurant, you order, get a number, and wait. That's what I've told my guys through the years from time to time when fire calls were stacking up and we couldn't get to them all. That's the approach that we are forced to take when fire calls exceed our response capacity on an afternoon at 2 pm with 20% RH [relative humidity], the wind's blowing at 15 mph, and Dispatch is getting hammered with calls. It's the same way with eating an elephant, one bite at a time.

Back when I was work unit manager in Clarke, I was walking over a landowner's property and unexpectedly walked up on a cave. Naturally, I spent some time crawling through and exploring. Later in a group conversation, I mentioned my spelunking expedition to others, including Gary Cole, Regional Forester at that time. I jokingly asked what time code that should be under. Without cracking a smile, he answered, "annual leave."

-- Benji Elmore, Southwest Regional Forester



I spent 32 years with the AFC in Winston County and enjoyed working with so many wonderful people. The diversity in our everyday job was the best. I enjoyed making two trips out West on fire details in 1989 and 1990. The topography was a huge challenge, and I took my first Huey helicopter ride

out there. I was/am a huge prankster and I had so much fun pranking the guys I worked with. Lasting friendships made over the years, and I couldn't have asked for better guys to work with.



-- Johnna Franks, AFC Retired

I would like to congratulate the Alabama Forestry Commission on its 100 Year Anniversary! I was an employee with this wonderful organization for 31 YEARS, 11 MONTHS, and 5 DAYS. I retired as the Southeast Regional Forester on September 1, 2014.

On September 1, 1985, the day I was to report to work, my first child was born, and the Alabama Forestry Commission allowed me to stay with my wife and new daughter until I got them out of the hospital and set up at home. Three days later I reported to work and began my career.

Thank you, Alabama Forestry Commission, and Congratulations!



-- Otis French, Sr., AFC Retired

It was a privilege to work with the employees of the AFC, especially the Northwest Region, and to greet landowners in the office and over the phone. I sincerely loved my job. I want to thank Mr. Wayne Strawbridge for giving me such a wonderful opportunity. The regional staff (Ken, Jim, Harry, Tilda, Rhonda, Linda, Lucious, and later, Ruth) were very helpful to me. I can't imagine working with a better group of people than our county managers (later, work unit managers). Many thanks to Myrtle, who retired just when I was seeking a transfer! She's like an older sister to me. All of us were, and still remain, a close family.

During my 22 years, I was blessed to work with five regional foresters (Strawbridge, John Pirtle, Dan Lassetter, Hank McKinley, and Terry Ezzell). Each one had a distinct style of management, and I enjoyed working with all of them. I pestered the stew out of the Central Office staff and the other regional secretaries! I will always be in their debt.



-- Diane Harris, AFC Retired

Congratulations to the Alabama Forestry Commission for 100 years of service to the citizens of the Great State of Alabama. I had the great pleasure of working with the AFC from September 1990 until January 1, 2017. I had previously worked for a private forest industry company for over 14 years. Needless to say, the change from a profit-centered job to a service-centered job was a challenge in the beginning. The unique things that the AFC accomplishes often go unnoticed by the public but have a great impact on the betterment of the state's natural resources, economy, and public health.

I enjoyed working with the private landowners in trying to help them manage their property to meet their objectives. However, I also gained great insight into many larger objectives on a state and regional level. I hope my job with the AFC helped educate different state and federal agencies, NGOs, and environmental groups about how forestry benefits the state. It was a pleasure and a learning experience for me to learn and understand their differing perspectives and how we all need to interact to make things work. Thanks again for the opportunity the AFC provided me. To the next 100 years!



-- Jim Jeter, AFC Retired

As a child growing up, I had two dreams – to someday be able to drive a big red fire truck and to somehow include my affection for Smokey Bear – my first [collectible] piece being a 1961 board game! So Forestry was a logical choice for me to pursue my dreams. In the end, I got to do both, and the Alabama Forestry Commission afforded me that opportunity. Except, it was not a big red fire truck, it was a small yellow 1975 John Deere 350B dozer and a dark green 1979 International transport truck with pull-out ramps! Then for 37 years I got to do what I always wanted to do, and even got paid for it!

I started my career in 1980 as a temporary employee, after interviewing with Harold Taft. I worked in the five southern counties of Mobile, Choctaw, Washington, Clarke, and Baldwin on the FEMA Recovery Plan after Hurricane Frederick. I reported to the fire tower in Chunchula and I was given a 1970s model pickup to drive. Roy Price was the District Forester. When that FEMA program expired, I went up to Lauderdale County as a permanent employee, moving from one end of the state to the other! In replacing Tommy Patterson, I was afforded the luxury of a Ford sedan to drive, in which I promptly ripped out the oil pan on a stump while visiting with a client.

My career entailed many events. I attended the 1981 Forestry Academy, and I remember Doug Smith always 'cracking the whip' during the classes. Having to get up early and jog in the morning, and stand in long lines to get our meals, I asked myself, "What have I gotten myself into?"

Sometime in the '80s, I remember picking up Mr. Moody at the airport for an event, and I was scared to death because I was picking up this 'larger than life' person. But I survived that experience! Remember Assistant State Forester Charles Pigg? One time he got on to me because my black dress shoes were not spit-shined, and my name tag was crooked!

I can remember a bad fire we had off Pea Ridge Road in Waterloo. Vernon Young was my Ranger back then and he said we could go down this rocky hill to get to the bottom of the fire. I disagreed, but he proceeded down anyway, and partway down the dozer flipped 180 degrees and he was going down backward. His jaw dropped and his eyes were big as saucers! Thankfully he made it down safely. We had many fires in the '80s. One Saturday we had a waiting list of 11 fires to suppress, and I ended up eating my breakfast cinnamon roll at 6 pm, sitting on a fire plug.

One time flying back from Montgomery, around Birmingham we encountered a thunderstorm. Ralph Montgomery, the District 9 pilot, was busy tightening up his shoulder straps, and I asked him what was happening. He said we couldn't go around it, above, or below it, so we were going through it. I will never forget the sound of the rain beating on that little Cessna and looking out the window at the wings flapping in the wind! And as a side note, Phil Montgomery does not like you getting sick in his airplane!

February of 1994 brought us the Big Ice Storm. I learned how good Cary Rhodes was in sharpening chainsaws, as that's about all he got to do. I slept in a church and the Red Cross brought us food.

The Edmond's Hollow Fire in Waterloo occurred in 1999, burning around 400 acres, and again I learned how good Cary was – this time as a dozer operator!

In 2012 was our big Hinton Road Fire, also in Waterloo, burning around 900 acres. Many counties, VFDs, and personnel helped with this project. This was my worst fire, and I was truly afraid for the safety and well-being of everyone involved. Chris Brewer proved what a good dozer operator he was. At one point he and I had to separate to escape the fire, and I ended up sliding down a steep hill on my butt.

Right before I retired, I made one last TREASURE Forest presentation to Will Calhoun. He was proud that he was my last awardee, and I was

(Continued on page 12)

excited and proud that I had the opportunity. It was quite an emotional event for him and me.

These are a few of my experiences that stand out in my mind. I am so thankful the Alabama Forestry Commission allowed me to fulfill my dreams. From Mr. C.W. Moody to Mr. Rick Oates, it's been fun. I met so many nice people, served so many clients, and worked with so many great associates. I enjoyed working with all my VFDs, which I continue to do today. And yes, I still collect Smokey Bear memorabilia! My 'museum' is ever growing! Congratulations on your 100th Anniversary.



I was blessed to be a part of the Alabama Forestry Commission (AFC) for 31 years (February 1, 1977 – March 1, 2008). With a Bachelor of Science in Natural Resources Management from Alabama A&M University, I was employed as a Forest Ranger I in Jefferson County. I was given the opportunity to control wildfires, assist in the development of volunteer fire departments in rural areas of the county, work with private forest landowners, provide forestry educational programs in schools, and perform other duties as assigned.

In 1984 the AFC assisted me in attending Auburn University to obtain a B.S. Degree in Forest Management. While working for three different State Foresters (Mr. C. W. Moody, Mr. Timothy Boyce, and Mrs. Linda Casey), the AFC gave me every opportunity to be the best I could be at my job. I retired as the Regional Forester in the Northeast Region of the state.

In general, Alabama forest landowners are wonderful people who give back much more to our forest resource than they take from it. The AFC plays an important role in that process.

My greatest joy, however, was derived from the amazing people I got to work with for 31 years. They were dedicated, hardworking individuals who placed the requirements of the job and the needs of Alabamians above themselves, and many times above the needs of their families. It was a blessing from God given to me and my family to have been a part of such a great organization.



As a retired employee of the Alabama Forestry Commission, I could write a book. Looking back at the time I spent helping landowners and people of Alabama, as well as the many other states we assisted, it means a lot to know that you made a difference in the lives of those needing help. It is very gratifying to have had the opportunity to work for an agency that allows you to do all of that. I made a lot of friends and had some great co-workers who left lasting impressions, but I sure am enjoying my retirement as I spend time with my family and friends.



-- Kenny Poole, AFC Retired

I loved working for the Alabama Forestry Commission. It offered immense diversity. I always worked on something different each day, in fact, each hour. Every employee brings something different and focus their activities on their strengths and interest. I feel very strongly that the Commission provided very valuable service of education and protection to the public and forest landowners.

I'll never forget the wildfire that clearly started from a rubbish pile in someone's backyard. When I asked the owner how it got started, they

responded, "I don't know, maybe a rat turned a soda bottle over and the sun ignited the grass."

I'll never forget the time Glenn and I were flying for SPB spot locations, and the plane's engine stopped (ran out of fuel). The contract pilot changed over to the reserve tank and restarted the engine just before we crashed. We took the rest of the day off!

I'll never forget the time I turned a dozer on its side while plowing out a wildfire. We got it back upright and I finished plowing out the fire.

I'll never forget the time the Autauga tractor fell off the edge of a ravine rolling over three times to the bottom of the gully. Fortunately, Joe the operator, was not injured.

I'll never forget the time I got a call from a landowner telling me he had finished implementing ALL the suggestions that I had given him in a TREASURE Forest Management Plan five years prior.

I'll never forget the opportunity I was given to go to Germany for a forestry trade show. We proudly displayed "Forestry in Alabama" to the world. I know of at least one new OSB mill that was built in Alabama partially resulting from that trip.

In the '90s, AFC serviced thousands of cost-share assistance programs for site preparation and tree replanting. During my career, I watched those trees grow and even saw some of those timber stands harvested. It felt good to be a small part of that assistance.

During the early part of my career, we would fly to mark SPB spots. Back on the ground, we would painstakingly determine the landowner and send them a notification letter about active spots on their property. They would then take action to stop the beetles and minimize damage. This process is still ongoing. I feel it is one of the most beneficial programs the agency does.

I will never forget the time a truck broke down on the side of the road. A wrecker was called to transport it to the repair shop. It was accidentally transported by a private service halfway across the state because of our miscommunication. It cost us more to transport the vehicle than to fix it.

I remember everyone getting the first computer mapping program. As a result, tens of thousands of printed maps could be produced for landowners. It even led to producing SPB location maps. After Hurricane Ivan, maps were made showing all the damaged timber stands in southwest Alabama. That system paid for itself many times over.

I'll never forget a landowner telling me he just finished weed eating around all his newly-planted pine seedlings in his ten-acre plantation. He managed his forest stands with high intensity!

I'll never forget the immense level of destruction caused by the tornados of 2011. When we flew to map the damaged forests, the pilots and I were just in disbelief. That tornado tore a half-mile-wide total level of destruction from Tuscaloosa to past the Georgia line. We spent years helping landowners recover from that destruction.

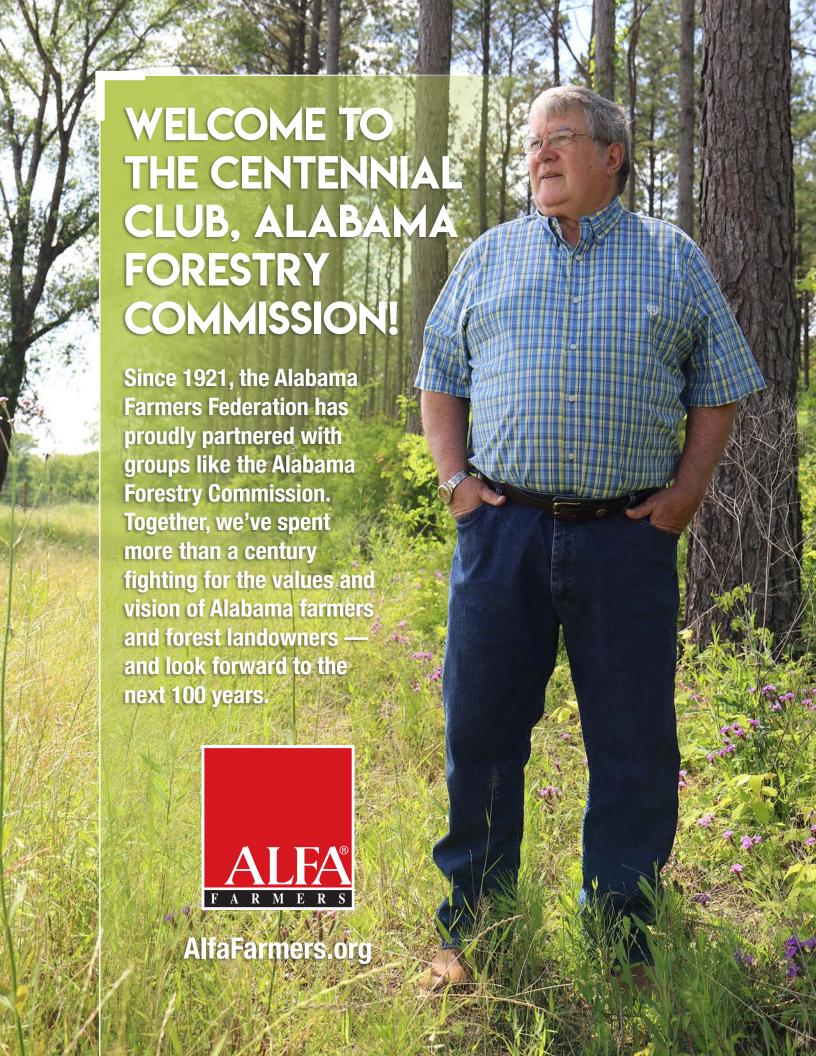
I worked with a great group of other employees. If a group effort was needed for a special function, such as a landowner tour, there were always volunteers. Providing prescribed burning, especially for the smaller landholdings, is a service no other entity provides. I was very proud to take part in responding to emergencies from wildfires to storm damage. It made me happy to help people in need. That was the joy I received for my service to the Commission.



-- Bruce Springer, AFC Retired

Regarding my time with the AFC: Most people chase success at work, thinking that will make them happy. The truth is that happiness at work will make you successful.

-- James 'Moto' Williams, Forestry Specialist Supervisor



## Looking to the Future:

tate Forester Rick Oates realized that he had been looking back at the 100-year history of the AFC, so he thought it would be interesting to look ahead at what changes we will see in the next 100 years. He sent out a questionnaire to several foresters across the agency and asked each of them to have some fun with the future while giving some thought to life and the forest industry in 2124. As you will see, the responses were varied! He listed the following questions to stimulate the thought process, but did not limit the respondents to answering just those questions.

- How will firefighting and prescribed burning be different? Will we still use
  prescribed fire and have wildfires? What technology changes will we see
  that make controlling wildfires easier?
- What will the markets for landowners be like? Will we still harvest trees
  for paper and solid wood products, or will there be an alternative crop and
  products? New uses for trees? Recycling? Genetic improvements in trees?
- Where will forest certification and our social license to harvest timber go? Will we have more trees or fewer trees? How will forest recreation be different? The wildland-urban interface?
- Will there still be an Alabama Forestry Commission? Democracy? America?

- Will we still manage timber like a crop? Will the southern pine beetle wipe out loblolly pine?
- Manmade climate change: will it be proven a hoax or have a strong influence on Alabama's forests? Will Baldwin and Mobile counties be under water? Will it lead to more, larger fires? Will hurricanes and storms wipe out huge areas of forest land?
- Will we still have private forest lands, or will the government own it all?
   How will the Endangered Species Act, Clean Water Act, and the Clean Air Act be different and affect forestry and the forest products industry?

#### **Greg Brewer, Stewardship Forester, Forest Management Division:**

I think in the next 100 years, prescribed fire will be nonexistent, and wildfires will be on the rise. With urban sprawl, wildfires will be knocking on the doors of structures, and structural firefighters will be more involved in wildfires than they are now. Technology in wildfires will include a lot of drones. Satellite imagery will detect fires, and drones will be deployed to contain the fires or at least assist firefighters.

We will have private forest land, but increasing political policies from our government or around the world will affect how private forests are managed.

More people on Earth will own smaller parcels of land. We will still manage timber like row crops, but there will be less land to grow timber. Urban sprawl and federal land policies will continue causing a reduction in productive forests. Markets will be high. Landowners that have enough land to grow an income-producing timber stand will be in the money. There will be some alternative timber products, but the original organic timber products will always be needed. Recycling will increase due to the smaller amount of land to grow trees and the cost of harvesting.

Certifications will be a huge deal in the future, and Tree Farm will not be the only certified wood program. Because of foreign policies and restrictions for Alabama to sell products on a world stage, certified wood will become more important.

Whether caused by humans or not, climate change will be a debate that continues forever. Regardless of where you stand on this issue, the earth is changing. Looking at the last 100 years, fires have increased, and this trend is likely to continue. Wildfire season as we have known it will change, becoming longer and more intense than we are seeing today. Hurricanes and tornados will also increase in frequency and strength. With this trend, increased forest damage will create challenges for the forest industry.

Forest health will be of more concern. Different invasive species will arrive; other insects and diseases will cause problems. With a limitation on burning and herbicide usage, we will not be able to manage forest issues. Creating genetically improved trees to resist southern pine beetle, root rot, or brown spot needle blight will be necessary.

The Forestry Commission will continue to play a large role in Alabama's forest industry in the next 100 years, but it will be more focused on wildfires and less on prescribed burning. The agency will be assisting landowners with smaller tracts, and forestry management objectives will change. Because of smaller tract sizes and increases in logging costs, most landowners will not be able to grow timber for income but will focus on other management objectives such as recreation. Overall, the challenges we see now will continue and increase in complexity.

#### **Bradley Dunham, Forestry Management Specialist, Coosa County:**

In 1924, one of the most important forestry-related acts, the Clarke McNary Act, was passed by the United States Congress. This act made it much easier for the Forest Service to buy land from willing sellers within predetermined national forest boundaries. It also enabled the Secretary of Agriculture to work cooperatively with state officials for better forest protection, chiefly in fire control and water resources. During this same year, the Alabama Forestry Commission was founded. Today, 100 years later we are still protecting the forests from all harmful agents; servicing and helping landowners to carry out responsible forest management on their property, using professional technical assistance to benefit themselves, their land, and society; and educating the public about the value of our forests in ensuring both a healthy economy and environment.

Over the past 100 years, there have been numerous technological advancements in the forest industry. We have advanced from skidding logs with horses then floating them down the river to mills, to having specialized logging equipment such as skidders, knuckle boom loaders, feller bunchers, and log trucks that quickly and efficiently move wood from the stump to the mill. I can only imagine the technological advances that we will experience over the next 100 years. I foresee Tesla robots playing a large role in the future of harvesting timber. Tesla will also begin building logging equipment that can be operated remotely and produce EV-powered heavy equipment. Increased drone usage will also impact the future of forestry: timber cruises conducted from above, along with thinnings marked from the air.

I'd like to believe that the Alabama Forestry Commission will be around for the next 100 years. I don't see an end to wildfires in the future. Prescribed fire is

## The Next 100 Years

such an efficient and low-cost management tool for forest stands that we will be conducting prescribed burning well into the future. With continued education, we might even get the West Coast to start conducting prescribed burns.

In addition, brown spot needle blight will become more detrimental to loblolly pine than southern pine beetle (SPB). Young stands of loblolly will be decimated by brown spot since there is no economically feasible way to treat it, mainly because burning young loblolly isn't an option. We will continue to manage trees as a crop well into the future. Hopefully, genetic improvements can help solve the brown spot needle blight problem and provide an economic boost to the company that can produce a brown spot needle blight-resistant loblolly seedling.

Genetic improvements will also be made that will reduce the rotation age of loblolly and longleaf pine. I see longleaf becoming more important in southern pine forests due to its increased resistance to SPB and brown spot needle blight. Increasing cost-share opportunities to help reintroduce longleaf into its native range will also make it a more popular choice.

Harvesting and reforestation practices will continue. Educating the public on the importance of renewable natural resources and their usage will continue to improve. Forest recreation will significantly change. Outdoor recreation will favor hiking and bird watching instead of hunting. Chronic Wasting Disease will also cause a drastic decrease in the number of hunters over the next century. The wildland-urban interface will continue to become more important as cities grow, and urban sprawl moves homes into woodland areas. Citizens from urban areas will realize how nice country living is and want to see wildlife in their backyards, resulting in more homes being built in this transition zone.

Furthermore, man-made climate change will be proven a hoax, with Mobile and Baldwin counties remaining safely above sea level. It will be proven that the earth goes through natural warming and cooling periods despite us humans and our activities. Earth was designed to do what it does. Who knows, in 100 years Earth might be entering its next ice age. Large fires will continue, and hurricanes will continue to damage forestland as they always have. Hurricanes could lead to alternative building products being used instead of the typical wood-framed construction of new homes, especially in states located along the Gulf Coast. I can see metal-framed home construction becoming more popular in this region.

Land ownership will still be a mixture of government and privately owned. There will be enough stubborn good ole boys who won't sell out to the government, at least in Alabama. Additional tighter government regulations on air and water quality through the Clean Air and Clean Water Acts will make prescribed burning and harvesting timber more difficult.

#### Rickey Fields, Prescribed Fire Program Manager, Protection Division:

There will still be a need for prescribed burning and wildland firefighting in Alabama and across the country 100 years from now. There are currently millions of acres of forestland throughout Alabama and the country that are state and federally protected from development, and these acres are increasing every year.

Going forward, there will be advancements in wildland firefighting and prescribed burning technology. However, there will not ever be a replacement for our most important asset, which are the people tasked with performing these hazardous duties.

In the future, we will still manage timber like a crop. Southern pine beetle (SPB) will always be a nuisance, but hopefully, technology will help reduce the

negative impact of SPB outbreaks. This could be achieved by a combination of improved tree genetics and controlling the SPB population.

The timber market for landowners will fluctuate and remain unpredictable in the long term. Timber will always be the most cost-effective and renewable resource for paper products, construction materials, etc.

Forest certifications will become increasingly popular because consumers of wood products want to make sure these products are harvested and managed to promote and enhance the overall health of our ecosystems. Forest management activities such as prescribed burning will be more difficult. It is important to continue our forest management activities, but it will have to be on a much smaller scale.

I have always felt that weather is cyclical in the long term. Is that climate change? Everyone has a different opinion on that. Although our coastline will continue to change just as it always has, I don't foresee Mobile and Baldwin counties being entirely under water in 100 years. I think our wildfire size and frequency will remain steady over the next 100 years. Most of our wildfires are caused by careless humans, not the weather.

Private forestland ownership has always been a benefit to the people of Alabama. These landowners manage their property to remain productive and be passed down to future generations. However, increasing federal regulations and low stumpage rates can cause frustration. Fortunately, many people appreciate the recreational rewards and the pride of land ownership instead of relying so much on the financial compensation their timberland can bring.

If America is still around in 100 years, I am certain there will still be an Alabama Forestry Commission. The AFC will continue to evolve just like it has in the last 100 years.

#### John Goff, Forest Protection Division Director:

One hundred years is a long time. I don't think a forester standing in the woods in 1924 could even fathom what 2024 looks like, with all the advancements that have come over the last 100 years. Could the next 100 years see the same amount of change?

Things are usually cyclic; what goes around comes around. Currently, we are in a state of high-production forestry. Little tracts and small landowners are left out. I think the large timber companies will regret divesting their land holdings to make short-term investors happy. Landowners will begin to put a premium on aesthetics and not necessarily cutting timber. Eventually, the small logger and small markets will come back as these smaller tracts have more, high-value old trees on them. Industry will have to adapt.

Fragmentation is happening, and that will change things. Fires will always happen. I'm not sure volunteer fire departments will be here in 100 years. However, the AFC will fill the void and be greater in number but be outfitted and run more like a structural fire department. Eventually, it will be seen that State Forestry needs more resources. We will still have dozers, but more people and more engines.

Family farms will make a comeback. The Coosa and Tallapoosa rivers will be free-flowing and free of dams.

#### Matthew McCollough, Forester, Plains Work Unit Manager:

Firefighting and prescribed fire techniques will change as much as the landscape changes. Over the next 100 years, who knows what native species will be left or what the new cogongrass will be.

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#### Looking to the Future: The Next 100 Years

(Continued from page 15)

Prescribed burning has not really changed in the past 1000 years. It's still the same: you need fuel, heat, and oxygen; and the basic burn techniques are head, flank, and back. However, as the landscape changes and more houses are built, we will have to adapt to new burn cycles and possibly smaller burns to get them done quickly and produce less smoke because of the increase in smoke sensitive areas.

As technology becomes more advanced with AI, robots, and drones, I see it playing an even bigger role in size up, automatic weather updates, and possibly even suppression, if drone efficiency improves. I don't see the human element ever being completely removed. If it is, we should all be mandated to watch "RoboCop" at Forestry Academy.

Timber will still be managed as a crop unless technology can produce a synthetic that is a lot cheaper. It will not take off unless it sets a trend like a Tesla.

Our brightest minds will conquer southern pine beetle with stronger genetics, and who knows, an invasive predator may be introduced and wipe them out.

Certifications could become more helpful to landowners for receiving additional financial assistance and dollars per ton. I can't foresee us ever having fewer trees, because even if you don't like to be in the woods, everyone loves the look of a forest, and we need timber for so many different things. Urban sprawl will be an even bigger factor and, in some counties, we as an agency may not even accept burns because of the smoke sensitive areas.

It will always be East versus West: private lands in the East and government lands in the West. The Clean Water Act and the Endangered Species Act will be fluid and as constantly changing as powers in the White House. The mandates will never be more than four years away from a change.

#### **Drew Metzler, Wildlife Biologist, Forester, Forest Health Coordinator:**

I certainly hope we have a country in 100 years and the government does not own all the land. Otherwise, things will be burning down all the time, polluting the air, and beetles will always be running rampant.

We will be managing pine timber as a crop, albeit much differently than the past few decades. This country (and others) will continue to depend on the plantation pine stands in the Southeast for fiber and solid wood products. Crop or plantation silviculture is always going to be around because it is the only sustainable and reliable measure of producing recurring harvests. Invasive plants are all too often present in naturally managed stands and threaten the long-term sustainability of these stands due to displacement and suppression of regeneration of native trees. In plantation systems, we at least have timed applications of herbicides that can be used before stand establishment or during the life of the stand rotation to suppress or limit invasive plant growth and ensure the timber reaches maturity. Southern pine beetle (SPB) and brown spot needle blight are certainly testing the feasibility of plantations, but it is something that will be overcome with genetic improvements and different silvicultural treatments.

Pine beetles have likely existed in the Southeast as long as there have been pine trees, so they will always be a native pest that we must mitigate. Since SPBs are native, Mother Nature has natural population controls that keep them from wiping out all the pine forests (ex. predatory beetles, diseases, weather, etc.) The large outbreak in 2024 could be blamed on many circumstances, but the changes in markets and wood demand have certainly played a large role in that, leaving many forests stagnated and stressed, providing ideal conditions for SPB growth and spread.

Going forward, I believe the attitude of 'Less is More' will be a trend regarding planting density and reducing the need for an early first thinning. However, non-native diseases and insects are the wild cards, and as we continue to be a more global market in terms of trade and travel, the potential for the introduction of

these non-native pests will forever increase and threaten both agricultural and timber crops. Some very impressive diseases and insects have been introduced over the past 100-150 years such as chestnut blight, Dutch elm disease, emerald ash borer, and hemlock wooly adelgid. These insects and pathogens have caused wholesale changes in the stand composition and structure in the areas where they have occurred, so it is unavoidable that new pests will continue to arrive and threaten the very existence of certain native species. Early detection of forest pests will be even more crucial over the next 100 years as well as continued improvements in tree genetics for pest resistance.

#### Ray Metzler, Wildlife Biologist, Threatened & Endangered Species:

I don't think that folks in 1924 could have envisioned the amount of change in the past 100 years. I always say that I think in black and white, not color, so I often find it hard to envision things. For this reason, I find it hard to imagine what the next 100 years will bring. But I realize the world is changing at a rapid pace. Your questions make great fodder for our readers to consider.

Our country's population has increased from approximately 114 million to roughly 340 million – about a 198 percent increase. The rate of population growth is decreasing, but if it remained the same for the next 100 years, the US would have over 1 billion residents. I wouldn't want to live here if we had 1 billion residents. Alabama's population increased from 2.5 million in 1924 to about 5.1 million today – a 104 percent increase. The state would have over 10 million residents if we experience this same population growth for the next 100 years. The world must recognize that our natural resources are not unlimited, and we must maintain our agricultural and forested habitats to provide for food, recreation, and sustenance. But who knows what will happen, life may be very similar to what it is now, or people may be walking around in spacesuits with backpack oxygen bottles/devices.

From a biologist's perspective, we must plan and adapt as needed to maintain as much of our 23 million acres of forest land to ensure a healthy environment – for humans as well as other living flora/fauna. We are lucky to some degree in that Alabama's expected population growth over the next 50 years is not as great as many other areas in the country. We are expected to only experience significant population growth in the Huntsville to Birmingham to Atlanta triangle, along with Montgomery, Dothan, and Mobile. I am thankful our rural areas are expected to remain rural for the most part. Hopefully, these 50-year projections will also be what happens 100 years from now.

Commercial airliners were just beginning to be built during the decade of the 1910s. Today, commercial airline flights are extremely common, and talk of drones serving as taxis is being considered. Drone technology is already being utilized for many activities in today's world. AFC staff is just beginning to use drones for many aspects of routine duties including fire suppression, which will only increase in the next couple of decades – let alone 100 years from now. Drones as we know them today will probably be obsolete in 100 years and there will be something much more advanced – possibly something that flies while sucking in air and spitting out water or some other fire suppression material.

There are lots of brilliant minds on this planet that will have to be put to good use. So far, man has been able to adapt and co-exist with the natural world. In the end, Mother Nature has much more power than man has been able to control, and this reality will continue into eternity. Natural phenomena such as fires, hurricanes, and floods, have been on the landscape since the beginning. I don't know if the rate of these natural occurrences has changed as our populations have increased, but I do believe they will always be on the landscape and our ability to learn/adapt/co-exist is critical to our future.



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#### **LET'S DO THE WORK.**



### AFC Mural Commemorates 100 Years of Service to Alabama

By Michelle Barnett, Centennial Committee Chair, Communications & Creative Design Services
Alabama Forestry Commission

n 2023, State Forester Rick Oates selected a cross-section of Alabama Forestry Commission (AFC) employees to form a committee that would gather ideas from their peers on how best to celebrate the 100th anniversary of the AFC. The committee which consisted of forest rangers, foresters, regional foresters, communications specialists, and administrative assistants met monthly to flush out the suggestions and develop a plan that was sustainable and affordable.

The first project the committee tackled was to have a mural painted on the exterior wall of the state office. The plans and bids were submitted to the executive team and ultimately presented to the AFC Commissioners for approval.

#### **Mission Mural!**

In our search for a muralist, we put word out that the agency was looking for an artist to transform a blank brown exterior wall at the state office building in downtown Montgomery. It was time to make it known to everyone who has driven by and wondered "What is that building?" just what we have been doing for over 100 years in the state of Alabama!

We consulted with the City of Montgomery, the Alabama State Council on the Arts, and local artist Kevin King who has been instrumental in the increase of murals in the downtown Montgomery area. Through those connections, we received some recommendations, as well as suggestions from AFC personnel around the state.

#### Lessons

The first questions artists asked besides the size of the wall were – do you have a water source? is there access to power? and is there a lift or scaffold available? It never entered our minds that they would need to wash their brushes and have lights to work at night; and if they worked at night, we would need to provide security for their safety.

During this process, we also discovered that there is a thriving mural community throughout Alabama, in small towns and large cities alike. There are enough murals to warrant a website to view amazing artwork and create a scenic tour around the state. The Alabama Mural Trail created by The University of Alabama Center for Economic Development "aims to provide the state of Alabama a sense of community, to drive economic impact, and to bring people together. This statewide trail encourages both locals and tourists to discover Alabama off the beaten path." www.alabamamuraltrail.org

#### **Call for Artists**

The goal at the onset was to clearly show how daily life looks for most of our employees. Out of nine artists that were reviewed or interviewed, there were four finalists. The artist that we selected nailed the concept on the first try. His artwork took our breath away. It was clear he understood the challenge of expressing how







we 'educate' our citizens on how to best 'sustain' and 'protect' their land and Alabama's forests.

The artist we selected is Charles Forbus from Alexander City. He captured the elements and essence of the AFC, his budget was in range, and he had the fastest timeline (four to six weeks). The contract was signed on October 10, 2023, and he started work soon thereafter. Charles and his assistant, Donald Moore, started the process at night so they could project the imagery on the wall. The next step was to use chalk to outline the compilation of images. However, we experienced uncommon October rains, so white spray paint was used to create the framework. During the day, they painted as long as there was light. In no time, the transformation began to take shape. The change was remarkable from one day to



the next. The entire process took roughly a little over a month to complete, and now no one has to wonder "What is that building?"

On January 17, 2024, the Alabama Forestry Commission's mural was added to the list of murals on the Alabama Mural Trail. On January 18, the agency hosted an Open House to kick off the anniversary celebration, as well as an unveiling and dedication of the mural to all AFC employees, past and present.

We appreciate the generosity of our sponsors – Alabama Forestry Association, Alabama Farmers Federation, Alabama TREASURE Forest Association, Thompson Tractor, and John Deere|Warrior Tractor. Without these sponsors, the mural would not have been a possibility for the agency.

Photos by Kelvin Daniels & Michelle Barnett



## CLARKE COUNTY FAWN: TRAIN 'EM UP!

By Benji Elmore, Southwest Regional Forester

ack in 1998, Mr. Gay DeWitt, Public Relations Manager with Boise Cascade's Jackson mill, approached the Clarke County Forestry Planning Committee about hosting a new educational program that he'd observed being implemented in the north part of the state. Forestry Awareness Week Now (FAWN) was started as an avenue to educate sixth graders about forestry and wildlife management. It seemed to be spreading to other counties as school systems, and natural resource professionals were deciding to come together for the good of their children's education. The format differed from previous events we'd been involved with, but with Mr. DeWitt's prompting, the committee decided to pursue it. Jack Brewer, county agent, hammered out much of the planning and the rest of the committee joined in to solicit funds, recruit workers, and get 'buy-in' from schools around the County. The committee recruited representatives from local forest industry, landowners, government agencies, and businesses to serve as presenters, instructors, and trail guides. People from all walks of life around

Clarke County answered the call to help the committee execute the first annual FAWN event in April of 1998.

Each year around January, the committee begins making plans for the spring event. Tasks are delegated to different members so that all needs are addressed. Schools are contacted to get their respective FAWN date on the calendar. Volunteers are coordinated and t-shirts are ordered. Funds are solicited from local industries and businesses to cover the cost of shirts for the participants, meals for the volunteers, etc.

T-shirts are a key part of the operation. Seven different colors are purchased and distributed to students and teachers in advance. When students arrive at the site, each is wearing a shirt that corresponds with their assigned group color to aid adults in keeping groups together and on schedule. Each school is assigned to one particular day so that all students in the county can participate. Throughout the week, students are bused in for a day's worth of natural resources education. Each class is accompanied by teachers and their aides. For the first 20 years, the event was held at the



Upper State Game Sanctuary north of Jackson. However, last year the site was moved to Scotch Park near Whatley, owned by the Scotch Lumber families.

Upon arrival at the event site, an organizational briefing is given to the students and workers. Then the students are divided into groups of approximately 20 each, wearing their color-coordinated t-shirts provided by the committee. Each group has a unique color, making accountability by the workers much easier. A trail guide who is familiar with the route is assigned to each group to keep it on schedule as it rotates from station to station. Average daily attendance is approximately 125 students and 35 workers. Four days in late April were originally set aside for the event to accommodate all students in all schools; however, the event has been shortened to two or three days due to fewer students.

Our goal is to teach every sixth grader in the county from all public and private schools, as well as homeschoolers, about the conservation of our natural resources. There are a total of seven stations with qualified, knowledgeable presenters at each that come from state and federal agencies, forest industry, and local

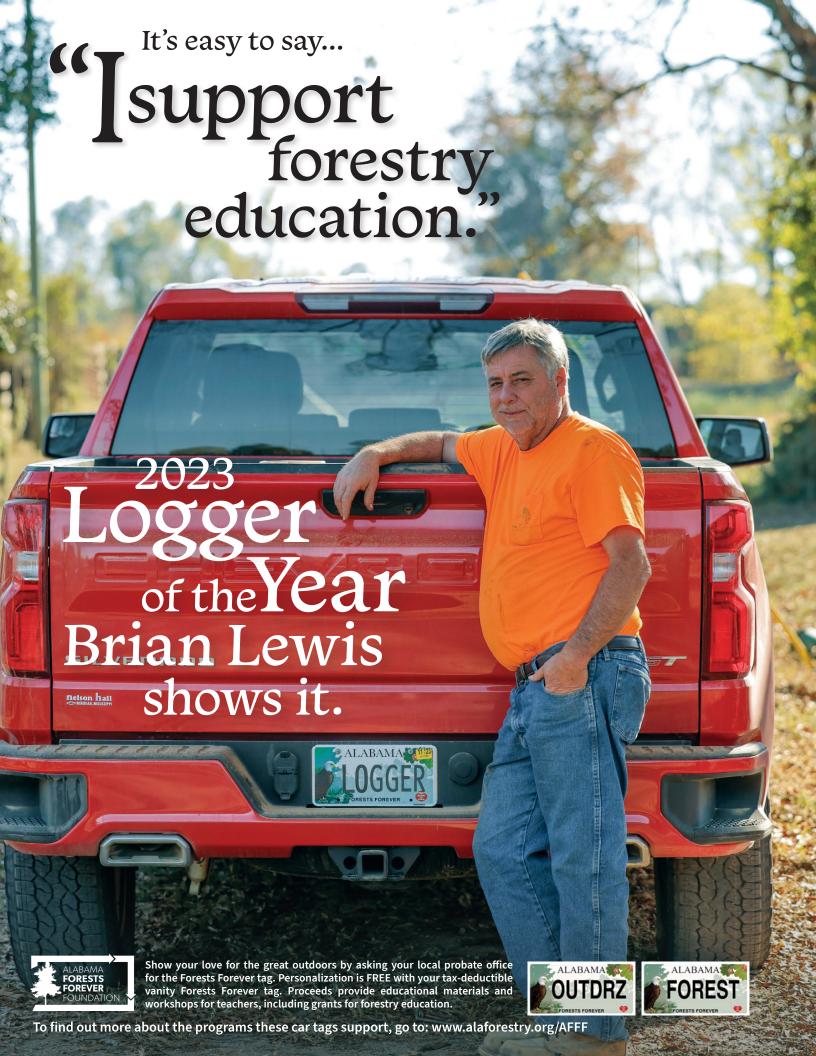
businesses. Topics include Tree Identification/Environmental History, Wildlife, Project Learning Tree, Soils, Forest Management, Wood Products, and Forestry Careers.

In addition to presenters and trail guides, workers are also needed as teachers, chaperones, meal preparers for adults' lunches, bus drivers, and logistical runners. Each student brings a sack lunch from their school. Students and adults enjoy a good meal during the lunch break at a common location and re-engage afterward for more learning stations. Problems are addressed as needs arise, and if inclement weather appears to be imminent, the day's activities are postponed so that everyone is kept safe.



Through the years, the members of the FAWN team have learned from previous years' teachable moments to evolve into a well-oiled machine. Each member understands his or her role in the overall objective of educating our youth so that they have a greater understanding and appreciation of our God-given natural resources. It is truly a rewarding experience to be a part of such an event with long-lasting implications. That's the reason that the Clarke County FAWN has been such a success for decades.







#### Alabama's Longleaf Turpentine Industry

By Ed Lewis, Forestry Management Specialist and Forest History Lover, Alabama Forestry Commission

t's very, very hard to imagine: an almost continuous forest, stretching over 1,000 miles, consisting of huge stands of mature trees covering large portions of eight states that stretched from east Texas through Louisiana, Mississippi, Alabama, Florida, North and South Carolina, and into Virginia. A forest that was established on over 90 million acres, and an area almost three times the size of the state of Alabama! That forest was reduced to less than 3 million acres by 1995, about 3 percent of its original range. What happened to it?

Longleaf pine in the southeastern United States is a 'riches to rags' story about the use of a once-thought 'endless resource' that was nearly destroyed by overuse and mismanagement. Thankfully, longleaf is slowly making a 'rags to riches' comeback. This is an abbreviated story of the industry that almost destroyed it, and the ongoing re-birth of the Southern Longleaf Pine Forest.

#### Turpentining in Alabama: The Beginning

Records indicate that turpentining in Alabama has its roots back to the late 1770s. Mobile County was the natural place for the beginning of the naval stores industry in Alabama, which made sense for a couple of reasons. Many wooden ships were nearby that required the pitch that waterproofed their vessels, and ac-

cess to the Mobile Bay overseas shipping trade that transported barrels of pine pitch was equally close. The term 'naval stores' refers to the extraction of turpentine gum, pitch, and resin which were used for waterproofing ships by coating the exterior of their surfaces with pine pitch. The story of large industrial turpentining in Alabama did not begin until around 1840, when copper turpentine stills were made that were small enough to be transported near to the forest resource. The Gulf Coast counties of Mobile, Baldwin, Escambia, Washington, and Choctaw had extensive natural longleaf pine forests that were exploited for the naval stores industry. Even Tuscaloosa County in the northern part of the state had a longleaf resource large enough to exploit for its large supply of pine resin.

The year 1875 brought the largest production of naval stores to Mobile Bay when the receipts reached a value of \$1.2 million. That value would translate into approximately \$34 million in today's dollars! Quite a nice sum for pine sap, don't you think?

#### Turpentining in Alabama: The Evolution of the Industry

In the early 1900s, it was widely recognized that almost half of the original longleaf forest in the United States had been exhausted for utilization of the turpentine industry, with no hope (Continued on page 24)

#### Riches to Rags to Riches Alabama's Longleaf Turpentine Industry

(Continued from page 23)

for renewal. The forests of Virginia, the Carolinas, and the Atlantic Coast of Georgia were no longer economically viable for obtaining pine sap products, so the industry moved to Florida, southwestern Georgia, Alabama, and Mississippi in the early 1800s. The increase of turpentine production in Alabama became possible through the invention of copper turpentine distilleries, or 'stills,' that greatly increased the ability to produce larger quantities of products.

#### Turpentining in Alabama: The Past Process

Let's briefly discuss some of the industry terms used in the early days. 'Chipping' was a term that described the removal of bark with V-shaped cuts in the trees to allow the sap to drip from the trees. Sap is the liquid that oozes from trees scarred to produce turpentine products. Gum is a thicker form of sap, having lost some of its moisture content through 'dipping,' the process which was the removal of that resin from the cups cut into the trees, collection tins, or clay collection pots. Pine tar is a type of wood tar produced by the high-temperature carbonization of pine wood in anoxic conditions. Pine pitch is a slightly more viscous, thicker type of pine tar, but those two terms have been used interchangeably.

The longleaf pines were chipped, forming an unusual recurring V-shaped pattern called a 'catface,' so named because of its cat-whisker appearance. As the sap began to slowly come out of the chipped face, it would accumulate in the cups, tins, or clay pots that were situated below the chipped edge. The cups, tins, or pots were then dipped, and the gum was delivered to the stills. The stills would cook the gum and separate it into turpentine and other products.

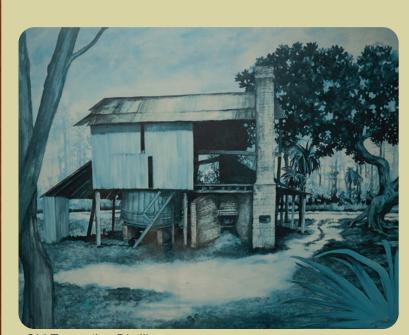
The laborers who worked in this forest industry deserve an article to

themselves, but space does not allow it to be written here. They were the hardest workers; however, they were also the poorest of the poor, the meanest of the mean, and many were the most unfortunate of the unfortunate. Wages were low if anything; many of the workers were slaves, and others were prisoners that were considered safe enough to present a low risk of escape. Work was excruciatingly hard, hours were long, and dangers included yellow jackets, wasps, and rattlesnakes, just to name a few.

The process of using longleaf pine was extremely wasteful, often resulting in the ultimate death of the longleaf trees. Many were killed by (1) over-use, that is, too much of the bark was

The process of using longleaf pine was extremely wasteful, often resulting in the ultimate death of the longleaf trees. Many were killed by (1) over-use, that is, too much of the bark was removed to restrict the trees' life processes of moving water and nutrients to the needles, and moving of nutrients and sugars that enable roots to grow. (2) The catfaces on the trees eventually turned into fat lighter, a densely packed bunch of tree cells loaded with flammable tree resin. Wildfires easily consumed the trees which had catfaces and flammable sap exuding from the sides of the trees. (3) The ever-present pine beetles also consumed and killed their share, girdling the trees' cambiums while raising their brood of future pine beetles.

As longleaf forests were used up, the understories of many of these abandoned pine forests grew into a dense coverage of hardwoods, shading out the forest floor, and thereby sentencing the future longleaf forest to death. Longleaf pine seedlings will generally not grow in a shaded forest, so many of these stands were considered to be forever lost to longleaf.



Old Turpentine Distillery

Section of an old pine

tree and collection tin



#### Turpentining in Alabama: The Present

The state's first permanent, continuous paper mill to use pine as a raw product was built near Tuscaloosa in 1929. Alabama's vast pine and hardwood forests provided an abundant resource, making the state a hotbed for paper mills over the next several decades. At present, at least 13 paper mills operate in the state.

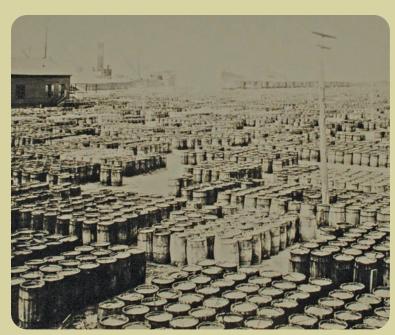
The process by which paper is made contributes to the present turpentine industry operation. In overly simple terms, pine trees are harvested from a forest, hauled by trucks to a paper mill, debarked (having the bark removed), and chipped into small pieces which are cooked with sulfite compounds in a large pressure cooker called a 'digester.' The chips are cooked until the wood fibers can be separated from the lignin and turpentine by-products. These by-products are separated from the chemical liquid 'soup,' sent to chemical companies and other customers around the world, ending up in shampoo, soap, plastics, and thousands of different products you use daily that you had no idea contained ingredients derived from a pine tree!

#### Turpentining in Alabama: The Future of the Longleaf Forest

The science behind getting longleaf pine seedlings to grow and prosper is understood more now than ever before. That knowledge, coupled with hard work by many landowners, has provided an amazing result. Just before the year 2000, the first recorded increase in longleaf acres was measured in Alabama, amounting to a 38,000-acre increase. Since previous forest inventories for decades had shown consecutive losses of longleaf acres, this achievement was considered a milestone at the time. The accomplishment was largely due to both public and private landowners planting longleaf through federal and state programs, as well as landowners investing their own hard-earned money to help restore this unique pine habitat.

Today, pine trees of several species can be seen along roads planted in rows, just like peanuts, corn, soybeans, cotton, and other crops. That's because trees are a crop – a natural resource that is similar to the other agricultural products mentioned above, but with one primary difference: it takes many years for a tree to grow to maturity. However, during that growth process, the tree is removing carbon from the air, using that carbon to produce wood for future use, producing oxygen for us to breathe, reducing temperature, recycling and filtering water, producing and providing wildlife cover and browse, giving a multitude of endangered plants and animals habitat in which to thrive, offering numerous recreational opportunities, and providing many more benefits too numerous to mention here.

The 'rags to riches' moral of this story lies not only in the longleaf trees themselves but in the multitude of benefits that the special longleaf ecosystem brings to Alabama.



Barrels of Turpentine

#### Much of the information for this article was derived from:

- 1. A publication by the U.S. Department of Agriculture, Bureau of Forestry Circular No. 24, and U.S. Department of Agriculture, Bureau of Forestry Bulletin No. 40, entitled "A New Method of Turpentine Orcharding," by Gifford Pinchot, Forester, 1903.
- 2. A History of State Forestry in Alabama. Originally issued by the Alabama Department of Conservation, Division of Forestry, by J.M. Stauffer, State Forester, and George Kyle, Information Writer, 1960. Revised, 1993.
- 3. Thanks to Dan Chappell, Alabama Forestry Commission Assistant Director of the Forest Management Division, for providing information for some of the content.



# Protecting Eastern Populations of GOPHER TORTOISE: Success at Geneva State Forest

By Ray Metzler, Threatened and Endangered Species Specialist, Certified Wildlife Biologist
Alabama Forestry Commission

he gopher tortoise has garnered much attention from the natural resources community during the past few decades, especially the past 10 years. Alabama's tortoise populations are designated as two distinct population segments – eastern and western. The western segment is defined as those populations that occur in Mobile, Washington, and Choctaw counties and are west of the Mobile and Tombigbee rivers. The western population segment has been afforded protection under the Endangered Species Act (ESA) and listed as a threatened species since July 1987. The eastern segment is comprised of those populations east of the Mobile and Tombigbee rivers across southern Alabama, Georgia, Florida, and into South Carolina. Although only the western populations are federally protected, gopher tortoises have remained protected at the state level in all states that comprise the eastern populations.

#### Listing Decision and Subsequent Petition

In October 2022, the U.S. Fish & Wildlife Service (USFWS) ruled that gopher tortoises in the eastern population segment did not warrant protection under the ESA. In 2023, a petition was filed that challenged that decision. Plaintiffs contended the USFWS decision was arbitrary and unlawful for several reasons, "including that it: (1) disregards the best available science regarding the status of, and imminent threats to, the species; (2) fails to lawfully determine the gopher tortoise's status in a significant portion of its range; (3) fails to rationally explain its choice to

limit the foreseeable future analysis to only 80 years; (4) fails to consider the adequacy of existing regulatory mechanisms; and (5) irrationally concludes that the eastern population of gopher tortoises is not a threatened or endangered distinct population segment."

Plaintiffs more recently reported that the population viability model used by the USFWS resulted in a significant overestimate of future gopher tortoise populations. The model used by the USFWS predicted that roughly 67 percent of gopher tortoises will persist by the year 2100. A model developed by researchers working for plaintiffs suggests that less than 1 percent of tortoises will persist by the year 2100. Population demography models are powerful predictive tools used in species status assessments for listing decision-making processes under the ESA. As with any population modeling tool, the end result is only as good as the data put into the system to develop the modeling parameters. These two predictive models have vastly different results and plaintiffs have requested the USFWS to re-evaluate its model and listing decision.

The plaintiffs also state the USFWS decision to not federally list eastern gopher tortoises is inconsistent with their own findings that concluded gopher tortoises in southern Alabama and the western Florida panhandle have a "different status" than the remainder of the eastern population.

The USFWS responded to the plaintiffs and continues to believe their original model offers useful insights into gopher tortoise population demography and the future effects of multiple stressors on populations. It is doubtful that any change will be made to the listing decision in the near future or anytime in the foreseeable future. "The USFWS has indicated it will continue to provide support for ongoing gopher tortoise conservation efforts at the Field Office level in all states within the eastern population in order to reduce the need to list in the foreseeable future."

#### AFC Operations and Tortoises

The Alabama Forestry Commission (AFC) continues to prioritize protecting gopher tortoises when conducting harvesting operations on agency-owned land, as this species remains protected and one of great conservation need at the state level throughout its entire range in Alabama. Prior to any logging activities, active burrows are flagged, and a map is provided to the loggers so that they do not utilize heavy equipment within 13 feet of the mouth of the burrow. This process has worked well for AFC and logging crews, primarily the feller buncher and skidder operators, who have done a great job of avoiding flagged burrows. Flagging is easily seen in the relatively open tortoise habitat and allows operators to lay out skid trails with ease. One of the recent logging crews was aware of the need to avoid burrows as they had previously logged a tract of land in Florida with similar requirements. Many forest industry partners have similar requirements to minimize damage to burrows on their company-owned lands.

#### Participation in Research Project

The Wildlife and Freshwater Fisheries Division (WFF) of the Alabama Department of Conservation and Natural Resources, Auburn University, and research partners at Eckerd College began a research project in 2023 that entailed collecting gopher tortoise eggs and 'head-starting' the hatched animals for about a year. Their goal was to collect 100 eggs. Ericha Nix, wildlife biologist with WFF, reached out to the AFC in July 2023 to determine if we could search for eggs on Geneva State Forest to bring their sample size up to 100. AFC personnel found six nests with 23 eggs that were subsequently collected and transported to Auburn University for incubating until hatching. Fifteen of the 23 eggs collected on AFC lands hatched.

One might ask, "What is the benefit of head-starting gopher tortoises?" Head-starts are generally kept in warm environments and have access to quality foods ad libitum [as often as necessary]. Head-starts do not have to forage for food which allows them to grow faster than wild gopher tortoises. Research has shown that increased size improves hatchling survival rates, especially through the first winter. If suitable habitat conditions are not present and future management activities are not conducive to maintaining quality habitat, the head-starting technique should not be used. State and federal agencies have found this to be a suitable technique to use when large acreages of unoccupied or marginal habitat have been enhanced or restored. Natural immigration into large acreages of newly restored habitat could take a very long time, especially if there are not large numbers of tortoises on adjacent lands. The head-starting process is expensive but does provide an opportunity to quickly establish a population of very young tortoises that are many years from reaching sexual maturity.

Fourteen of the Geneva State Forest hatchlings survived to be released on AFC lands on June 27, 2024. Hatchlings averaged 30 grams at birth and 200 grams at release. That is an astonishing 566 percent increase in weight in 10 months. Length and width



measurements doubled from hatching until release. Head-started hatchlings were similar in size to wild tortoises approximately 5-7 years of age. All hatchlings had PIT (passive integrated transponder) tags inserted under their skin and blood samples were taken. These tags are identical to those inserted into dogs and cats by veterinarians. Their carapace (top shell) was also marked by filing scutes (the scales on the outer rim of the shell) using a predetermined numbering system. Starter burrows were dug for each tortoise to enable it to escape the heat while acclimating to its new environment.

Unlike adult tortoises that need to be released into a temporary enclosure when translocated, research has shown that hatchlings tend to stay close to their release site. These tortoises were released into a unit containing high-priority sandy soils that were previously sprayed to minimize gallberry and yaupon. The unit has been burned multiple times since spraying and the most recent burn was earlier this year in January 2024.

During a follow-up visit, we found that several hatchlings had moved out of the starter burrows and dug new burrows up to 250 feet away. I have dug many starter burrows for translocated adult tortoises released on Geneva State Forest but always struggle when trying to dig a burrow for a hatchling or juvenile-sized tortoise. The fact that several of the tortoises moved out of the starter burrows within a matter of days indicates that our burrow excavating skills aren't quite as good as they need to be. I suspect that no matter how many starter burrows I dig, tortoises will often choose to move into a burrow they excavate themselves. I have noticed that tortoises will often dig a burrow with some type of overhead structure, such as a root or log, at the entrance.

The AFC was proud to be a partner in this project and appreciates the Division of Wildlife and Freshwater Fisheries requesting our assistance and participation.

## AHERO, HIDDEN ATRUE TREASURE



By Matthew McCollough, Registered Forester/Plains Work Unit Manager, Alabama Forestry Commission

Then you hear the word hero, who do you think of? Do you think of a teacher you once had, a coach that inspired you, or even your mom or dad? What about a person who risked his or her life for the freedoms of the United States? What about someone who had such a traumatic experience in war that it's hard for them to function daily? Heroes come in all shapes, sizes, and backgrounds. As a popular saying goes, with a little twist, not all heroes wear capes, but all wear scars (physical and psychological).

In the town of Shorter, about 30 minutes west of Auburn, lies a hidden TREASURE – one where heroes can escape noise, hustle and bustle, even people. Originally 104 acres, the East Alabama Game Preserve, now known as 'AHERO' [an acronym for America's Heroes Enjoying Recreation Outdoors] was purchased by Lee Stuckey, his brother Tyre, and their father, Al Stuckey, so the three could spend quality time with each other while enjoying the outdoors. Upon returning from Iraq in 2007 with a brain injury from an improvised explosive device (IED) and post-traumatic stress disorder (PTSD), Major Lee Stuckey fought his own demons. Following an attempt to take his life, interrupted only by his mom, the 22-year marine veteran recognized that not only did he need help, but that there was also a need for a healthy safe

place for his brothers- and sisters-in-arms to come and be able to talk about their experiences openly and unimpeded by life.

AHERO started as a dream and now, almost 15 years later with help from friends and family, Major Stuckey has turned this property into a 504-acre sanctuary to help veterans and first responders heal from their physical and psychological wounds. In 2016, AHERO received the W. Kelly Mosley Environmental Award, given to those who have voluntarily contributed significantly to the wise stewardship of Alabama's natural resources.

From 2016-2021, AHERO concentrated on creating outdoor recreational areas for veterans and first responders while also continuing to manage the natural resources on the property through good stewardship practices. Currently, there are approximately 20 acres of wildlife openings, all with hunting stands dedicated to a fallen or wounded service member, complete with a picture and narrative of that individual, which is written by the family of that service member. From 2014 until the present, AHERO has consistently practiced excellent stewardship, whether by conducting prescribed burns on approximately 364 acres; planting hundreds of chestnuts, fruit trees, and multiple species of oak; or trapping wild pigs by the hundreds.



AHERO partnered with the Alabama Forestry Commission (AFC) in 2021 to create a written stewardship plan to ensure that all forest management activity was recorded and to produce a road map for future projects. Over the last three years, AHERO has received Stewardship Forest and Tree Farm certifications as well as TREASURE Forest recognition. The Stuckeys have also opened their property to hundreds of landowners by hosting landowner tours and various educational events. The most recent landowner tour featured a mulching demonstration, prescribed burning results, information on how to prepare wildlife openings, and hog trapping.

Although AHERO's primary and secondary management objectives are education and wildlife, Major Stuckey's priority for this property is not a common objective that we see with the AFC. His goal is to save the lives of veterans and first responders who suffer from PTSD. However, he understands that the wildlife and education goals would suffer without proper forest management, so he works closely with the AFC and other professional forestry consultants to make sure the timber on the property is managed the best way it can be.

Stuckey enjoys making landowners aware of the assets provided by the USDA Natural Resources Conservation Service, USDA Farm Service Agency, Macon County Soil & Water Conservation District, and Mid-South Resource Conservation & Development (RC&D) Council, and other agencies to find potential funding for stewardship practices, no matter the property size.

Since completing the AFC's Alabama Prescribed Burn Manager Certification course, Stuckey has been teaching veterans how to conduct prescribed burns and is even certifying some as wildland firefighters for western fire details.

Major Lee Stuckey says that he now lives for those who never came back home, and he wants to live "a life worth living." AHERO is unique in its objectives, and I have never been more certain of a property that deserves the title 'Hidden TREASURE.'



Sign dedicated to the memory of Lance Corporal Jason N. Barfield, USMC, KIA Afghanistan



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#### AFC Equipment Over the Decades:

#### Marion County's 1954 John Deere Tractor

By Joel Bartlett, Forestry Specialist Supervisor, Marion County, Alabama Forestry Commission

s we look back over the last 100 years, there is no doubt that the advances in equipment have changed the way we fight fire in this day in time. However, things were a little bit different 70 years ago. It was the winter of 1954 when the Marion County AFC took ownership of their new John Deere Model 40C. Purchased by the Marion County Commission for \$3,000 through acre assessments, it was the first new tractor for the county office.

The John Deere Model 40C was a crawler tractor that was manufactured in Dubuque, Iowa, between 1953 and 1955. Model 40C featured a 1.6-litre two-cylinder gas engine with a whopping 19 horsepower (HP) at the drawbar and 25 HP at the belt. The Model 40C tractor crawler wasn't even equipped with a blade or roll cage for operator protection, unlike the dozers we operate today which are over 100 HP and have enclosed cabs with heating and air conditioning. Although it did come with a plow much like the plows we use today on our dozers.

In 1954, this was a welcomed piece of equipment due in part to firefighters having to use hand tools and natural barriers to contain and control forest fires. Much like then, we still utilize hand tools and natural barriers to fight wildfires, but the use of equipment such as our enclosed-cab dozers gives us a safer alternative in managing and battling fires.

This tractor also opened the door for more prescribed burning to be conducted around the county. Marion County's Model 40C has not seen any action in well over 60 years, but it sits on display at the Alabama National Guard 877th Engineering Battalion in Hamilton as a testament to how far we have come in equipment advances.

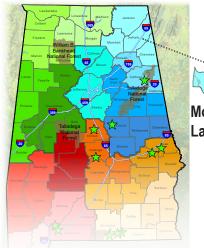


How the 1954 40C Crawler would have looked in its heyday.













#### **Mountain Lakes Work Unit**

By Lynn Washington, Registered Forester, Work Unit Manager Alabama Forestry Commission

here the mountains meet the lakes' is where you will find the Mountain Lakes Work Unit. We are nestled in the foothills of the southern tip of the Appalachian Mountains, in the northeast corner of Alabama. Comprised of Jackson, DeKalb, Marshall, and Cherokee counties, we have beautiful mountains, two gorgeous lakes, and more than one million timbered acres (1,031,038 per the 2023 Forest Resource Report). The Tennessee River and Lake Guntersville separate most of Jackson County and a portion of Marshall County from DeKalb and Cherokee counties. Lake Guntersville, the largest in Alabama, covers approximately 69,000 acres, while Weiss Lake covers about 30,000 acres. As for forest resources, Jackson County boasts the most timbered acres, 450,684, in the work unit. So, if you want to go fishing or fight fire in the most difficult terrain in the state, come visit us in late October. We can supply you with a leaf blower and/or a reel &

From a work perspective, the Mountain Lakes Work Unit has a diverse array of duties and goals that we strive to achieve. As we all know, the number one priority is "we fight fire." Landowner contact is always needed, both on an individual basis and on behalf of the US Department of Agriculture (USDA). As the technical service provider for landowner assistance programs such as the Conservation Reserve Program (CRP) and Environ-

mental Quality Incentives Program (EQIP), we are responsible for initial management recommendations, developing the technical management plans, doing inspections of the work completed under the application, as well as compliance checks years later. Over the years, foresters and rangers within the work unit have certified 52 TREASURE Forests, 26 Tree Farms, and 40 Stewardship Forests.

The strength of any organization is the people. In this work unit, the staff's combined years of experience fighting fire with the AFC is 148 years. Mountain Lakes personnel consists of Work Unit Manager Lynn Washington, Management Specialist Todd Langston, and Forestry Specialist/EMT Bruce Bradford in Jackson County; Forester Matt Woodfin and Forest Ranger Mike Moore in Cherokee County; retired Forester Dan Green (who continues to work part-time), Forestry Specialist Supervisor Jeff Keener, and Forestry Specialist Jon Burt in DeKalb County; and, Forest Management Specialist Michael Williams and Forest Ranger Luke Holden in Marshall County.

In conclusion, in the Mountain Lakes work unit, we approach our job as Aldo Leopold suggested many years ago: "What more delightful avocation than to take a piece of land and by cautious experimentation to prove how it works. What more substantial service to conservation than to practice it on one's own land?"

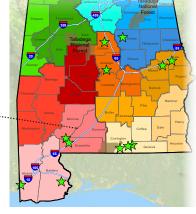




#### **Little River Work Unit**

By Ryan Holland, Registered Forester/Work Unit Manager Alabama Forestry Commission





omprised of Escambia, Monroe, and Conecuh counties, the Little River Work Unit is located in the Southwest Region of the state. It was given the name "Little River" because it is home to both Little River State Forest and the river that flows through the area. This work unit consists of six employees that cover 1.3 million acres of timberland. Based on state severance tax records, these counties are three of the highest timber producers in Alabama and home to three pole mills, three sawmills, two paper mills, and one plywood mill.

The Little River Work Unit performs several tasks that include wildfire suppression, prescribed burning, providing landowners advice, servicing cost-share programs, monitoring for insect/disease issues, participating in forestry planning committees, and working with partners to provide school programs such as Classroom in the Forest and Forestry Awareness Week Now (FAWN) programs. Additionally, work unit personnel perform all management activities at Little River State Forest and Hauss Nursery. Some of the events from this past year include a 'Hooked on Conservation' fishing day and a Legislative Learn & Burn at Little River State Forest, fall landowner tours in both Escambia and Monroe counties, Conecuh County Classroom in the Forest, and a Pine Decline Workshop. Monroe County is also home to the 2024 Helene Mosley Memorial TREASURE Forest Award winner Jess Martin.

At approximately 4,985 acres, Little River State Forest is located in both Escambia and Monroe counties. The forest doubled in size in 2020 with the acquisition of 2,885 acres to go along

with the original 2,100 acres. While the original state forest consists of natural and planted longleaf pine, the new addition contains mainly loblolly pine that will be eventually converted to longleaf when timber is harvested. The Claude D. Kelley Recreational Area within the state forest features a 71-acre park, that although currently closed will be reopening in a few years after renovations are completed. The redesign features new RV sites and several improvements to the 25-acre lake along with other infrastructure. The Alabama Forestry Commission (AFC) partners with the Department of Conservation and Natural Resources, Wildlife and Freshwater Fisheries Division, to provide the public with a Special Opportunity Area (SOA) hunting on the new addition as well as hunting for the physically impaired on the original state forest.

Hauss Nursery, located in Escambia County, covers 300 acres. The site mainly consists of planted longleaf pine with some of it in a silvopasture configuration. The AFC currently leases a portion of the property to Pacific Regeneration Technologies, Inc. (PRT). This company has established a nursery on site that produces several million containerized longleaf, loblolly, and slash pine.

Personnel in the Little River Work Unit includes Forest Ranger Lucas Newby and Forestry Management Specialist Thomas Davis in Escambia County; Forest Ranger Jordan Tolbert and Forestry Management Specialist April Hall in Monroe County; Forestry Specialist Supervisor Jerry Calhoun and Work Unit Manager Ryan Holland in Conecuh County.







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### BLACKGUNI ASWEET & RESILIENT TREE

By Thomas (TJ) Stoudenmire, FIA Forester, Alabama Forestry Commission

ake a walk in the forest in late August or early September and you might catch a glimpse of a wallflower among its fellow forest neighbors. A flash of orange draws your eye to where the verdant color of late summer was before. A blackgum tree, having waited patiently for its moment to shine, modestly heralds the changing of the seasons. The brilliant reddish orange of this early display of fall color gives way to the presence of an unassuming, well-mannered tree – one that is ecologically, aesthetically, and economically useful. The blackgum's history with the Southeastern US is long and storied, most famously as the source of fine honey. Prized by many, the blackgum offers colorful and resilient potential as a native tree for your forest and landscape.

The blackgum, Nyssa sylvatica, is one of several species of tupelo found throughout the Southeast. Ranging from central Florida to Maine, blackgum trees are highly adaptable. The name tupelo came from the Muscogee Creek language ito opilwa, meaning 'swamp tree.' Unlike its water-loving kin, the blackgum prefers well-drained soils. Blackgums are tolerant of a range of conditions but prefer the dryer conditions found on upper slopes and in residential landscapes. With a moderate rate of growth, blackgums reach an average of 60 to 80 feet in height with an oval-shaped crown that stretches out 30 to 40 feet wide. In urban environments, its size tends to be more limited. Its manageable habit makes for an excellent landscape tree for residential use. This can make the blackgum useful for providing shade for smaller lots where canopy space can be limited. Garden-improved varieties exist; however, in a forested setting, seed-grown stock is best to retain the species' genetic diversity and adaptability.

A member of the dogwood family, Cornaceae, this species produces flowers laden with nectar, later forming berries that are

foraged enthusiastically by many wildlife species. Flowers are small and whitish, borne in clusters profusely through the canopy in the spring. Small and inconspicuous, often overlooked, the flowers mature to form blackish-blue berries. Its leaves appear oblong in shape, alternating down the stem. Their inconspicuous appearance often allows the blackgum to disappear into the forest canopy until its early display of autumn color appears. Fall color is a range of reds, oranges, and even shades of purple.

A favorite with honeybees, the blackgum is renowned among beekeepers as a source of fine-quality honey. The famous tupelo honey is from several aquatic gum species found on the Southeastern coast, with 'gum honey' being highly sought after in the Appalachian regions. Traditionally, blackgum trees were valued as 'bee gums,' with hives made from hollowed-out sections of the tree's trunk. The tree's habit of dying back from the top down combined with durable wood, creates cavities within its long-standing trunk, providing an ideal place for honeybees to swarm. It's this quality that provides not only homes for honeybees but also for many cavity-dwelling wildlife species. The wood of the blackgum is durable, given its rot resistance with interlocking grain. Frequently utilized for pallets and crates, blackgum wood is also favored by woodcarvers for its ease on power tools and low fuzzing of the exposed grain.

Often overlooked among its neighbors, the blackgum has much to offer in a variety of ways. The tree has been influencing cultures in the South since mankind first settled there. Modest in growth and appearance, the blackgum performs well in either forest lands or in the yard. While not showy or famous like many other tree species, the blackgum deserves a place in your forest or yard.