

ALABAMA'S

# TREASURED FORESTS

A Publication of the Alabama Forestry Commission



*Volume XLI No. 3 - 2022*



**ALABAMA**  
**FOREST**

**I'D RATHER BE IN THE WOODS**

Alabama TREASURE Forest Association




**TIMBER, RECREATION, ENVIRONMENT, AESTHETICS, SUSTAINABLE, USABLE, RESOURCE**

The Alabama TREASURE Forest Association is dedicated to promoting good forest stewardship, educating others about responsible forest management and improving the forests of our state and nation. These lands are managed for many resources, including wildlife habitat, pine and hardwood timber, clean water, recreation opportunities and beautiful scenery. When utilizing a multiple-use management strategy, all of the benefits a forest provides are enhanced.

We are passionate about making our land better for the next generation. In a very real way, the future of Alabama's forests rests in the hands of landowners and like-minded individuals who support good forest stewardship. You can be a part of that effort. Purchase an "I'd rather be in the woods!" tag and support education and outreach efforts to raise awareness about the wonderful possibilities of sustainable land management.



[TREASUREForest.org](http://TREASUREForest.org)

ALABAMA'S  
**TREASURED  
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**On the Cover:**

The eastern towhee, a year-round resident across Alabama, sits perched in a native oakleaf hydrangea. It can often be spotted scratching in leaf litter looking for bugs. Listen for its "Tea, Tea, Drink your Tea" song.

*Photo by Joe Watts*

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](http://www.forestry.alabama.gov)



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

The Alabama Forestry Commission is an equal opportunity employer and provider.

# Message from the STATE FORESTER

Last Spring, the Alabama Legislature included a line item in the Alabama Forestry Commission's budget to hire an economic development specialist. This position will focus on recruiting new forest industry to the state of Alabama. Thirty years ago, the AFC had several people in this role, and they helped strengthen one of the most important pieces of the state's economy: the forest products industry. Over time, these functions got absorbed by other agencies, including the Alabama Department of Commerce.

Commerce does a great job bringing new industries to the state as well as assisting current facilities expand. However, their recruiters do not concentrate on specific industry sectors. Because they take a shotgun approach to recruiting, it is hard for a person to become knowledgeable about forestry and be able to meet the needs of those looking to locate a new sawmill, pellet mill, or other wood-using facility in our state.

Aerospace, automotive, and technology fields seem to be their specialty these days. These are good industries, and provide great jobs for Alabamians, but we need to keep in mind that forest land still occupies more than two-thirds of our state. It's a significant Alabama resource that needs to be further utilized.

In mid-September, we extended an offer to a gentleman who will fill the role that the Legislature created. Beginning October 16, he will get up every day thinking about what we can do to highlight Alabama's abundant forest resources and bring them to the attention of those with capital to spend on wood product facilities. This person will work closely with local developers, the Department of Commerce, the Governor's Office, the Alabama Farmers Federation, the Alabama Forestry Association, and our staff to recruit facilities to Alabama.

We think this new position will have a positive impact not only on the economy of Alabama, but also on the health of our forests. Some landowners manage their forests without income in mind, but most forest owners depend on timber revenue to make other things happen on their property. Better markets for landowners will give them more opportunities to sell their forest products. In turn, they will reinvest that money in the land and make sure we have sustainable, well managed forests. Better Markets = Better Forests!

We wish to thank our partners for suggesting this position and the Alabama Legislature for supporting the appropriation. Although we've been using Forest Inventory Analysis (FIA) data and our existing staff to assist Commerce in recruiting forestry projects, our people all have other significant responsibilities so they could not devote enough time to industrial recruitment efforts. Our new economic development specialist will be working full time to bring new markets for your timber. That will be a plus for the economy and the environment of our great state!



Rick Oates,  
State Forester

A handwritten signature in black ink that reads "Rick Oates". The signature is written in a cursive, slightly slanted style.

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



# *Money Really Does Grow on Trees Revisiting the TREASURE Forest of O. M. Becton*

*By Benji Elmore, Southwest Regional Forester  
Alabama Forestry Commission*

**D**eep in the rolling hills of southern Choctaw County in Alabama lies a testament to the life of a couple that has spent over half a century practicing good stewardship, not only for their benefit but also for sharing their experiences and knowledge with others.

O.M. Becton was born and raised in Choctaw County. Even as a teenager, he had a passion for owning timberland. He and his brothers grew up cutting pulpwood with a shortwood truck on their family property. With this passion driving him, at age 25 in 1965, Mr. Becton bought 346 acres for \$17,300 in Wayne County, Mississippi. By borrowing half the money, along with the seller taking a Deed of Trust on half, he was able to finance his first purchase. Since this land had already been cut over, money to service the debt came from his and his new bride's combined salaries. Continuing to take money from their salaries and by proactively managing his timber resources, he was able to meet his financial obligation and continue purchasing more property through the following decades. Today, he and his wife, Carolyn, own 1,400 acres in Choctaw County (Alabama) and 1,200 acres in Mississippi.

The Becton's Alabama property was initially certified as a TREASURE Forest in 1992 and as a Tree Farm in 2006. Then in 2011 the Bectons received the Helene Mosley Memorial TREASURE Forest Award for their commitment and dedication to share, demonstrate, and educate others about being good stewards of the land. That same year, Mr. Becton was also chosen as the Outstanding Tree Farmer of the Year for Alabama. They have always been eager to share their enthusiasm and their property by hosting numerous landowner tours and Classroom in the Forest events for school children.

Mr. Becton began his professional forestry career with the US Forest Service stationed on the Ozark-St. Francis National Forest in Arkansas. There he met Carolyn and they were married in January of 1965. He was promoted and transferred to Tennessee. After that, he came to a crossroads in his career: he had the chance for another promotion but would have to move to Texas. Always wanting to go back home, he decided instead to accept a job with MacMillan Bloedel in Alabama. Therefore, they moved to his home county, and he worked out of the Camden office and later the Butler office from 1967 until 1976. Becton

*(Continued on page 6)*

# Money Really Does Grow on Trees



*A good road system throughout the property provides not only access through hardwood stands but also a firebreak in pine stands.*

*(Continued from page 5)*



*Mr. Becton shows off a fine loblolly pine stand burned two years ago.*

then took a job with Scotch Lumber Company in Fulton, Alabama, to lead the company's Outside Land Management Program which oversees clients' properties (approximately 250,000 acres). Later he was responsible for the creation of the company's pulpwood dealership. After 31 years of building a robust consulting and management program, he retired from Scotch in 2007.

When I worked as the county forester in Clarke County, Mr. Becton was always a highly respected, hard-working, knowledgeable leader in the forestry profession who built a solid program at Scotch Lumber. In these parts, we consider him a walking forestry encyclopedia!

Becton's management philosophy is to practice good, sound commercial forestry to make money growing timber. It's the "engine that pulls the train" . . . the landowner must make money to manage the property. Other multiple-

use benefits such as wildlife habitat and aesthetics are provided for when the timber resources are properly managed.

Most of the terrain on their Choctaw County property is mild to moderately rolling topography, conducive to growing loblolly. Some high sandy ridges are managed for longleaf pine. Hardwoods, especially mast-producing, are favored in streamside management zones and on a few north-facing slopes that are home to beautiful white oak stands. Mr. Becton personally burns all his pine stands on a two-year cycle. Young pine stands are initially burned at age 8 to 10 to remove underbrush and control hardwoods before the stand is thinned in a few years. Initial thinning should occur around age 13-15, cutting back to 70 square feet of basal area per acre. Intermediate thinnings are planned every five years or so, then the final crop of trees is harvested at about age 45. Site preparation is

usually done with herbicide application and prescribed burning. Loblolly seedlings are planted on 7x9-foot spacing. Sometimes the initial herbicide application is postponed until a year or two after planting and conducted as a release application, usually at a lower herbicide rate.

Mr. Becton believes in marking timber before initiating a sale. Some of the marking he does himself, but he also relies on help from Scotch Lumber. He says that you need to “keep your head in the crowns” when marking, picking the best trees to leave. He considers the location of the skidding corridors in relation to the loading deck. He doesn’t believe in operator-select thinning in intermediate thinnings where the cutter operator picks which trees to cut; however, the operator is key during the thinning job by laying out the pull loads for the skidder operator. When the skidder grabs logs laying on the ground, correct placement of those logs by the cutter operator minimizes the number of standing trees that are skinned when pulling the logs through the stand toward the loading deck. When returning to grab another load, he also expects skidder operators to take limbs from the loading deck back to the woods to scatter them throughout the stand. This practice minimizes large slash piles that become “hot spots” when prescribed burning is conducted on the stand a year later.

When asked what lessons he’s learned about starting out as a timberland owner, he’s quick to say to not allow debt to bother you or paying interest on investment debt. If you manage your timber right, you’re growing more timber than the interest costs. You don’t make much money on the first pulpwood thinning, but as the timber matures, it moves into more valuable size classes, such as chip-n-saw, sawtimber, veneer logs, and poles. This increase in product value accelerates the value of your timber as it grows. Income from thinnings provides adequate means to service the debt and to cover management cost. Income from the final harvest cut is used to pay down the principal of the loan. He believes in putting revenue back into the land and using equity to purchase more timberland.

To the Bectons, managing the family forest is truly a family affair with wife, Carolyn, always being a supportive partner. Their last land purchase was 35 acres in December of 2020, stretching the span of building this family forest to six decades. Their son, Brett, and his three sons are all accomplished men in their own fields outside of forestry, but they hold a deep appreciation for the legacy that is being built in these hills of southern Choctaw County. As the old saying goes, money really does grow on trees, and this unique corner of the world certainly testifies to that. 🌲



***Conducting a prescribed burn on the Becton place.***




***This site has been harvested, then treated with herbicide in preparation of prescribed burning and planting.***



***O.M. and Carolyn Becton***

**GIVING IT YOUR ALL TODAY,  
DOING IT ALL AGAIN TOMORROW  
SOME DON'T GET  
IT, BUT WE DO.**

Natural resources sometimes need human resources. That's why since 1916, Alabama Ag Credit has helped timberland owners purchase timber tracts, replant after a harvest, manage their agribusiness, and refinance property. With the financial support for everything from timber processing equipment to general business operations, we can offer you customized long-term or short-term credit options. Call us today about our competitive rates and how our relationship lending can help your timber land business grow. 



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# New TREASURE Forest Certifications

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

Congratulations to these landowners who recently earned their TREASURE Forest certifications! 

Landowner	County
Brinley Hocutt	Fayette
Joe Wilson	Fayette
Mike and Angie Rickles	Madison
Mike Wells	Madison
Ronald Brunell	Marshall
Matt Hannah	Winston





# The Essence of Stewardship

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

Life is short and our opportunity to be a good steward is even shorter. We have a short stint at best; then someone else will take over. What we do with the land during our time as owners or managers will define our level of stewardship. And what we *do* is usually related to our objectives for owning forestland. Since the word ‘objective’ is too general or impersonal, I believe ‘passion’ is a better word to describe our motivation for what we *do* with the land.

During my career as a forester, I have known some outstanding stewards of Alabama forestland. Each had a passion for some specific area of land management. My relationship with these friends of the forest has been a unique blessing in my life, so please allow me to offer you a brief glimpse into their respective lives and passions.



*Gary Fortenberry*

Dr. Robert Parker was a skilled veterinarian and forest landowner in Elmore County. Though he was passionate about several things, making wooden bowls seemed to be his primary passion. One day while he and I were talking, we were standing beside his utility trailer. He pointed to a short, gnarly log laying in the bed of the trailer and said, “Tim, there is a bowl in that log, and I have got to get it out.”



*Dr. Robert Parker*

Dan, who lived in Bibb County, loved God’s creation and he invested time into knowing it fully. Whenever we were together, he would quiz me about a species, and he always enjoyed catching me off guard. He would say something such as, “Tim, have you ever seen a natural grove of *Magnolia grandiflora*?”

After many such experiences, I began to prepare myself before meeting him to avoid being caught off guard. However, more often than not, he won. By the way, *Magnolia grandiflora* is the scientific name for southern magnolia, and no, you don’t usually find it in natural groves! Dan was a good steward and a great friend.



*Dan James*

Dr. Salem Saloom, a medical doctor, has a passion for prescribed burning to enhance his longleaf pine. You notice I said *has*, not *had*. I wanted to conclude by telling you about a good steward and great friend who is still alive, because this article is meant to inspire the living. And if I have one friend who can inspire others, it is my friend, Salem. I know firsthand because my visits with him have always been uplifting.

When I travel with Salem around his Conecuh County property, he talks of stands of timber like some people talk about their children. With great appreciation for God’s handiwork, Salem will say, “Tim, this stand was planted in 1998 and thinned in 2014,” or, “I have burned this stand five times so far, and I think I’m going to burn it again this fall.” If a stand of timber is reaching the point of final harvest, it is for certain he has already planned the regeneration method and has detailed plans for accomplishing it. Salem is a good steward and a great friend.



*Dr. Salem Saloom*

These great friends are just a sample of how God has blessed me during my career through friendships with landowners who practice good stewardship. I read somewhere that the central essence of a biblical world view of stewardship is “managing everything God brings into the believer’s life in a manner that honors God.” I would add that if you find your passion, proper stewardship of the land will surely follow. That is the essence of stewardship.

The four good stewards I described here had a passion. I hope you will find yours, because it will help you leave a legacy of good stewardship. 🙏

**Editor’s Note:** It is worth noting that all four of these gentlemen were winners of the Helene Mosley Memorial TREASURE Forest Award! (Gary Fortenberry in 1989, Robert Parker in 2005, Dan James in 1986, and Salem Saloom in 2007.)

# ALABAMA SAWYER: Coming Full Circle

*By Katie Wiswall, Urban & Community Forestry Partnership Coordinator  
and Juan N. Merriweather, Steel City Work Unit Manager  
Alabama Forestry Commission*



**F**orestry is about cycles. We plant and grow a group of trees to cut them down and craft products that enhance our lives, then we do it again and again. Until the trees are cut, their full value isn't realized. But urban forestry isn't usually like that. The 'products' associated with urban and community trees are produced while the trees are in place. Clean air, stormwater mitigation, beauty, shade, wildlife habitat, improved mental health, and a host of other benefits accrue from live trees. When a street or yard tree dies, it becomes a nuisance. There is no full circle, just a short-sighted and wasteful system.

People like Cliff and Leigh Spencer at Alabama Sawyer are working hard to change that paradigm. An Alabama native, Cliff met Leigh in California, pursuing a career in the entertainment industry. Instead of waiting tables to support himself at the time, he worked in manufacturing, building furniture and custom cabinets. Becoming more engaged in concepts of sustainability and service, the couple left cabinetry and built a business around utilizing urban tree 'trash'

as their main furnish for their products. In 2016, the call of family and the allure of a less-frenetic life in Alabama brought Cliff and Leigh back to his hometown of Birmingham where they opened Alabama Sawyer.



*Cliff and Leigh Spencer*

Located on Vanderbilt Road in the Premo Factory complex, Alabama Sawyer is a fascinating example of full-circle forestry in the urban arena. They receive logs from trees that local tree services cut down. They then mill the logs, air- and kiln-dry them, then turn them into beautiful, unique pieces for home and commercial use.

Designers from around the corner and across the country rely on Alabama Sawyer for just-the-right items for their projects. The Alabama Sawyer team supplied benches for the City Walk area in downtown Birmingham (a focal point of the 2022 World Games) and interior pieces for the popular eatery Hot & Hot Fish Club. Their art has been displayed not only all over this country but overseas as well.

Additionally, they design and build custom furniture for homeowners who supply the

raw material for their projects. The Spencers refer to this feature on their website as “Tree Concierge Service.”

Utilizing wood from native trees such as white oak, hackberry, and black cherry, they have opened an avenue for street and yard trees to be enjoyed long after they have stopped growing. These pieces of furniture and art tell a story about place and time. They are special because of that story, pieces to be treasured and passed down through generations.

How does Tree Concierge Service work? As Leigh is quick to explain – they will NOT come out to your yard to pick up that huge oak tree that fell in the last storm. Nor do they have the expertise to cut down that big pecan that looks ready to fall on your house. However, they *can* give you a vendor list of tree services in the area that can handle the job and deliver the log to their facility. They take over when the log arrives on their yard. There, the Spencers take care of the sawing, drying, design, and production. They have a website that explains the cost of each step and what the various options for a person’s log are. An additional, interesting service that Alabama Sawyer can provide is a site visit before the tree is removed to discuss what can be made from it. See <https://alawsaw.com/pages/tree-concierge-menu-alabama-sawyer> for more details.

Whether or not a tree owner chooses to have a site visit in advance, communication is critical to utilizing urban trees. For optimal efficiency and utility, the Spencers need the tree to be a minimum of 20 inches in diameter (at the small end) and for the tree service to cut it into pieces at least 10 feet long. This is not a normal length for most tree services, so it is critical to make sure both the contractor and his crew are aware of the plan. While the mill at Alabama Sawyer can handle smaller logs, the time, effort, and expense of processing the smaller pieces is not usually economical. Also, when the story behind the log is important, be sure to discuss it with Cliff or Leigh so that they might be able to work with you on that as well. At the end of the day, they are committed to producing beautiful things that tell a story of place, people, and times.

The work that happens at Alabama Sawyer, like that at any lumber mill or furniture factory, is hot, dirty, and noisy. But there is pride in being part of full-circle forestry in the urban arena. Reducing the waste sent to landfills is important. Re-capturing carbon that would be released into the atmosphere as those trees decay is a public service. Contributing a chapter to the story of an individual tree planted a hundred years ago that has shaded streets, cooled passersby, and commemorated the building of a new home is monumental. Keeping venerable old trees out of landfills and adding value to society is also important, and simply smart.

And then there are the people. They too are important. The Spencers currently employ nine people at Alabama Sawyer who all share their vision and embrace the saying “a hard day’s work,” but they have employed many more than that over the years. Cliff’s eyes gleam when he talks about how gratifying it is to see those employees grow and succeed. He has enjoyed watching many of them go from knowing little about life or work, to becoming amazing craftsmen. To go from not knowing how to identify, much less use, a simple hand tool, to helping run the sawmill, or reading a design and producing a beautiful item is a great accomplishment and one that Cliff takes joy in promoting. Together, the team at Alabama Sawyer sweats in the summer and gets cold during the

*(Continued on Page 12)*



At City Walk in downtown Birmingham Alabama, these benches are produced from the center of a local pine log.



The bar ceiling at Hot & Hot Fish Club in Birmingham features a wooden structure that's both functional and a work of art.



Also at the Hot & Hot Fish Club, the doors are milled from the urban forest around Birmingham.

## ALABAMA SAWYER: Coming Full Circle

(Continued from page 11)

A 100-year-old former auto plant now serves to both air dry and store the boards sawn out on the yard.



winter, but they work and get the job done. Those who have moved on in life have left with a skill, a trade to be passed down to the next generation. It's a life journey in which Cliff and Leigh love to know they play a part. They are committed to helping their employees develop to their full potential.

The Spencers are generous with their time and expertise outside their business as well. They realize that their one shop cannot begin to handle the amount of urban wood produced in a city the size of the Birmingham metro area, and they are eager to see other craftsmen enter the market. They will gladly talk to others about how to get started, and what pitfalls to beware of as they begin their businesses. They welcome teachers who want to expose their students to post-high school opportunities that do not necessarily require a college education. And of course, they are always ready to consider hiring another willing worker.

Regardless of the size of the community, there are raw materials available in the trees that we often see as 'trash.' It takes time, hard work, and effort – but the beauty of the art created proves that the effort is worthwhile. Cliff and Leigh are visionaries who see where full-circle urban forestry can go; they relish being part of that goal.

To learn more about Alabama Sawyer, you can visit their website at [www.alasaw.com](http://www.alasaw.com). The next time you are in Birmingham, stop and visit City Walk during the day to take a seat on homegrown Alabama urban wood, Spencer-made. Consider contacting the Spencers to see if you can stop in for a visit. They are an inspiration to anyone interested in seeing the development of our urban forests into the same full-circle forestry model we already enjoy in rural parts of our state. The supply is out there; the demand is out there. All we lack are more people like Cliff and Leigh Spencer. Perhaps YOU are that person. 🌲

Cliff and Leigh Spencer explain the process and the passion at Alabama Sawyer to AFC Steel City Work Unit Manager Juan Merriweather.



The Alabama Sawyer team, shown here with their families, take a break from a hard day's work.



# SERVING ALABAMA LANDOWNERS:

## The Hurricane Michael Block Grant Program

By Hunter Moncrief, Landowner Assistance Coordinator  
Alabama Forestry Commission

One of the services provided by the Alabama Forestry Commission is to administer programs that offer financial assistance to Alabama's forest landowners to implement on-the-ground practices benefitting their forests. These programs typically consist of offering assistance in cases of disaster recovery for landowners in designated affected areas, historically underserved landowners, or helping forest landowners utilize forest management practices that benefit endangered species. Agency personnel utilize their technical expertise to administer the programs and routinely meet with landowners to assess eligibility for various practices.

Most recently, the federally endowed Hurricane Michael Block Grant Program was designed to provide financial assistance to landowners who suffered a financial loss on their forestland due to the extreme weather events of Hurricane Michael in 2018 or the 2019 Lee County tornadoes. This financial assistance was provided to forest landowners within the 'Presidentially' and 'Secretarially' declared counties who met all program requirements.



Serving as the technical service provider, the Alabama Forestry Commission (AFC) implemented this program over the course of the summer of 2021 through the early months of 2022. More than 200 landowners applied to the program, with 157 of those people being accepted. The AFC performed a damage assessment for each individual applicant by using aerial imagery, on-the-ground methods, prior data from the time of the storm, and other readily available options.

After passing the AFC's inspection, financial assistance was awarded to those who met the necessary qualifications. By the end of this program, more than \$9.5 million dollars was distributed to eligible landowners. The success of this program would not have been possible without the hard work provided by AFC employees such as Wiregrass Work Unit Manager Thomas Moss and Forestry Specialist Brady Dunn, Plains Work Unit Manager Matt McCollough and Forester Caleb Killough, and State Office Account Clerk Deliska Chatman. 🙏

*Houston County landowner, Dr. Adair Gilbert, discusses Hurricane Michael damage with AFC personnel Brady Dunn, Hunter Moncrief, and Thomas Moss.*

# Conservation in Action

## AT WEBB POND

*By Andy Prewett, Land Manager, The Land Trust;  
Brian Bradley, Forester, USDA Natural Resources Conservation Service; and  
Jim Schrenkel, Wildlife Biologist, USDA Natural Resources Conservation Service*

*Shallow water feature at Webb Pond, Madison County, Alabama*

**I**n 2004, the Land Trust received a donation of a little more than 60 acres of land associated with Webb Pond in north Madison County. The property was composed of a combination of wooded wetlands and farmland. For decades, this land had been farmed with mixed results. Due to the proximity of the wetlands, the farmland crops more often than not couldn't be harvested due to localized flooding.

As its very first proactive management project, and in cooperation with the farmer of the property, the Land Trust opted in 2013 to take the land out of rotation and restore it to its lowland hardwood state. It was enrolled in a USDA Natural Resources Conservation Service program known as the Wetland Reserve Program.

The USDA's Natural Resources Conservation Service (NRCS) encourages management of natural resources through a variety of programs with a wide assortment of partners. While private landowners make up the overwhelm-

ing percentage of forest owners in many parts of the United States, non-governmental organizations such as the Land Trust of North Alabama play a critical role in the nation's conservation efforts.

In contemplating a wetland restoration project, the Land Trust, in consultation with NRCS, took into consideration these statistics:

- *One-third of all Threatened and Endangered (T&E) species live only in wetlands.*
- *One-half of all T&E species and one-half of all bird species use wetlands for part of their life requirements.*
- *Wetlands provide essential habitat for migratory birds and waterfowl.*
- *Alabama is 5<sup>th</sup> in the nation in plant and animal diversity.*
- *Alabama is 1<sup>st</sup> in the nation in freshwater species diversity with 750 species of fish, mussels, snails, and crayfish.*

Considering the best conservation needs of this property, the Land Trust, working with NRCS, enrolled 40 acres of the land into the Wetland Reserve Program and sold a perpetual easement to the Conservation Service. In return, NRCS developed a restoration program for the property and covered the costs of implementing that plan.

The plan saw the installation of a half-acre shallow water pond for migratory bird habitat and planted more than 5,100 trees, primarily in the oak family, to re-establish oaks in the habitat. The project was started in September of 2013 and completed in February of 2014. Since that time, the Land Trust has continued to monitor the farmland transition back to hardwoods and has seen the naturalization of the pond. The NRCS monitors the property annually to ensure that it adheres to the program parameters.

There have been challenges in the restoration program dealing with invasive species. A small patch of cogongrass appeared within the planted area that was addressed with herbicide treatments. Lately, populations of Callery pear trees have emerged and will be removed. As it adapts to the new tree populations, the Land Trust along with NRCS, will continue to monitor the property to ensure a successful transition from unproductive farmland to a robust woodland habitat.

The benefits of such a Wetland Reserve Program are significant, considering wetlands provide many ongoing benefits including:

- *Filtering pollutants and sediment*
- *Flood water storage*
- *Recreational opportunities*
- *Wildlife habitat*

Fast forward to 2022 and a healthy young forest is thriving at Webb Pond. Oak seedlings planted in rows 12 feet apart now grow shoulder-to-shoulder with 15- to 25-foot-tall native species that seeded in from adjacent 'mother' trees. This natural succession occurs whenever open land next to mature trees is left undisturbed. Bare land always yearns to be forested. However, enhancing natural succession with targeted species sometimes allows for a more diverse and dynamic habitat to emerge.

What will this forest look like in the next 10 years, or even in 2050? Competition for sunlight, soil nutrients, and water will result in a natural culling of weaker trees, and we can expect a more open, park-like forest. The planted oaks that survive will begin producing acorns, providing food for blue jays, whitetail deer, wild turkey, and other animals. Salamanders and other aquatic species will be evident near the shallow water pond.

Preservation, defined as maintaining a natural environment in its current state forever, is not possible because ecosystems are dynamic, living, and growing. The forest we enjoy today will change as years march on. Fortunately, groups such as the Land Trust who obtain land, restore essential ecosystems, manage resources, and prevent land from being converted to other non-natural uses are practicing true 'Conservation in Action.' The Land Trust and Natural Resources Conservation Service are proud to be partners in these efforts. 🌱

Forest landowners who are interested in the Wetland Reserve Program (WRP) should contact the office of their local USDA Natural Resources Conservation Service.



# Did your lender give it's borrowers 12.2 million in cash this year?

As a cooperative, we support the principle of sharing in the success of Alabama Farm Credit. That's the basic philosophy behind the dividend program that has generated more than \$100 million for our members. When you succeed we all succeed. Together we grow!



# Mulberry Birds

By Joel D. Glover



*Cedar Wax Wing*

*All photos by Joel D. Glover*

**A**s a birdwatcher and amateur photographer, I have been the beneficiary of what I guess could be coined a happy accident. Several years ago, the Alabama Forestry Commission, in conjunction with the Coosa County Forestry Planning Committee, conducted a tree giveaway. After handing out trees to folks all morning, we were wrapping things up and divided the few bare root seedlings that remained to take home.

With plans to plant the trees later, I poured some potting soil into three or four concrete blocks and stuck the seedlings in them. Honestly, I didn't give the trees much thought. While some died, four of the seedlings actually survived and began to grow. When

I finally got around to trying to 'plant' the trees, I found they had already taken root in the ground. I realized I would have to break the blocks off them, dig them up, and replant. That seemed like a lot of trouble. I think I failed to mention these trees were right at the corner of my house.

Have you ever spent more time working on someone else's property than your own? Well, I was guilty of that and finally gave up on moving the trees. Surprisingly, they survived. Therefore, I now have two sawtooth oaks and two white mulberry trees growing at the corner of the house.

Once the trees got large enough to begin producing fruit, I learned a couple very interesting things about a white mulberry.





Tufted Titmouse



Female Summer Tanager



Downy Woodpecker

They produce a lot of fruit and are a tremendous bird magnet. Through the years it has been unbelievable how many birds are attracted to the trees. I have observed more than 20 species of birds in the two trees. Several of the species spotted in the tree are not normally fruit eaters. Evidently, it's a good place just to hang out. I say this since hummingbirds and mourning doves aren't normally seen in a fruit tree.

Beginning in early to mid-April, the trees are literally alive with birds. The most frequent visitors are the beautiful scarlet and summer tanagers, cedar wax wings, and red bellied woodpeckers. In addition to birds, the trees also attract gray squirrels, green anoles, and butterflies. These trees have provided a great opportunity to observe the behavior of various species.

While some species such as the grosbeaks, vireo, and titmouse sneak in silently, the tanagers, woodpeckers, and crows are very boisterous. While many species show up one bird at a time, I have often seen four to six tanagers in the trees at once. The cedar wax wings usually bring the whole family, which sometimes numbers more than a dozen. Most birds feed exclusively in the trees; however, the robins feed in the tree and on the ground beneath it. While the red bellied woodpecker will sometimes cram two or three berries in its beak before flying away, the downy

woodpecker sometimes picks a berry apart without ever pulling the stem from the tree. The trees often encourage some interesting pairings. Some species are tolerant of others, while many vacate the area when others show up. It really is an interesting classroom.

There are a couple of caveats that must be included. First, the white mulberry (*Morus alba*) is an Asiatic species that is considered invasive. While I have not experienced any problems with new trees popping up, that doesn't mean it will not happen. If you decide to plant such a tree, it needs to be in an area where you can control any seedlings that might emerge. The USDA warns that white mulberry invades forest edges and disturbed forests and open areas, displacing native species. It is slowly outcompeting and replacing native red mulberry (*Morus rubra*) through hybridization and possibly through transmission of a harmful root disease. Additionally, birds will deposit the 'processed' seeds all over the place. My vehicles appear to be one of their favorite targets. Secondly, the mulberries that aren't consumed by birds make quite a mess.

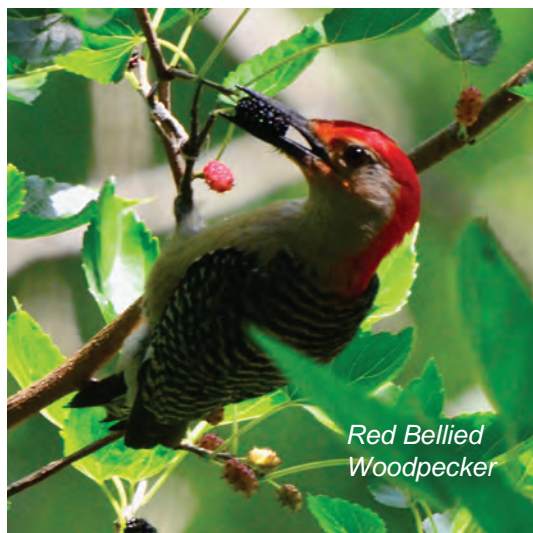
Through the years, I've made a lot of recommendations to landowners to try and improve their property for their desired species. However, I do not know of anything that has produced more results than the happy accident of the white mulberry.🙏

### BIRD SPECIES OBSERVED IN THE WHITE MULBERRY

- SCARLET Tanager
- SUMMER Tanager
- BLUE JAY
- EASTERN BLUEBIRD
- RED BELLIED WOODPECKER
- BLUE GROSBEAK
- ROSE BREASTED GROSBEAK
- VIREO
- AMERICAN ROBIN
- CEDAR WAX WINGS
- PURPLE FINCH
- MOURNING DOVE
- CAROLINA WREN
- DOWNY WOODPECKER
- CARDINAL
- CAROLINA CHICKADEE
- CROW
- HUMMINGBIRD
- GREAT CRESTED FLYCATCHER
- TUFTED TITMOUSE
- BROWN HEADED COWBIRD
- EASTERN PHOEBE
- HERMIT THRUSH



Male Rose Breasted Grosbeak



Red Bellied Woodpecker



Scarlet Tanager

# The Sustainable Future of CLT in the South: *Auburn University Hosts Conference with Regional and National Scope*

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



*Tony & Libba Rane Culinary Science Center  
Photos by Jamie Anderson & Kelly Knowles*

**A**n event that has been several years in the making, Auburn University played host to a major wood products conference April 27-29, 2022. The nature of the opportunities in the field of mass timber meant that responsibility for the conference was shared between the College of Forestry, Wildlife & Environment; the College of Architecture, Design, and Construction; the Samuel Ginn College of Engineering; the Offices of Sustainability; and the University Architect.

There is tremendous interest across the Southeast in furthering the acceptance of mass timber. It may be a good idea to clarify what is meant by mass timber, as opposed to the more familiar framing lumber. To use a definition found at naturallywood.com, 'mass timber' refers to a category of engineered wood products typically made of large, solid wood panels, columns, or beams often manufactured off-site for load-bearing wall, floor, and roof construction. The products are thick, being made of compressed layers of wood, and utilize lamination, fasteners, or adhesives. While the strength of these products is comparable to steel and concrete, the weight is lighter. Specific mass timber products

include cross-laminated timber (CLT), glue-laminated timber (glulam), nail-laminated timber (NLT), and others.

Auburn University was a natural place to host this event, as work conducted by Dr. Brian Via and the Forest Products Development Center has been instrumental in providing the density and strength testing needed to support the use of loblolly and other southern yellow pines in the creation of mass timber products. Dr. Via shared some insight into the continuing work in the Center's lab to improve upon the critical adhesives that give added strength to mass timber, and which also represent a major input cost to the product. The encouraging results from the lab's prior work helped to bring the Smartlam North America plant to Dothan, and their current work will help keep this Alabama plant on the cutting edge of advancing technology.

Smartlam's CEO, Derek Ratchford, provided insight as to major projects for which they are now producing materials. In fact, there are two important projects in Atlanta that everyone should be very excited about. The first is Echo Street West, a large mixed-use development for which Smartlam was creating

panels at the time. The second is Jamestown's Ponce City Market expansion, which will be fully open to the public and will also be a showpiece of mass timber design. Projects such as these are paving the way for a future where Alabama-grown timber and Alabama-produced engineered wood products are meeting customer demand for low net-carbon building materials that are strong, sustainable, and pleasing to the eye.

These developments are encouraging, and they are not restricted to Atlanta. James (Jimmy) Rane, Chairman, President, and CEO of Great Southern Wood Preserving, Inc., provided the keynote address at the conference. Beyond his position within the wood products industry and as a Trustee of Auburn University, his donation of the Tony & Libba Rane Culinary Science Center is advancing mass timber design and construction right here in Alabama. Mass timber is a featured design element within the Hey Day Market, a portion of the Center which is now open to the public, where nine food vendors, including an 'incubator' (or start up) for graduate restaurants, provide excellent meal choices for students and the public.

The newly opened Advanced Structural Engineering Lab on campus uses CLT and glulam for its administrative offices. Although this lab is not normally open to the public, they were kind enough to allow attendees of the conference to tour it on April 29, and the facility is truly amazing. There is not space here to describe all the work that the lab is conducting, but the 41,500 square foot lab is approximately five times as large as the old space it previously occupied, and the professors are already

taking on projects which simply were not possible within the confines of the older structure. From the engineering side, the development of which is critical to advancing mass timber as a building solution, Doctors Kadir Sener and David Roueche shared valuable insight into the testing they are conducting within their new lab space. The knowledge they shared was even more beneficial to me because industry professionals such as architect Brian Campa and construction pioneer Jeff Morrow of Timberlab, Inc., were present and able to ask the types of questions that I, being a forester, did not have the expertise to ask.

There is a group called WoodWorks that exists to lend professional expertise to prospective mass timber building projects. Their work has been a key component of getting mass timber projects off the ground, as these projects have required, and still require, a different 'toolbox' than many existing firms possess. As developers, architects, engineers, general contractors, construction crews, local building code enforcement officers, and others acquire experience using mass timber in construction, the need

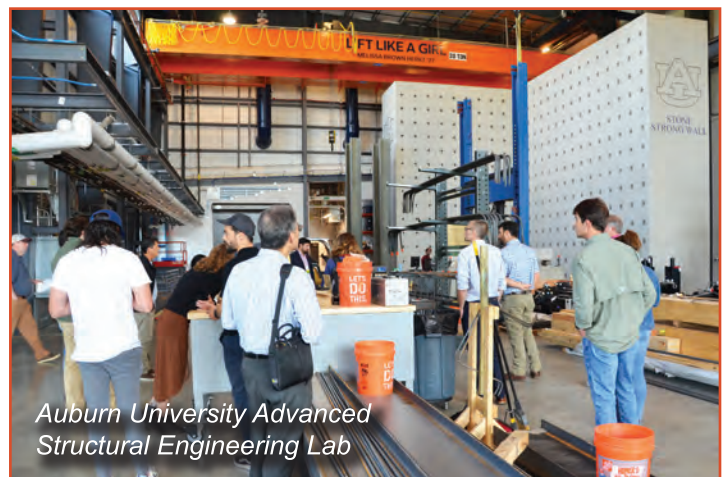
*(Continued on page 20)*



*Cross-laminated timber (CLT)*



*Glue-laminated timber (glulam)*



*Auburn University Advanced Structural Engineering Lab*



*Auburn University Advanced Structural Engineering Lab on campus uses CLT and glulam for its administrative offices*

## The Sustainable Future of CLT in the South

(Continued from page 19)

for WoodWorks to provide free technical support across many disciplines should subside. However, they continue to be there to support the numerous ‘first time’ projects that are ongoing.

In fact, there are 1,384 mass timber construction projects in the U.S. that have either been built or are in some stage of the process now, and this number keeps trending upward.

Newer building codes are being adopted in state after state which more fully account for mass timber. Did you know that the City of Birmingham has adopted the International Building Code (IBC) 2021 standard, which allows for the construction of tall (up to 18-story) mass timber buildings? While there are currently none of these tall buildings publicly in the design stage for Birmingham, as of January 1 of this year they are permitted within the code that is on the books, so the opportunity is there.

Jeff Peters, who directs the efforts of WoodWorks across the Southeast region, made a strong presentation concerning the need for having good answers for “Why?” questions when it comes to choosing CLT and mass timber to construct a building. Lacking this, a construction project is likely to fail in the face of adversity, money will be lost, and more traditional materials will be used if the project is still salvageable. The key to success is knowing “why” you want to proceed using mass timber, even if your architect, engineer, and general contractor have greater experience outside the field of building in mass timber. Only by gaining wider experience will those professionals learn the advantages that mass timber offers, such as the potential for lower labor costs, faster construction, a lower carbon footprint, and greater site options. As that knowledge becomes more widely diffused through the construction community, we can all expect to see greater adoption and more widespread use of mass timber as a mainstream material alongside steel and concrete. Mass timber will never completely replace those materials, and each has unique strengths and weaknesses, but mass timber should certainly take its place as a viable option.

Although there is something to be said for jumping in and being an ‘early adopter’ when it comes to the latest technology,

sometimes there is more to be said for waiting until the kinks get worked out of a new process, case in point with mass timber. This material was invented in and widely employed in Europe where rainfall and humidity are different than they are in the Pacific Northwest or Southeast. Poor outcomes have occurred in certain U.S. projects where water damage to the materials has occurred during construction, and although material shielding products from Europe are on the market, they have not performed well in many cases in North America. This scenario has led to costly and time-consuming reworking.

Aaron Gould, representing VaproShield LLC, was on hand to speak about what has been learned through errors made by these early mass timber adopters. The company he represents is now marketing a mass timber weather-shielding product that is manufactured at their plant in Illinois and is designed to withstand the rigors of the North American climate. Because previous water damage issues have prompted some contractors who have had bad experiences with damage to materials in the past to ‘price in’ significant premiums to protect themselves against expensive charges to replace compromised systems, the goal of VaproShield is to market a product that will keep mass timber from sustaining negative impacts from water throughout construction, and even throughout the lifecycle of the material if the mass timber is located in non-visual spaces.

The scope of this article will not allow me to single out each of the presenters, but there are two more of special note that I must mention. Closing out the daytime portion of the Thursday program was Dr. Patricia Layton, Director of the Wood Utilization & Design Institute at Clemson University. A remarkable speaker, she referred to the ‘pioneering’ stage of mass timber construction here in the U.S. presently. She speaks with great energy concerning this industry being at the very first stages of growing solutions to many of our modern challenges: economic, environmental, and social.

Dr. Layton recounted how she has been drawn toward pioneering projects for her entire career, citing as an example being a rare female at the time in forestry school and being told by a professor on Day One that, “half of the students in this room will never graduate as foresters, and none of the females will.” Never one to back away when challenged, she has guided two significant mass timber construction projects through to completion at Clemson, while also participating in some of the needed engineering





*Glue-laminated timber (glulam)*

research on the limits of mass timber as a building material. Anyone who has ever heard her speak will agree that Dr. Layton’s enthusiasm is contagious, making her a great choice to end the day on a high note.

Finally, Chris Isaacson, President and CEO of the Alabama Forestry Association, shared a few words at the evening dinner. He understood that many of the conference attendees were not from the Southeast, much less from our state. A number even confessed to being in Alabama for the very first time, so a proper introduction was needed. With a unique statewide perspective that includes landowners, loggers, truckers, and forest industry, Mr. Isaacson focused on the ‘story’ of Alabama forests and the wood products industry. It is a story of which he is very proud and was happy to share with the broad assembly of guests that were present. This story encompasses the stewardship of the land as practiced by private individuals and private industry; the tens of thousands of jobs provided and communities supported; and the vast natural resource that not only continues to renew itself, but also continues to present growth opportunities for employment as well as the production of environmentally friendly products. His comments served as both a fine introduction to those who were new to our state, and an excellent reminder for those of us who live and work here of what a privilege it is to play a small part in the life of the forests of Alabama.

It was important to bring an event to Alabama that showcases our state and brings together the designers, general contractors, research engineers, product vendors, development specialists, foresters, sawmill representatives, potential customers, and other stakeholders who are acting, as Dr. Layton said, as pioneers in this emerging field. Out west, the International Mass Timber Conference held in Portland, Oregon, counted 2,100 attendees this year, and this number has strongly increased each time it has been held.

Dr. Adam Maggard with the Alabama Cooperative Extension System worked diligently through the several (COVID-delayed) years that it took to stage this needed and vital event here in the Southeast. Dean Janaki Alavalapati of the Auburn University College of Forestry, Wildlife & Environment provided needed backing to make the conference happen. The Alabama Department of Commerce, which promotes industry growth and recruitment statewide, served as a platinum sponsor, as did Smartlam North America.

I was very thankful for the opportunity to represent AFC at this event along with our Economic Development Specialist Gary Faulkner. I learned a great deal from the presentations and believe that I made some positive contacts with other guests as well. The information that we gathered and the talks with varied stakeholders from around the country made this a very enjoyable yet very productive three days, and everyone who worked hard to make this event a success should be pleased that their efforts paid off. I will not be surprised if this event is the first of more as we will be continuing to discuss the growth of the mass timber industry and its potential for beneficial impacts for many years to come. 🏡



**James (Jimmy) Rane, Chairman, President, and CEO of Great Southern Wood Preserving, Inc. and Auburn University Trustee provided the keynote address at the conference.**



**CLT samples to be tested in the Advanced Structural Engineering Lab**



**Touring the Smartlam manufacturing facility in Dothan, Alabama**

# Sounds of a Summer Evening

## The Song of the Whip-poor-will



*Eastern Whip-poor-will*



*Chuck-will's-widow*

*By Dan Green, Retired Forester,  
Alabama Forestry Commission*

**A**s a native of upstate New York, I spent my first 22 years in the foothills of the Catskills. My hometown was Bainbridge, a small rural town (population less than 2,000) along the Susquehanna River. Eastern Whip-poor-wills were common, and I spent many nights listening to them as a Boy Scout and young adult.

When I came South in 1977 to work in Andalusia, Alabama, I heard something similar, but not the same. After a bit of research, I discovered it was the Chuck-will's-widow. My boss from Florala would say the song this bird sings actually sounded more like "Chip-married-the-widow."

Both the Eastern Whip-poor-will and Chuck-will's-widow have similar coloration and nesting habits, but differ in size, range, and song. Both are members of the nocturnal Caprimulgidae family, commonly known as 'nightjars.'

So, on with my story. After moving to north Alabama (more specifically to Lookout Mountain upon my retirement in 2020), once again I heard what I had known as a Whip-poor-will. When I looked up the range of these birds, I discovered they overlap right here! Often, we hear the Eastern Whip-poor-will early in the evening, then the Chuck-will's-widow later in the night. Sometimes they'll both carry on at the same time! Their songs are incessant (annoying to some), but my wife and I find them fascinating.

It had been 43 years since I'd heard the sound of the Whip-poor-will of my youth, but now I smile every time I hear its song and cherish the memory. 🌲

# COGONGRASS

## *Mitigation Program*

*By Owen Andrews, Cogongrass Coordinator  
Alabama Forestry Commission*

Invasive species are one of the biggest issues facing the forests of Alabama. According to the USDA Forest Service, cogongrass ranks in the top 10 worst invasive species in the world. Native to Asia, cogongrass (*Imperata cylindrica*) was brought over to Alabama through the Port of Mobile in 1911. Cogongrass is a federally listed noxious weed, which means it is illegal to sell or transport it across state lines. It is the only invasive plant in Alabama that is on this list.

Cogongrass forms dense patches of infestations, often occurring in a circular pattern and usually growing 2-10 feet tall. However, most of the plant (60 percent of the biomass) is underground with the roots (rhizome), making it very difficult to control. The roots can grow as deep as four feet with segments as small as one inch. If transported to a different location, these root segments can start a new cogongrass infestation. Any applied control treatment must find a pathway to the underground biomass.

As a fire-adapted species, cogongrass is highly flammable, yet it will be unaffected by the fire due to its rhizome's network. It can even burn when it is green. The physical characteristic of the weed influences wildfires to burn fast and hot, making suppression efforts arduous. These wildfires burn so hot that they kill most of the other plants in the immediate area, including longleaf pines.

Cogongrass infestations are also causing ecological degradation to affected sites. It is not only an issue for landowners but also for people who enjoy wildlife. Cogongrass often inhibits the growth and establishment of native plants decreasing desirable food

source for wildlife such as the eastern bluebird. Infested patches of the weed are often very thick, making suitable habitat difficult. For example, a gopher tortoise can survive on a few acres in acceptable habitat. If a cogongrass patch is larger than one acre, a gopher tortoise may abandon its burrow and move some distance away to a more appropriate environment.

Control of cogongrass is costing taxpayers and landowners significantly. Cogongrass can cost up to \$300 per acre to spray with herbicides.

The Alabama Forestry Commission recently received a grant from the United States Department of Agriculture (USDA) Animal Plant Health Inspection Service (APHIS) to treat this noxious weed on properties owned by private non-industrial landowners. There is no cost to the landowner when approved into the program. It is not limited to forestland only; it is open to all land types. To be eligible for this Cogongrass Mitigation Program, the land must be located in Alabama and cannot be in another cost-share program. Under the program guidelines, the agency cannot treat cogongrass near water or endangered species. The herbicides used to treat cogongrass infestations include the chemicals glyphosate at 5 percent and imazapyr at 1 percent. Imazapyr cannot be used near hardwoods.

Although the enrollment period for applications is currently closed, landowners should monitor the Alabama Forestry Commission's website or contact their local county office for next year's program announcement. 📧



*By Ray Metzler, Certified Wildlife Biologist/Threatened & Endangered Species Specialist  
Alabama Forestry Commission*

**D**uring my career, I have handled common snapping turtles (*Chelydra serpentina*), but I have never seen a live alligator snapping turtle (*Macrochelys temminckii*) in the wild. My knowledge of the species is limited to what I learned through my education and working career as a wildlife biologist, so I was a little apprehensive to write an article for this magazine about it. However, I treated this request as a learning opportunity and knew the research phase of writing this article would be beneficial and informative.

#### **[Description]**

There are two members of the genus *Macrochelys* in North America as recognized by the Society for the Study of Amphibians and Reptiles: 1) alligator snapping turtle and 2) the Suwanee alligator snapping turtle (*Macrochelys suwanniensis*). These two species are the largest freshwater turtles in North America.

Distinguishing characteristics of alligator snapping turtles include a large head, long tail, and an upper jaw with a strongly hooked beak. The carapace (upper shell) is quite thick with three ridges that give it a rather pre-historic appearance and distinguish it from the more widely distributed common snapping turtle. Studies suggest that adults generally grow to carapace lengths up to 32 inches and may weigh up to 175 pounds, but larger specimens have been documented. The jaws are very strong and reportedly capable of biting through many different objects. A quick google search confirmed this thought as there are many

YouTube videos showing an alligator snapping turtle biting everything from vegetables, aluminum cans, human arms, and even a broom stick. Some of these videos make me question the sanity of some members of our society.

#### **[Distribution and Habitat]**

Alligator snapping turtles are typically confined to freshwater river systems that flow into the Gulf of Mexico, extending from the Apalachicola River in Florida, west to the San Jacinto and Trinity rivers in Texas, and north to Indiana and Illinois. The species is known to currently occur in 12 states including Alabama, Arkansas, Florida, Georgia, Illinois, Kentucky, Louisiana, Missouri, Mississippi, Oklahoma, Tennessee, and Texas. Barnacles have been found on a few specimens supporting the thought that they are able to tolerate some salinity and brackish waters. Jim Godwin, Biologist with Auburn University who has studied these turtles, reported, “they were once commonly found throughout most of Alabama but are now most easily seen in south Alabama.” Records archived in the State of Alabama’s Natural Heritage Database confirm Jim’s report as Baldwin, Clarke, Elmore, and Washington counties appear to have the most documented sightings.

Adults of the species are generally found in deep, slow-moving waters of large rivers, bayous, canals, swamps, lakes, ponds, and oxbows. They are highly aquatic and typically only venture on to



land to deposit eggs into a nest. Hatchling and juveniles tend to occupy shallower water than adults.

Most active at night, alligator snapping turtles often lay on the bottom of the waterbody among submerged trees, stumps, roots, and other forms of structure. Occupied areas often have a high percentage of canopy cover or undercut stream banks.

### [Diet]

Alligator snapping turtles are primarily carnivorous, opportunistic feeders with fish being a large component of their diet. Other food items include but are not limited to carrion, amphibians, crayfish, mollusks, nutria, snakes, birds, and some vegetation including acorns that have fallen into water. They are known to lay motionless with their mouth wide open exposing a small pink or grayish, worm-like, wiggly tongue appendage that attracts small fish and other organisms into their mouth. The turtle completes the ambush process by closing its mouth quickly and forcefully.

### [Reproduction and Lifespan]

Thought to be long-lived, with some specimens in captivity being more than 80 years of age, alligator snapping turtles may live longer in the wild. Sexual maturity occurs between 11 and 21 years of age. Females leave the water to excavate a nest site and deposit an average of 27 eggs from May through July. No other parental care is provided to the eggs or hatchlings. The sex ratio of hatchlings is influenced by nest temperatures – an example of temperature-dependent sex determination. Intermediate incubation temperatures result in more males being born than females. Incubation temperatures at the two extremes (lower and higher than intermediate) result in more females than males. Females may lay a clutch of eggs annually or no longer than once every two years. As with many turtles, predation on eggs in the nest is relatively high.

### [Endangered Species Act Listing Status]

The U.S. Fish & Wildlife Service proposed to list the alligator snapping turtle as a threatened species on November 9, 2021. A

final rule regarding the proposed listing is expected sometime later in 2022 or 2023.

A primary cause of population declines during the past century has been commercial and recreational harvesting for food. To the best of my knowledge, I haven't eaten an alligator snapping turtle, but I recall about 50 years ago my great-grandfather having

a very large common snapping turtle in a 55-gallon drum that was turned into turtle soup. To this day, I believe that was the largest turtle I have ever seen and remember it being rather tasty. The Campbell's Soup Company purchased alligator snapping turtle meat for turtle soup during the 1960s and '70s. Commercial harvest is now prohibited in all states, and recreational harvest is prohibited in all states within its range except for Louisiana and Mississippi.

The U.S. Fish & Wildlife Service lists the following as the primary negative influences on alligator snapping turtles: "legal and illegal intentional harvest (including for export), bycatch associated with commercial fishing of catfish and buffalo, habitat alteration, and nest predation." Incidental hooking on recreational trot and limb lines is thought to be a threat of varying degree throughout much of its range.

Like other long-lived species, alligator snapping turtles exhibit low survival of hatchlings and juveniles, but individuals may live many decades once they reach maturity. Adult female survival is especially important for population growth to occur. Surveys throughout the range of the species indicate that populations haven't significantly increased even though regulations are now in place to limit their harvest.

### [Summary]

Populations of alligator snapping turtles in Alabama and Mississippi represent more than half of the estimated abundance across its range. The species still occurs throughout much of its historical range, but some range contraction has occurred in Illinois, Kansas, Missouri, Oklahoma, and Tennessee. Although commercial harvest was limited many years ago, populations have been slow to recover due to low reproductive rates that are highly influenced by high nest and juvenile mortality. 🙏



Photo by Mark Bailey



Alligator Snapping Turtle

Photo by USFWS



Common Snapping Turtle

Photo by Alan Cressler

# HIDDEN TREASURE

## *The Outdoor Classroom at McDavid Jones Elementary School*



*By Benji Elmore, Southwest Regional Forester  
Alabama Forestry Commission*

When one thinks of Mobile, many times the picture in our minds may be of majestic live oaks lining busy downtown streets. However, north Mobile County is quite rural. McDavid-Jones Elementary School (MJES), which lies outside the small town of Citronelle, is home to approximately 900 students, pre-kindergarten through 5<sup>th</sup> grades. Joy and Robert Herring began as parent volunteers two days per week in the early 2000s when their son was attending the school. In 2004, MJES asked Joy to come on board as a full-time teacher and conduct the science lab with the children. That role began a years-long journey of not only teaching students, but also developing the school's forestland located immediately behind the school.

One of Mrs. Joy's earliest activities with MJES was to plant the first tree on campus and from there began a whirlwind of activities. Longleaf pine was planted in 2002, and an amphitheater that literally functions as an 'outdoor classroom' was built in 2003. With the assistance of AFC Coastal Work Unit Manager Ken





Leslie, the school property was certified as a TREASURE Forest in 2006. Using funds obtained through grants from Gulf Coast Resource Conservation & Development Council (RC&D), the school built a pavilion in 2007 and a concrete walkway in 2008. The school obtained a grant from the Alabama Wildlife Federation to install various wildlife-oriented projects. Joy's support group of husband Robert, teachers, students, and other volunteers provided the needed labor. They hung gourds to attract martins and installed an animal tracking sign to show students how to identify different forest creatures from their tracks.

A bluebird trail was created and scattered with 10 boxes that the kindergarteners monitor for nesting and fledgling activity.

Since an owl box was installed, barred owls have been heard calling nearby. Originally a large gully was located behind the school grounds. Thanks to RC&D, the gully was filled in and trees were planted. It is this fenced ten acres that is now designated as the TREASURE Forest. Here Mrs. Joy's team built a turpentine learning station to demonstrate to students how turpentine was collected from longleaf pine in the previous century.

The Junior Master Garden Club, through the Mobile County 4-H program, provides an opportunity for students to learn about planting a garden. Each grade plants a small, raised-bed garden.

Mrs. Joy promotes recycling by teaching the children to collect cans and plastics. Students bring their happy meal toys to give to

the local Ronald McDonald House. She also instructed children to collect dryer lint from their homes to bring to school for the birds to use when they are looking for materials to prepare their nests. Along with other miscellaneous items, they fill and hang a suet feeder for birds.

MJES became officially certified as an Alabama Outdoor Classroom in 2018. When asked what initially sparked her interest in beginning this journey with the school, Mrs. Joy replied that she's always loved nature. Her motivation comes from working with children. Her goal for students has been for them to understand the "magic of science," to appreciate the earth, and take ownership of it. Visitors on campus will never find any trash because the students take pride in keeping it clean and litter-free. They actually compete to see who can pick up a piece of trash first! Mrs. Joy sees this exercise as "growing good citizens." Each class leaves their legacy by choosing and planting a tree, then decorating the ground around it by painting legacy rocks!

Mrs. Joy loves her students, and her enthusiasm for educating them is contagious, all driven by an extremely strong work ethic instilled in her at an early age by her parents. When asked if she'd faced any obstacles, she answered that writing grant proposals had been challenging at times, and she'd had a few sleepless nights thinking about what she could do next.

*(Continued on page 28)*



*Left: Turpentine learning station teaches students how turpentine was collected from longleaf pine. Center: Nature's cleanup crew - This station demonstrates how logs decompose and turn into soil. Right: Mrs. Joy poses with a scarecrow at the raised-bed garden.*

*The Outdoor Classroom at  
McDavid Jones Elementary School  
(Continued from page 27)*



The Herrings live on their own personal TREASURE Forest, affectionately called Bluebird Meadow, where she was raised as a child. In addition to her husband assisting her with numerous projects at the school through the years, her son is now a teacher at Semmes in Mobile County, and her daughter is a therapist. It seems each member of the entire family has a servant's heart.

Upon her retirement this past school year, Joy said that anyone wishing to step in behind her or begin a similar project will need to "own it." They'll need to be a leader, have a good support committee, and "think out of the box." She plans to stay active with the school, assisting with outdoor classroom events and other projects around Citronelle. She leaves her legacy at MJES growing in the forest, but also growing in the hearts of students she has inspired through the years. She's a true TREASURE in every sense of the word! 🌲



*On her last day at work before retiring, Mrs. Joy was surprised with a reception and a sign dedicating the outdoor classroom to her.*



*An amphitheater was built to bring entire classes into nature for outdoor learning experiences. Mrs. Dailey covers several topics with her class.*



*A special thanks goes out to Coastal Work Unit Manager Ken Leslie and the Mobile County AFC staff for assisting Mrs. Joy with various projects through the years. Most recently, they conducted prescribed burning on the longleaf stand in 2021.*



*With the help of a sign created by Mrs. Joy, fourth grade teacher Mrs. Connie Dailey explains Alabama's state flag, state tree, as well as other state plants and animals. As part of a history lesson, students learn how native Americans used river birch bark as paper, writing on it with ashes from their fires.*

# Not all classrooms have four walls



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# Stay Safe During a Thunderstorm

*By Coleen Vasant, Communications & Public Relations Manager  
Alabama Forestry Commission*

**W**orldwide, eight million cloud-to-ground lightning strikes occur every day. According to the National Aeronautics & Space Administration (NASA), lightning causes more deaths than any other weather event worldwide.

Based on data from 2011 to 2021, the United States records 23 lightning deaths in an average year. Alabama, Arizona, Colorado, Florida, Georgia, Missouri, New Jersey, North Carolina, Pennsylvania, and Texas have more lightning deaths and injuries than other states.

More than one-third of all lightning deaths and injuries occur on farms. More lightning strikes occur in July than any other month, and two-thirds of all lightning fatalities occur between noon and 6 p.m. Males are five times more likely to be struck by lightning than females, and 85 percent of fatalities are male. Almost half of all lightning strikes (41 percent) occur in people from 15-34 years of age.

The fatality rate for people struck by lightning is around 20 percent. Eighty percent of survivors suffer from long-term injuries including insomnia, chronic pain from nerve damage, headaches, confusion or problems concentrating, serious burns, cardiac arrest, and ringing in the ears.

Being caught outdoors during an electrical storm can be frightening and dangerous if you are not near a place of safety to wait out the storm. If you find yourself in that situation, there are things you can do to limit your chances of being a lightning statistic.

## **Lightning**

Lightning is an electrical discharge which results from a buildup of static electricity between the ground and the clouds, or between two clouds. It occurs with all thunderstorms, in the

storm area and out in front of the storm. Lightning is what causes those rumbles of thunder we hear off in the distance. If you can hear thunder before the storm, you are close enough to the storm to be struck by lightning.

Thunderstorms are most likely to develop on warm, summer days and go through various stages of growth, development, and dissipation. On a sunny day, as the sun heats the air, pockets of warmer air start to rise in the atmosphere. When this air reaches a certain level in the atmosphere, cumulus clouds start to form. Continued heating can cause these clouds to grow vertically upward in the atmosphere. These towering cumulus clouds may be one of the first indications of a developing thunderstorm.

## **More Lightning Facts**

Lightning hits somewhere on the earth about 100 times every second.

More people are killed by lightning than by any other kind of storm, including hurricanes and tornadoes.

Lightning causes several hundred million dollars in damage to property and forests each year.

A lightning flash is estimated to carry 30,000 to 300,000 amps of electricity at 15 million to 125 million volts, for less than one second.

The air near a lightning flash is heated to 50,000 degrees Fahrenheit, much hotter than the surface of the sun. The rapid heating and cooling of the air causes the shock wave we hear as thunder.

## **Keeping Safe**

No place is absolutely safe from lightning, although some places are much safer than others. Knowing these safe places and how to utilize them may help keep you or your family from being caught in the storm with no place to go.



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The safest location during lightning activity is a fully closed building with a roof, walls, and floor. Picnic shelters, sheds, car ports, camping tents, or other partially open structures are not your safest bet. An enclosed building is safe because the wiring and plumbing, or outside telephone poles helps divert the electrical current from the flash. Typically, the charge of electricity will travel through the wiring or plumbing and into the ground.

### Safety tips

If you can't find shelter in an enclosed safe building, you can help protect yourself from being a victim of lightning by following the safety tips below.

If you are planning a day to work on your property, get an up-to-date weather forecast from your cell phone, NOAA Weather Radio, commercial radio, or television station. You can set your smart phone to give an alert of thunderstorms and lightning occurrences in your area. Keep an eye on the sky, look for darkening skies, flashes of light, or increasing wind.

As soon as you hear thunder, see lightning, or see dark threatening clouds, get to a safe location. If you can hear thunder, you are close enough to the storm to be struck by lightning. Wait 30 minutes after the last rumble of thunder before you leave the safe location.

Lightning typically strikes the tallest object. Don't take cover under a tall tree or any other tall object or structure.

Avoid proximity to water including creeks, ponds, faucets, showers, and pools.

Try to get into a house, large building, or your vehicle. Avoid standing in small, isolated sheds or other small structures.

If you are stranded outdoors seek shelter in a low area under a thick growth of small trees or shrubs. If you're in an open area, go to a place as low as possible, such as a ravine or valley.

If you're caught in a flat area such as a level field and you feel your hair standing on end, this is an indication that lightning is about to strike.

Avoid contact with other people. If in a group, do not huddle together. Spread out at least 15 feet apart.

Stay away from metal objects such as antennas, electric wires, fences, and train tracks. The rails can carry lightning to you from some distance away. Remove all metal objects from your body and clothing including keys, tools, fishing rods, guns, etc.

Get off and away from machinery including lawn mowers, tractors, golf carts, ATVs, and bicycles. ⚡

*You can use thunder to estimate the distance in miles between you and the lightning by counting the seconds between the flash and the sound of the thunder, then divide those seconds by five. Sound travels approximately one fifth of a mile per second, so dividing the number of seconds by five gives the number of miles.*

Reference:

Severe Weather 101: Lightning Basics ([noaa.gov](http://noaa.gov))



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# Cucumbertree

(*Magnolia acuminata* L.)

*The Tree,  
Not the  
Vegetable!*

*By Bonnie Coleman, FIA Forester  
Alabama Forestry Commission*

When the word ‘cucumber’ is mentioned, thoughts of salads and pickles are likely to occur. Although the name can be misleading and would seem associated with the common vegetable, the cucumbertree (*Magnolia acuminata* L.) is actually part of the Magnolia family. In addition to its eccentric name, this tree also displays some unique characteristics within its family.

The cucumbertree typically reaches 60-90 feet tall, growing as one of the tallest Magnolia species. The deciduous leaves are alternate, simple, ovate, elliptical, typically 5-10 inches long, and pinnately veined with entire margin. The leaves also have a round to acute base, which is one differentiating characteristic from several magnolias that have an auriculate base. They have acuminate tips (tapering to a point) and are dark green above with a soft white pubescence underside. The twigs are moderately stout and have long silky hairs on the buds, with terminal buds that are one-half to three-quarter inches long and have a single scale. The leaf scar is narrow and elevated, and stipular scars encircle the twig.

Another common name for cucumbertree is yellow-flower magnolia, derived from the beautiful yellow-green flowers that bloom in late spring to early summer. The petals are 2-4 inches long, spirally arranged, and are typically found high in the tree. The name cucumbertree

may be more closely associated with its fruit, which often is curved and starts out green. The fruit then turns red and eventually dark brown. It is cone-like with shiny red follicles and can typically grow 2-3 inches long. Once the fruit matures in early fall, it releases fleshy seeds that are consumed by a variety of birds and rodents.

One of the key characteristics of this tree that differentiates it from others within the Magnolia family is its bark. It has a light gray-brown to red-brown, thick, furrowed bark with numerous narrow scales. The bark is soft and can easily be dented in with a thumbnail. The cucumbertree displays light, soft, close-grained wood that is creamy white to pale yellow-brown in color. Its wood is commonly mixed with yellow-poplar and sold interchangeably as such. Uses include pulpwood, veneer, paneling, crates, furniture, trim, and general utility wood.

Cucumbertree isn't found widely across the state. It tends to prefer slightly acid, well-drained soils on moist and fertile slopes. However, it is a hardy, quick growing tree and able to adapt to various sites, making it a wonderful ornamental when planted throughout its range.

Next time you hear the common vegetable brought up, enlighten those around you with the tree that shares its name. 🌳



Photos by Bonnie Coleman