



THE LONGLEAF LEADER

Reading the Landscape:
Managing for **YOUR** Forest

VOLUME XII - ISSUE 2

SUMMER 2019

NUTRA GUARD

Available Exclusively from
Meeks' Farms & Nursery, Inc.

NUTRA GUARD uses encapsulated CRF released as a function of time/temperature

Unique and proprietary blend of controlled release fertilizers incorporated into the growing media

N



K



S



Fe



Mn



Cu

P



Ca



Mg



B



Zn



Mo

NUTRA GUARD plugs are loaded with 12 essential elements

12-14 months release cycle providing your seedlings an important jump start in the transition from nursery to newly planted forest

Get your seedlings off to a fast start.
Insist on NUTRA GUARD from Meeks Farms and Nursery, Inc.

Meeks' Farms & Nursery, Inc.
Kite, GA

Sales 877.809.1737

Regional Sales:

Pensacola, FL
850.572.3932

Holly Ridge, NC
910.512.1743

Swainsboro, GA
478.455.0808

TABLE OF CONTENTS



President’s Message.....2
 Upcoming Events4
 Letters from the Inbox5
 Understory Plant Spotlight.....7
 Sprewell Bluff Managing without Bounderies8
RESEARCH NOTES12
LANDOWNER CORNER14
TECHNOLOGY CORNER18

REGIONAL UPDATES20
NEXT GENERATION30
ARTS & LITERATURE32
 Longleaf Destinations38
PEOPLE42
SUPPORT THE ALLIANCE47
 Heartpine51

PUBLISHER The Longleaf Alliance, **EDITOR** Carol Denhof, **ASSISTANT EDITOR** Margaret Platt, **DESIGN** Bellhouse Publishing
ADVERTISING Carol Denhof 678.595.6405 – editor@longleafalliance.org
COVER Hog Plum Glade on Sprewell Bluff. Photo by Philip Juras.

The Longleaf Leader (USPS#) is an official publication of The Longleaf Alliance, 12130 Dixon Center Road, Andalusia, Alabama 36420 and is published 4 times a year. The Longleaf Alliance reserves the exclusive right to accept or reject advertising or editorial material submitted for publication. Advertising rates quoted upon request. Postmaster: Send address changes to The Longleaf Alliance, Address 12130 Dixon Center Road, Andalusia, Alabama 36420. Periodicals Postage Paid at Montgomery, Alabama.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, age, or disability. (Not all prohibited bases will apply to all programs.) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

BY ROBERT ABERNETHY, THE LONGLEAF ALLIANCE



PRESIDENT'S MESSAGE

As I write this, it is mid-May and still cool. All the oaks have been fully leafed out for several weeks, and the first flush candles from the young longleaf are tall, straight and have 2-inch green needles. You will be reading this in July, in the heat of summer when we have long since forgotten the cool spring and are living with the heat of another Southern summer. Time passes.

When we plant trees, we learn to be patient. I planted my first field of longleaf before the CRP program allowed it in 1992. Two months later, our son Garrett was born. Today, those trees are 30 - 40 feet tall and growing straight and clear, and we have thinned them once. Garrett is 27 and married and on his own. Trees grow up, kids grow up and time passes on.

Some of you may have heard that I have decided to “transition toward retirement,” as I am calling it. The process may take several months, but the Board of Directors and I are actively searching for a new President of The Longleaf Alliance. I will still be around working on special projects but I want to take a step back and spend more time with a drip torch on our farm in North Carolina and a fishing rod with our kids in Oregon and Utah. And Yvonne and I plan to spend as many summers as possible camped above 7,000 feet in the Rocky Mountains catching trout, watching elk, and enjoying the heat of a campfire on a summer night. You cannot do that in South Carolina. We have the heat; the campfire is unnecessary.

I am very proud of what we have all accomplished in my nearly seven years as President. We have worked together from Texas to Virginia, and we have made a real difference. We have increased prescribed fire on the land and populations of red-cockaded woodpeckers. Partners and the like are head-starting

gopher tortoises and buying land throughout the longleaf range to restore gopher tortoises, longleaf, and the myriad species associated with the landscape. And we are planting about 100 million longleaf seedlings a year. That is getting pretty close to a billion trees in the last ten years. Those trees planted on 130,000 to 150,000 acres a year are the first step in restoring the longleaf forest.

WE ARE
TRULY
THE
LONGLEAF
ALLIANCE

When I say, “we,” I mean, “The Big We.” Sure, I mean our staff, members, and partners; but I also mean all the landowners and companies that know about longleaf and understand the history and importance of it because of the conversations you have all had with them. Conversations you have had in the woods, in the line at the grocery store, and over Thanksgiving dinners with relatives.

We are having this incredible success because of you and what you are doing on your own land or the WMAs and National Forests that you manage, but we are also having this success because you care so deeply about this ecosystem that has sustained Southerners for generations. It is more than just a job, it is who you are. We all think it, and most of us are proud to say, we are doing this work for the next generation and “we want to leave the land in better shape than we received it.”

So yes, I am stepping down as the President of The Longleaf Alliance, but I am not retiring, I am “transitioning toward retirement.” There is too much work to do to fully retire. Too many hills to climb; too many trees to plant, too many turkeys to chase and too much work that needs to be done. Thank you for all the conversations and meals we have shared, the trust and friendships we have forged, and all the great work we have accomplished together. We are truly The Longleaf Alliance.

Longleaf Alliance Board of Directors

Marc Walley –
Chairman

Reese Thompson –
Vice Chairman

Rufus Duncan –
Secretary/Treasurer

Barclay McFadden –
Past Chairman

Angus Lafaye

Lynda Guerry Beam

Robbie Fisher

Amanda Haralson

Ken Nichols

Mickey Parker

Mac Rhodes

Salem Saloom

Latimore Smith

George Tyson

Phillip Woods

Staff

Robert Abernethy
President
robert@longleafalliance.org

Ad Platt
Vice President of Operations
ad@longleafalliance.org

Anne Rilling
Vice President of Business
anne@longleafalliance.org

Charlie Abeles
Wildlife Biologist
charlie@longleafalliance.org

Nicholas Barys
*Wetland Ecosystem Support Team
Member*
nick@longleafalliance.org

Lynnsey Basala
Development Director
lynnsey@longleafalliance.org

Ryan Bollinger
Local Implementation Team Consul
ryan_b@longleafalliance.org

Karen Zilliox Brown
*Technical Assistance & Training
Specialist*
karen@longleafalliance.org

Emma Browning
Biological Technician
emma_b@longleafalliance.org

Vernon Compton
GCPEP Director
vernon@longleafalliance.org

Carol Denhof
Understory & Media Coordinator
carol@longleafalliance.org

Bobby Franklin
SoLoACE Partnership Coordinator
bobby@longleafalliance.org

Lucas Furman
GIS Support Specialist
lucas@longleafalliance.org

Kelsea Heider
*Wetland Ecosystem Support Team
Member*
kelsea@longleafalliance.org

Lisa Lord
*South Carolina Field Project
Coordinator and Savannah River
Watershed Project Director*
lisa@longleafalliance.org

Ryan Mitchell
*Outreach & Technical Assistance
Coordinator*
ryan@longleafalliance.org

Edward O'Daniels
*Wetland Ecosystem Support
Senior Team Member*
edward@longleafalliance.org

Jessica Sandoval
Biological Technician
jessica@longleafalliance.org

Brian Schumann
Ecosystem Support Senior Team Member
brian@longleafalliance.org

Kaiden Spurlock
Ecosystem Support Team Supervisor
kaiden@longleafalliance.org

Randy Tate
*Ft. Stewart/Altamaha Longleaf
Restoration Partnership Coordinator*
randy@longleafalliance.org

Ben Tuttle
Ecosystem Support Team Member
benjamin@longleafalliance.org

Donna Vassallo
Ecosystem Support Senior Team Member
donna@longleafalliance.org

Brian Whalen
Wetland Ecosystem Support Team Member
brian_w@longleafalliance.org

Casey White
Administrative Assistant
office@longleafalliance.org

Bob Wilken
Fire Specialist
bob@longleafalliance.org



RMS

Resource Management Service, LLC

Resource Management Service, LLC is proud to support
the work of The Longleaf Alliance and its partners.

2019 | Calendar

July 16 - 18

Longleaf Academy: Longleaf 101
Withlacoochee Training Center
Brooksville, Florida

August 13 - 15

Longleaf Academy: Fire &
Longleaf 201
Wesley Center
Woodworth, Louisiana

September 24 - 26

Longleaf Academy: Understory
Diversity 201
Heflin, Alabama

October 22 - 24

Longleaf Academy: Groundcover
Restoration 201
Austin Cary Forest Campus
Gainesville, Florida

November 19 - 21

Longleaf Academy: Longleaf 101
Wakefield, Virginia

For more information about events please visit The Longleaf Alliance website (www.longleafalliance.org).

SUMMER 2019 MANAGEMENT CHECKLIST

- **Evaluate Young Stands:** Inspect new longleaf plantings and plan future treatments if problems are noted. Mow or spray problematic species such as crabgrass, coffee weed, partridge pea, hairy indigo, and other emergent weeds.
- **Planting Longleaf:** Secure soil samples for selected longleaf restoration sites. Subsoil or rip sites with hardpans early to allow time for the furrow to settle.
- **Order longleaf seedlings** for upcoming plantings; nurseries sold out of their entire inventories by September of last year. A list of preferred nurseries can be found at — www.longleafalliance.org.
- **Herbicide Treatments:** Secure contractors for any chemical site-prep treatments. For maximum efficacy, foliar active herbicides such as glyphosate (Roundup®/Accord®) should be applied to pasture grasses before the first frost. If targeting waxy species, triclopyr (Garlon®) may be applied now or delayed until after the first frost to minimize impact to herbaceous groundcover.
- **Spray invasive species** such as kudzu, cogongrass, bermudagrass, Japanese climbing fern, bahiagrass, and fescue.
- **Prescribed Fire:** Burn wiregrass and native groundcover to maximize fall seed production and viability.
- **Conduct a seedbed preparation burn** on mature stands with good cone crops. This allows the seedbed to be clean, but not so clean that predators destroy all the seed.
- **Order Native Seed for Understory Restoration:** Seed from local ecotypes and endemic species is limited and expensive. Although some landowners have the time and expertise to collect their own seed, the most restoration will occur with seed purchased from the few seed companies that sell southeastern sourced seed.

Q&A



*Pitch canker on site; slash buffer is directly behind the photographer.
Photo by Ryan Mitchell.*

Q.

Dear Longleaf Alliance,

We have 200 acres of 4-year-old longleaf I planted under the CRP program. We planted longleaf for quail and turkey, and possibly some income of pine straw in the future. The site was row cropped prior to planting. We ripped, sprayed, scalped and planted longleaf on an 8 x 12 spacing. We have been mowing 1/3 of the stand annually for wildlife but have not yet burned it. Beginning last fall, I started noticing brown needles on the top of some of the trees. Those trees died, and now we see many with the same brown needles. We think it may be insects. If so, what should we spray to kill them? Attached are some pictures.

Worried

A.

Dear Worried,

I do not think you have an insect problem. The pictures look like a rather common disease characteristic of pitch canker called "flagging." Pitch canker is an infection caused by the *Fusarium moniliforme* var. *subglutinans* fungus. According to the Florida Forest Service (FFS) and IFAS, when infected, these dying shoots appear most frequently from late fall through the following spring. Once the spores enter the trees through any type of wound, they create a canker. The canker exudes a ton of resin, or pitch. Slash and loblolly pines are more susceptible than longleaf to pitch canker. Little is known about the control of pitch canker, but on these small trees and local

occurrences, Jeff Eickwort, Entomologist with the FFS has demonstrated how with corrective pruning you can often save individual trees. This is done by cutting out the diseased leader, selecting a new leader, and trim other top stems as needed. Pitch canker typically flares up for a few years in trees of this age, then subsides. Damage can be severe, but the incidence usually is not economically significant. We suggest conducting prescribed burns in the stand on a 2-year rotation, which will hopefully remove the infected trees. Avoid nitrogen inputs of any kind. I will be in your area soon and will swing by to check on the tract.

Sincerely,

The Longleaf Alliance

Post Script: A staff member made a technical assistance trip to look at the infected stand. Within the 200 acres of longleaf, one area had a disproportionately higher infection than the rest of the stand. Bordering that side of the stand was a 4-row strip of 15-year-old slash pine, and beyond was a sizeable 4-year-old loblolly tract. Upon closer inspection, the strip of slash was almost completely infected with pitch canker. After walking through the slash and into the loblolly, we saw similar results, significant pitch canker infection. It is just a reminder not to get pigeonholed looking at only problems within a stand or tree species. Sometimes we must look at things going on outside the stand to determine the problem.

continued on page 6

continued from page 5

Q.

Dear Longleaf Alliance,
I sprayed my 3-year-old longleaf this spring for herbaceous weed control, and now some of the longleaf are turning yellow and brown. I sprayed the site by helicopter with 2 oz. of Oust® and 5 oz. of Arsenal® AC. I had some hardwood sprouts we needed to control. Why are my trees turning yellow?

Concerned

A.

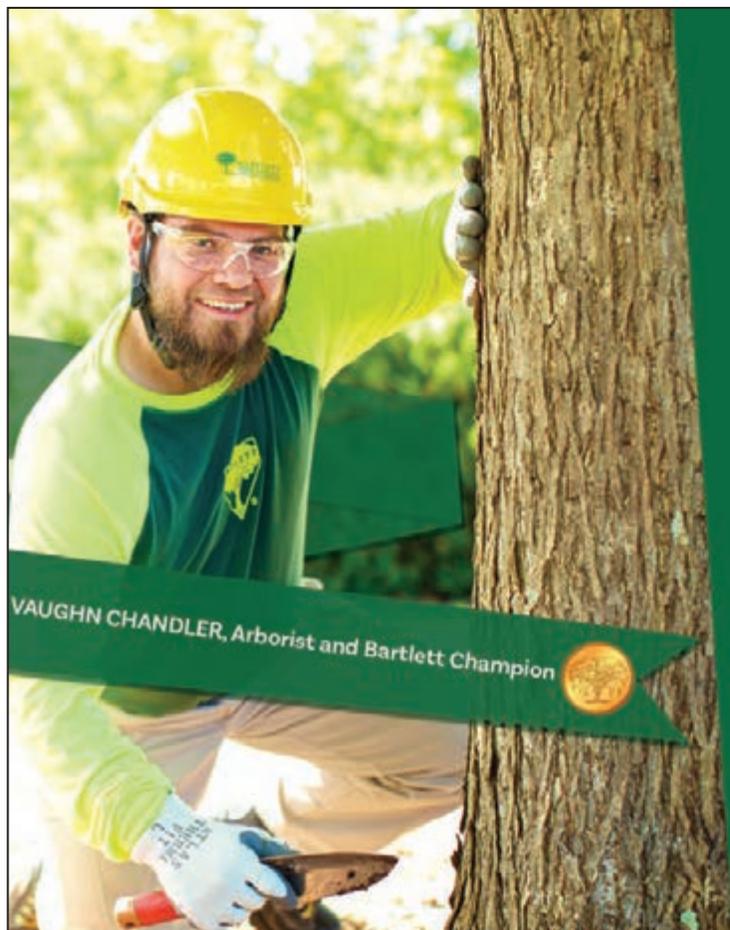
Dear Concerned,
Looking at your photos, a well-timed prescribed burn would have solved your problem. Unfortunately, your trees now have what some refer to as “arsenal disease.” According to the label for Arsenal® AC, you can apply the herbicide over the top of 1-year-old longleaf in the spring. The label also allows for applications on 2—5-year-old longleaf AFTER August 15th. This late application is to avoid spraying actively growing longleaf. Imazapyr can kill the terminal bud when applied to actively growing tissue. Technically, your spring application of imazapyr was off-label. I have seen too much damage to 2—5-year-old longleaf to recommend an over the top application of imazapyr unless it is a last-ditch effort to save the stand. Embrace the flame and burn next time!

Sincerely,
The Longleaf Alliance

Longleaf Pine Needle Baskets and Red Clay Pie Plates



HESSPOTTERY.COM
NeedlesandClay on Etsy
(bit.ly/LongLeaf)



Me? Obsessed with trees? Yes. Yes, I am.

Vaughn Chandler champions the trees, landscapes and property investments of the customers in his care. And he's one of the many reasons we've become the premier scientific tree and shrub care company in the world.

Contact us today at 877-BARTLETT | bartlett.com



EVERY TREE NEEDS A CHAMPION.

By Carol Denbof, *The Longleaf Alliance*

PLANT SPOTLIGHT

SILPHIUM COMPOSITUM. MICHAUX VAR. *COMPOSITUM* KIDNEYLEAF ROSINWEED



Closeup of Kidneyleaf rosinweed flower head. Photo by Will Stuart.



Distinctive lobed and red-veined basal leaves of Kidneyleaf rosinweed. Photo by Will Stuart.



Map showing distribution of Kidneyleaf rosinweed. USDA PLANTS Database.

Description

Kidneyleaf rosinweed, also known as Compass Plant, is a perennial plant in the Sunflower Family (Asteraceae). The tall flowering stem originates from a set of very distinctive basal leaves. The large, ovate shaped leaves measure 4-12 inches long and are deeply lobed with reddish veins. There are no leaves on the stem. The stem can reach up to 6 feet tall. It flowers throughout the summer starting in June. The yellow flower heads occur in small groups on short branches of the flowering stem. The heads have unique bracts that are wide, green, and succulent.

Distribution & Habitat

This plant is mainly found in the Atlantic Coastal Plain portion of the longleaf range. It grows from Virginia in the north, Georgia in the south. Kidneyleaf rosinweed can typically be found in dry pinewoods with well-drained soils.

Wildlife/Medicinal Uses

Nectar plant for bees and butterflies.

Plant Availability

Silphium compositum is not widely available commercially but be on the lookout for it at native plant nurseries and native plant sales.

References

- Sorrie, B.A. 2011. *A Field Guide to Wildflowers of the Sandhills Region*. The University of North Carolina Press. Chapel Hill, NC. 378pp.
- USDA, NRCS. 2019. The PLANTS Database (<http://plants.usda.gov>, 13 May 2019). National Plant Data Team, Greensboro, NC 27401-4901 USA.

By Nathan Klaus, Georgia
Department of Natural Resources

SPREWELL BLUFF

MANAGING WITHOUT BOUNDARIES

*Longleaf Heath Bluff, rare
G1 community overlooking
shoals. Photo by Hal Massie.*

There are no firm borders to the place we call Sprewell Bluff. Ridge upon ridge fade into the distance in a part of Georgia not known for its mountains. Time also seems to fade away here where generations of women and men have all stood admiring old trees that barely changed as the years passed. For most Georgians, Sprewell Bluff flashed briefly into their consciousness about 40 years ago when then-governor Jimmy Carter made the final decision: there will be no dam on the Flint River; it was just too lovely a place to bury under acres of water. After that, the public largely forgot Sprewell and the place was left to the shoal bass and the people who fished them. Those old longleaf didn't notice; they just continued their vigil up on those rocky ridges, and the next generation of people came to love them. Meanwhile, Georgia Power was left holding the 3,200 acres of rocky ridges that had been slated for flooding.

Twenty years ago, I was a new employee of the Georgia DNR and first laid eyes on Sprewell Bluff while paddling the Flint River with a girlfriend on a hot Saturday afternoon. The river

wasn't so crowded back then, and we were filled with the timeless solitude that still haunts these mountains. After a few hours of paddling, I was surprised to see the familiar Georgia

DNR boundary lines painted along the river. Like a lot of people, I knew of Sprewell Bluff Park (then a State Park), but I had no idea we owned land across the river as part of Sprewell Bluff Wildlife Management Area (WMA). A short time later I searched the bumpy dirt roads of eastern Talbot and Meriwether counties for those familiar yellow DNR blazes, this time signaling the end of a dense loblolly pine stand owned by Georgia Pacific and the beginning of a stand of colossal old-growth longleaf pine high

atop the mountains. It was fire suppressed, had no groundcover to speak of and was choked with oaks, but you should have seen those big trees – actually, you still can; please come and see them!

It turns out we didn't own that land across the river; Georgia Power still did, and we only leased it for the WMA. Like most Georgians, the goliath power company had more or less



Sprewell Bluff spring fire. Photo by Nathan Klaus.

forgotten about Sprewell Bluff after Carter made his decision. I decided I'd like to burn it, but I had to get permission. First, let me digress a minute to point out what a young fool I was: steep slopes, old longleaf with deep duff, not a bit of flat ground to put in a decent firebreak, and my fire experience was limited to a handful of burns! OK, back to the story. DNR's game management section managed the property and didn't care if we (then Nongame Conservation Section) burned it. Next, I went to Georgia Power, who sent their forester to meet me. I think he may have had his doubts about this kid biologist, but he was gracious and said it would be alright to burn. I also reached out to Neal Edmundson, then with Georgia Forestry Commission, who had just left the Upson County ranger job to take a job overseeing prescribed fire statewide. I think he jumped out of his chair with excitement; sure, he would help! It must've been only a couple of weeks later we were all out there, burning about 350 acres of the steepest ground I'd ever burned. It went pretty well, for a while, then we had some crown fires, then we had a spot fire across a valley to the next mountain over, then we had a 4-wheeler roll over trying to get to that spot. It all came out alright in the end, though at times I thought I saw my career going up in smoke.

Meanwhile, I think Neal was having the time of his life, and his fellas with GFC handled it just as calmly and professionally as you could ask for. It was my first taste of the cool attitude of the wildland firefighter and a good lesson for me. Fortunately, somebody had coached me about duff trees, and we had burned right after a big rain and the old longleaf that generations had loved are still there. And though we kept the fire on our property this was the beginning of getting to know our neighbors.

It was after this first burn that what I said at the beginning of this article became clear to me, that Sprewell Bluff has no boundaries. The land, the soil, the longleaf, and the river all flow right across the lines we paint and post on the trees. We have big old longleaf, so does the neighbor and their neighbors. True, many timber companies have removed most of the longleaf they owned, but most of the other private lands are just as beautiful as our WMA, across thousands of acres. It didn't take long to meet these neighbors, and a shared love of the mountains and the longleaf was a great foundation to start

our relationship. Today it's a rare burn on the WMA that doesn't include at least one of them and their land. Besides the benefits to all our wildlife, it's easier, safer, less expensive and less destructive to burn using existing roads and rivers as firebreaks than plow down steep mountainsides. Turns out

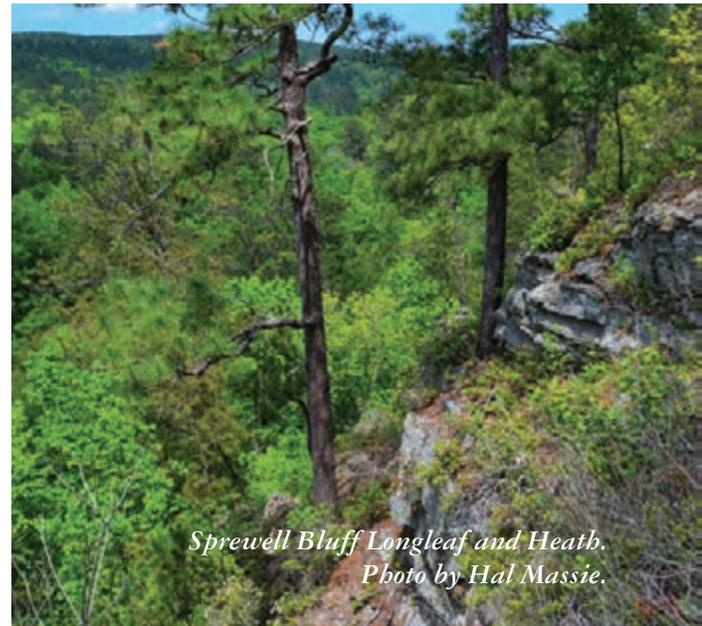
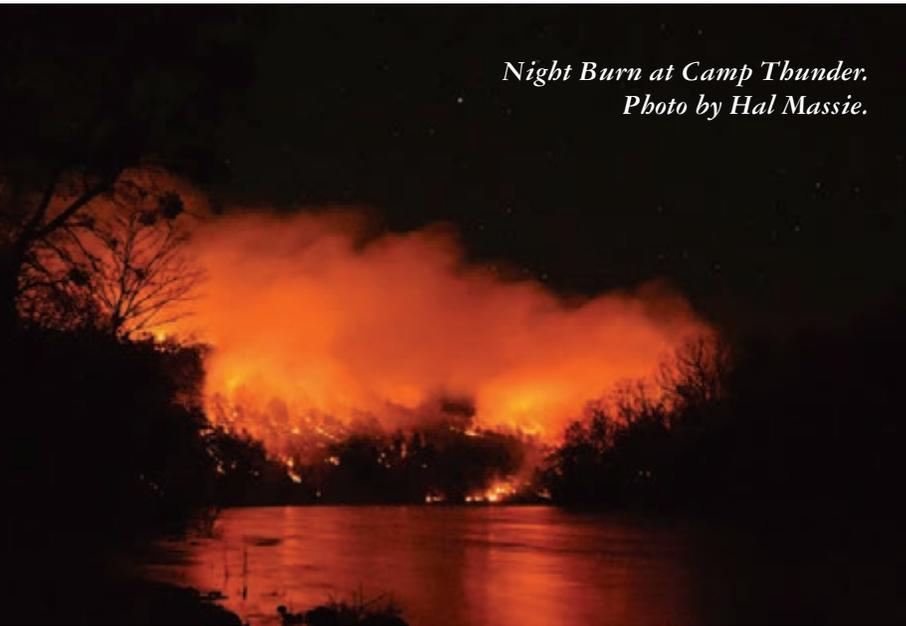


Pre-burn Partner Briefing with Georgia Partners. Photo by Grant Blankenship.

nearly everyone wanted to burn. The older generation remembers the mountains burning in the past. The younger generation remembers the stories the grandfather told about the mountain burning every year, but the steep ground and heavy fuels were just too daunting for most folks.

It's been almost twenty years now. Georgia Power eventually donated their holdings to the state, and a great deal of the neighboring timber company lands have been added to Sprewell Bluff, nearly doubling the size of the WMA. Being a part of these land deals has been one of the best things I've gotten to do in my career. Several ecological communities new to science have been discovered and described on this landscape. I'm still talking with the neighbors, and burning with them, and learning from them and most I consider friends. I've learned so much from my relationship to the land and the people, for example, there is a fish weir in the Flint River, built by Native Americans, that kept the Pasley family alive when they settled the area; you can still see it! I've learned that the rusted metal down by a lovely spring is all that remains of a steam-powered sawmill, once used by Roy Mitchell's father when he used to selectively log the longleaf out there. I've learned about Jim and Pete, two Native Americans that escaped

*Night Burn at Camp Thunder.
Photo by Hal Massie.*



*Sprewell Bluff Longleaf and Heath.
Photo by Hal Massie.*

the roundup for the Trail of Tears and lived out their days trading deer hides and growing patch gardens on the backside of Rockhouse Mountain. I've even learned about the man shot in the back for stealing moonshine and where he is buried; digging his grave provided the bare ground where a small patch of longleaf seedlings got their start, and a hundred years later you can still see the cluster of trees on his unmarked grave. My life is rich from knowing this place.

And I have been able to give back also. For twenty years I've studied duff and the various ways to manage it and shared what I've learned with anyone who will listen. I've gotten a lot better at burning, and we help the neighbors every chance we get. I've learned about the groundcover out there, the simply amazing diversity of plants that remain in this rocky soil that was never farmed. And I've learned how to manage that groundcover so that it is not destroyed when the time comes to replant.

My latest project is hardwood control, a topic that I've dabbled in all along. We know from the 1830s Land Lottery surveys that these hardwoods have changed the face of Sprewell Bluff; the ratio of pine to hardwood has flipped, as over a century, loggers selectively removed longleaf and fires were suppressed. A task that keeps me as excited as the first day I walked through these woods, is to hack and squirt (applying herbicides to the tree cambium) across hundreds of acres of hardwoods, selectively, leaving a forest like what was documented in the 1830s Land Lottery maps. Within a year of treatment, the rocky ground erupts in big bluestem, little bluestem, switchgrass and wildflowers, and today quail and Bachman's sparrows' songs ring through the now open woods! Some of the neighbors have taken notice: and similar projects such as planting longleaf pine, use of selective herbicides, hack and squirt of hardwoods and of course lots of fire are happening

all over this land without borders. I guess you could say we have a landowner cooperative, with dozens of members now, though we aren't so formal as to call it such a thing, we just love the land, the river, the longleaf. I hope it will continue when I'm gone; I think it will if the right people in DNR get the chance to keep it going.

One last thing remains to keep Sprewell Bluff saved, it needs to be better known, and that's part of why I'm writing this. We are all familiar with the famous longleaf tracts, or at least we think we are: the Greenwood tract, the Wade Tract, Moody Forest, Weymouth Woods, the old growth on Eglin AFB, and Flomaton (Flomaton: now gone forever!). But have you heard of the Nichol's tract of Sprewell Bluff? Have you heard of Camp Thunder, now called Camp Lawhorn, a few miles upriver? Have you heard of Pasley Shoals? These public and private tracts deserve the same reverence that Greenwood or Moody deserves. I hope this landscape in and around Sprewell Bluff WMA will be recognized by the larger world, and receive the equal protection, both formal and informal, that these other great forests now have.

Our president-turned-poet, who thought he was saving a river must have also known that he was saving the beautiful mountains that cradle that river, mountains clad in old longleaf that still hold their vigil, thanks to this man who could see the beauty and was willing to be its champion —

"I have had many people come up to me and confess that they cursed me profoundly when I vetoed the dam. But now they are thankful for my having done it. They are glad that the river was saved.... Lakes and dams are everywhere. But to experience something that is undisturbed and has its natural beauty? You hope and pray that it will be there a thousand years in the future, still just as beautiful and undisturbed."

- Jimmy Carter



Partridge Pea
(Chamaecrista fasciculata)

A native legume that fixes nitrogen for other species in a native plant community. Its seeds provide a winter food source for birds.

 ernstseed.com
sales@ernstseed.com
 800-873-3321





Forestry's impact in Louisiana

- 58,530 jobs in forestry & related industries
- 14 million acres — 50% of land area — of forest land
- 73 million seedlings planted each year
- \$12 billion of economic impact



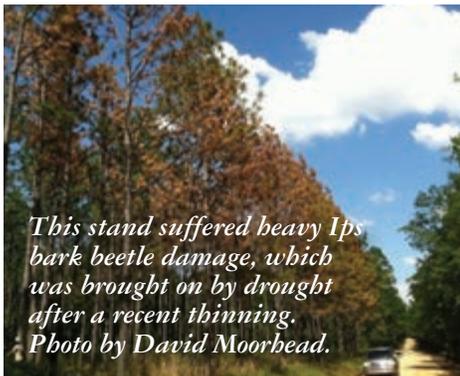
  SUSTAINABLE FORESTRY INITIATIVE

*70 years of minding
the forest for our future*

Redheaded pine sawflies on young longleaf. Photo by Lisa Lord.

By David Coyle, Department of Forestry and Environmental Conservation, Clemson University and Lisa Lord, The Longleaf Alliance

LONGLEAF RESILIENCY: Insects and Diseases



This stand suffered heavy Ips bark beetle damage, which was brought on by drought after a recent thinning. Photo by David Moorhead.



Brown spot needle blight on longleaf pine needles. The fungus appears as a brown spot surrounded by a yellow halo. Photo by David Coyle.

(especially compared to other southern pines) makes it a desirable choice for landowners, land managers, and the forest industry.

INSECT AND DISEASE THREATS TO SOUTHERN PINE TREES

Southern pines face threats from insect pests such as the Nantucket pine tip moth, regeneration weevils, and bark beetles, and diseases such as pitch canker, heterobasidion root rot, brown

spot needle blight, and fusiform rust. When trees become stressed, they are more susceptible to attacks by insects and pathogens. Longleaf pine has traits that help make them more resistant than other southern pines.

Bark Beetles

All southern pines are susceptible to the southern pine beetle, but longleaf pine is considered the least vulnerable of the major timber-producing pine species – which is significant considering the southern pine beetle is the #1 pest of pines in the eastern U.S. Proper stand management has been shown to decrease the likelihood of a southern pine beetle infestation. Southern pine beetle outbreaks tend to begin in stressed stands,

A collaborative network of partners — including federal and state agencies, nongovernmental organizations, private landowners, and other sectors — have joined together to restore the longleaf ecosystem through America's Longleaf Restoration Initiative. The future will likely bring environmental changes, including less predictable weather (e.g., flooding, hurricanes, and drought), wildfires, and insect and disease outbreaks. Longleaf pine (*Pinus palustris*) provides high-quality timber and excellent wildlife habitat, and it is resilient with respect to these growing ecological challenges. While longleaf pine is not immune to these threats, (including insects and disease), its high tolerance against these potential damaging agents

so keeping stands thinned and free of other competition can go a long way in preventing southern pine beetle outbreaks.

Longleaf, like other pines, is susceptible to Ips bark beetles and the black turpentine beetle, but these beetles are only an issue when trees get stressed or wounded. Stress may come from storm damage, drought, or poor management. We may see more stressed trees in the future with increasingly unpredictable precipitation patterns. If so, longleaf is well-positioned as it is more drought-resistant than other pines and has resin characteristics that increase its resistance to bark beetle attacks.

Pine Regeneration Pests

Even when young, longleaf pine is more resilient to pine regeneration pests. Longleaf pine is rarely impacted by the Nantucket pine tip moth, and only occasionally impacted by the pine shoot moth. It is thought the thickness of the longleaf pine shoot is too large for these insects to utilize. The southern pine coneworm occasionally attacks longleaf pine terminal buds. Compared to other southern pines, longleaf pine is less susceptible to regeneration weevils – but damage from the Pales weevil can happen. When it does, the weevils usually attack the longleaf pine seedling just below the soil line, on the upper part of the taproot. Weevils may also chew at the base of the grass stage needles, leaving a “clipped needle” appearance. Pine sawflies, however, can be damaging to longleaf pine. These caterpillar-like insects (they’re actually the young of a stingless wasp) eat the needles and can defoliate a stand during insect outbreaks. They consume the needles back to the stem, leaving little green nubs where needles should be.

Fungal Pests

Fusiform rust, heterobasidion root rot, pitch canker, and brown spot needle blight are all diseases that can impact longleaf pine. Longleaf is less susceptible than other southern pines to fusiform rust, which can cause cankers on the stem branches — cankers, which can lead to stem breakage and tree mortality. Fusiform rust is easily identified in the spring when the bright orange spores are readily visible. Heterobasidion root rot is also uncommon on longleaf pine. This disease leads to a slow decline of the tree, but it is difficult to diagnose because roots must be excavated to find the damage. Longleaf pine is susceptible to pitch canker (as are other southern pines), which can be recognized by the copious amounts of resin which seep from the canker areas. One disease more common on longleaf pine than in other southern pines is brown spot needle blight, which tends to impact trees in the grass or early sapling stage causing premature needle loss. Fortunately, this disease can be easily managed using prescribed fire, as the fire will burn and eliminate the fungal inoculum.

MANAGEMENT RECOMMENDATIONS

Although longleaf pine is resilient, it is still susceptible to insects and diseases from inadequate management practices (or

in some cases, bad luck). When trees become stressed, they are more vulnerable to pests, so proper establishment and stand management is key.

- Choose pest-free nursery stock to avoid introducing problems to the site. Fusiform rust, in particular, can be a problem in some pine nurseries.
- Avoid overstocking to reduce competition and stress, and thin the stand when appropriate.
- Avoid injuring trees during thinning operations: tree injuries are often attractive to bark beetles.
- Use natural regeneration, allowing the forest to maintain its diversity, and with it, its resistance.
- Use prescribed fire, but again, avoid damaging trees. Prescribed fire is one of the best tools available to combat brown spot needle blight, and prescribed fire and thinning are your best tools against southern pine beetle outbreaks.
- Monitor the stand frequently for any signs of stress or insect and disease infestations and take action if necessary.

References

- Boyer, W.D. 1972. Brown-spot resistance in natural stands of longleaf pine seedlings. Res. Note SO-142. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 4 p.
- Clark, K.E., E. Chin, M.N. Peterson, K. Lackstrom, K. Dow, M. Foster, and F. Cabbage. 2018. Evaluating climate change planning for longleaf pine ecosystems in the Southeast United States. *Journal of the Southeastern Association of Fish and Wildlife Agencies* 5:160–168.
- Martinson, S., R.W. Hofstetter, and M.P. Ayres. 2007. Why does longleaf pine have low susceptibility to southern pine beetle? *Canadian Journal of Forest Research* 37:1966–1977.
- McNulty, S.G., J.M. Vose, and W.T. Swank. 1996. Potential climate change effects on loblolly pine productivity and hydrology across the southern United States. *Ambio* 25: 449-453.
- Nowak, J.T., J.R. Meeker, D.R. Coyle, C.A. Steiner, and C. Brownie. 2015. Southern pine beetle infestations in relation to forest stand conditions, previous thinning and prescribed burning: evaluation of the southern pine beetle prevention program. *Journal of Forestry* 113: 454-462.
- Snow, G.A., W.H. Hoffard, C.E. Cordell, and A.G. Kais. 1989. *Pest Management in Longleaf Pine Stands*. P. 128-134 In: *Proceedings of the Symposium on Agriculture Forest Service the Management of Longleaf Pine*. Gen. Tech. Rep. SO-75. New Orleans, LA: U.S. Dept of Agriculture, Forest Service, Southern Forest Experiment Station. 293 p.
- Thistle, H.W., H. Peterson, G. Allwine, B. Lamb, T. Strand, E.H. Holsten, and P. Shea. 2004. Surrogate pheromone plumes in three forest trunk spaces: composite statistics and case studies. *Forest Science* 50: 610–625.

By Bob Fletcher, CEO/Treasurer

LANDOWNER SPOTLIGHT

FIVE GENERATIONS AND A FUTURE FOR THE PASLEY RIVER FARM

Looking upstream on the Flint River, from the entrance overlook at Sprewell Bluff, with Pasley Shoals in the foreground. Photo by Ad Platt.

I recently had the great pleasure of visiting with the Fletchers along with Nathan Klaus and seeing their old-growth montane longleaf on the Pasley River Farm. Their long history of stewardship on this land is an inspirational story also, and so I posed these interview questions to Bob Fletcher, that we might share this story with others. –Ad Platt, The Longleaf Alliance

Please tell me about the history of this land and your family ties.

Our great, great grandfather, William D. Pasley was awarded land on the Flint River in Upson County under the state of Georgia's land lottery in the early 1800s. This land was steep and rocky, but it was located on the Flint River where fishing was as much of a way to feed a family as was farming corn and cotton. This land was also covered in montane longleaf pine spaced as you have read about in history; the old-growth stump evidence is still there. Naturally, fire was a huge part of the landscape, and I heard my parents and grandparents say that a woods fire was no big deal to anyone in those days. No one seemed to get upset when they saw smoke and flames on the mountains in Western Upson County. There was no Georgia Forestry Commission to call in those days; fire was simply something that happened. No one seemed to mind it, and while no one appreciated its impact on the land, they also did not try to deter it.

We are the 5th generation to manage this land. Our great grandfather was born on this farm. However, he moved to town (Thomaston, Georgia) as a young man and opened the C.M. Pasley Livery Stable and later the C.M. Pasley Funeral Home. He continued to operate the Pasley Shoals farm but often had

to supply revenue from his businesses in town to keep up the farm.

Even though there is still evidence of moonshine stills on our land, my mother insisted that our family did not engage in that business. Our grandparents were old-line primitive Baptists, but there are stories of my great grandfather occasionally "dipping in the corn squeezins"!

Located on the Fall Line where the Coastal Plain meets the Piedmont, much of our land is on steep rocky terrain which has protected some of the old growth longleaf from harvest, simply because the giant trees on such terrain were impossible to skid out by the mule teams. Even later, with the rise of mechanical harvesting and log skidders, this terrain continued to protect; there were always more profitable places for loggers to work. And there still are.

What are your objectives as a land owner?

As a family, we grew up seeing longleaf pine trees on our land, and while they were always viewed as "neat trees," initially, they were simply longleaf pine trees. Later as adults, we began to take note of what we saw people doing with their land. As we would ride along the roads of the southeastern United States, we would see clear cuts and replanting of loblolly pine trees. I mistakenly thought that since this was what



Nathan Klaus, with Jim and Bob Fletcher, on an early April visit to explore longleaf on the bluffs at Pasley River Farm. Photo by Ad Platt.

everyone was doing, we should manage our land the same way. We clear cut 150 acres and replanted half in loblolly and half in longleaf. This left a little over 1,000 acres, and our goal was to eventually turn it into a “pine plantation.”

I also began to handle controlled burns with the assistance of the Georgia Forestry Commission. Our land adjoins the Sprewell Bluff WMA, and after doing a few controlled burns, I was approached by Mr. Nathan Klaus of the Georgia Department of Natural Resources. Because of the steepness of the terrain, we discovered that we could work better together, and with Mr. Klaus’ leadership we began to cooperate on how we managed the land.

For us, land management is like going to an art museum. To the untrained eye, it just looks like art, however, when you study the art and discover what the artist was trying to do, it opens an entirely new window into the world. The same is true for management of longleaf pine. Mr. Klaus helped us to see what restoration of the longleaf pine ecosystem means for Central Georgia and what we refer to as the Fall Line of Georgia. We feel that it is a very unique area that is worthy of our restoration efforts.

Because prescribed fire was excluded for such a long time, we are planning to thin about 350 acres down to about 50 BA to re-establish ground cover. Currently, we have hardwood trees on the mountains “thick as hair on a dog’s back.” The only way to open up the understory is to harvest the hardwoods but leave all the longleaf pines. We are doing this with help from the USDA NRCS and the Georgia Department of Natural

Resources. Without these two agencies helping us under our Conservation Stewardship plan, it would be impossible for the local landowner to have much influence in restoration.

Why is involvement important to you?

I believe The Longleaf Alliance is the premier organization to educate private landowners on the benefits of restoring longleaf. Simply by joining the organization and reading the magazine, you can learn so much about this process. We are also members of the Georgia Forestry Association, which advocates in our state for rules and laws that will keep the practice of forestry viable. Because our land is located along the Flint River, we are also members of the Flint River Keepers. The health of the Flint River is paramount to this region of Georgia as well as our neighbors to the south.

As stewards of this place, tell us more about how you use the forest as a teaching site.

We always welcome the use of the land for teaching a better understanding of nature. We allow a professor of biology from Gordon State College to study bats, and we have permitted a biology professor from Columbus State University to study Blue Sided Shiners in Turkey Creek. We also cooperated on a water quality study with the Georgia Department of Natural Resources.

What are your greatest enjoyments?

I think everyone in our family enjoys something different about the land we affectionately call “the river.” Some enjoy deer and turkey hunting, others enjoy getting away from the big city, and my greatest joy is hiking and seeing God’s



Restoring native understory using selective herbicides and fire on Pasley River Farm. Photo by Ad Platt.

handiwork. However, I think most landowners can agree that a connection to the land and the memories formed there are always at the back of your mind, calling you back over and over, reminding you that one of nature's greatest gifts is bringing folks together in the great outdoors.

Do you have any tips for other land owners engaging in restoration?

Team up with others in your Natural Resource Agencies and in The Longleaf Alliance that are passionate about the restoration of longleaf. Read their magazine articles and study what they are doing. Don't be afraid to contact these people and form relationships with them. Not only will they become great advocates for what you are trying to do, but they will become your personal friends. Go into these relationships with trust. These type people have spent much time and effort in educating themselves and understanding what they can offer. I would advise any land owner that restoration is a worthy goal, and it will also greatly enhance the value of your timber and your pleasure in owning land.

Any closing thoughts about involving others in this pursuit?

The Georgia Department of Natural Resources specifically under the leadership of Mr. Nathan Klaus assists many private landowners in Upson County and across Georgia with preparing prescribed fire burn plans. Additionally, they prepare the actual burn unit days or weeks in advance of burn season. The GA DNR burn team also provides leadership and on-scene expertise on ignition day.

I know that a landowner could hire a private forester to handle this, but for us, that would be cost prohibitive. Georgia DNR has also assisted in marking 'leave trees' in our harvest unit, and many of the personnel who do this work are VOLUNTEERS.

As I have talked to the people involved in this work, many are college students wanting experience in land management to pursue higher education. I can't say enough good things about the people I have met who have a heart for restoration of longleaf habitat. This work is arduous (hot, sweaty and dirty), but in the end, I hope these people who spend lifetimes advocating for restoration know how much they are appreciated. I think the public knows very little of the professionalism and commitment that these people make to enhance our landscape in the Southeast. I'm looking at the Spring 2019 Longleaf Leader magazine, and there are three people that I am describing holding drip torches on the front cover. Without leadership and people wanting to engage in restoration of longleaf habitat NONE of this would be possible.

The Pasley River Farm family of Upson County, Georgia wants all the people involved in advocacy for longleaf restoration to know how appreciative and grateful we are for their commitment. When John Muir began the effort to save the California Redwoods from harvest, I would bet that his first effort was to get like-minded people around him to push for such conservation. Without The Longleaf Alliance and its restoration leadership, no individual could make this happen.

By Nicole Adimey, US Fish & Wildlife Service

WEST-CENTRAL GEORGIA LANDOWNER ASSISTANCE PROGRAM



Gopher tortoise. Photo by USFWS.

The American Forest Foundation (AFF) and the U.S. Fish and Wildlife Service (USFWS) have entered into a cooperative agreement to assist landowners in west-central Georgia with habitat improvement projects through restoration and technical assistance. Funding is now available to improve habitat to support federal listing decisions for the gopher tortoise (GT) and other at-risk species populations. The objectives of this new initiative are to enhance occupied and potential habitat for the GT and other at-risk species on private lands, and obtain location data and potential habitat for future populations of GT and other at-risk species on private lands. Participants should:

have property in west-central and southwest Georgia; have GT on their property, or directly adjacent to it; actively be managing their property or at the very least are adjacent to an actively managed property; allow collaborators access to their property to conduct surveys and subsequent monitoring; and have a minimum of 25% non-federal match (cash or in-kind). Although a minimum of 100 acres of contiguous ownership is preferred, it is not required, and no maximum acreage is defined. Further, there is no maximum amount of funding per landowner, and no AGI limit. Anyone achieving the American Tree Farm Standard Eligibility requirements for Certification (up to 20,000 ac) is eligible to participate in this initiative. Funds can support one prescribed burn; however, landowners must be willing and able to actively manage and maintain the subject property with a minimum of three prescribed burns (fuel-load permitting) within a ten-year period. Additional activities covered in this initiative can include native warm season grass and pine establishment (longleaf only) and other habitat improvement practices, as needed. Partners for this initiative include: AFF, USFWS, The Longleaf Alliance, Georgia Department of Natural Resources, Georgia Forestry Commission, The Nature Conservancy, Chattahoochee Fall-Line Conservation Partnership, Tall Timbers Research Station & Land Conservancy, The Jones Center at Ichauway, and Fort Benning. For more information, contact Jim Bates (jim_bates@fws.gov, 706 544-6428).



ALIGN

MINERAL MANAGEMENT

a subsidiary of Heard, McElroy & Vestal, LLC

info@alignllc.com | 318.226.7125 | 333 Texas Street, Suite 1525 | Shreveport, LA 71101

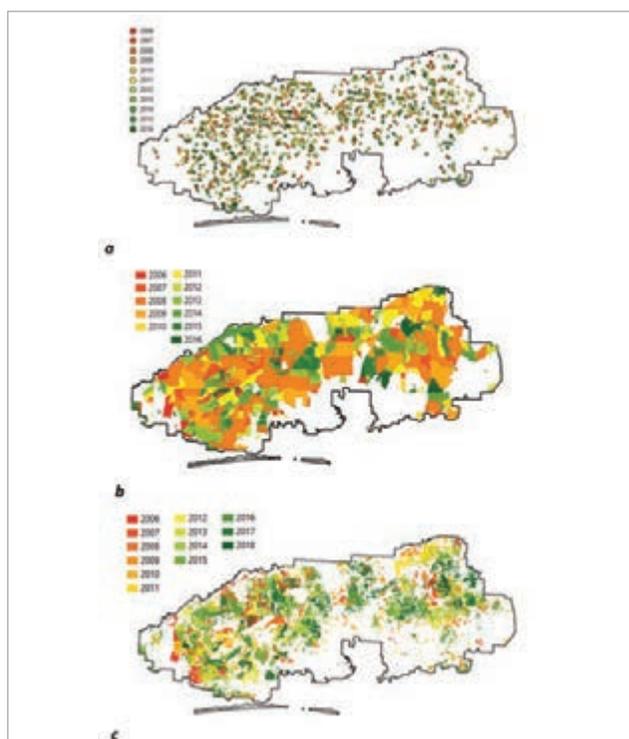
By Casey Teske and Joe Noble, Tall Timbers Research Station & Land Conservancy

USING LANDSAT BURNED AREA PRODUCTS TO MAP FIRES ACROSS FLORIDA

Tall Timbers staff recently completed a collaborative project that mapped the footprint of fire across the state of Florida.

Florida leads the nation in prescribed burning accomplishments with between 1-2 million acres of prescribed fire approved annually (approximately 10% of total fire area burned nationally). This is especially impressive as nearly 70% of the state is in private ownership, and accounts for many of these fires. Florida has had a method for tracking the permitting of fires for over a decade. The Florida Forest Service requires prescribed burners to submit a request to burn to an Open Burn Authorization (OBA) system. Approved burns are tracked, including information such as size, date, time, and purpose. However, the fire locations are recorded as points, and more than one 'burn unit' can be associated with a single OBA point. This can be an issue for conservation and management prioritization purposes, where actual spatial area information about fires may be required.

The goal of this project was to utilize satellite-based data products to derive the spatial extents (e.g., boundaries) of burned areas in Florida in order to show the extent of fires across the state. We used the USGS LANDSAT Burned Area (version 2; BAv2) products to map



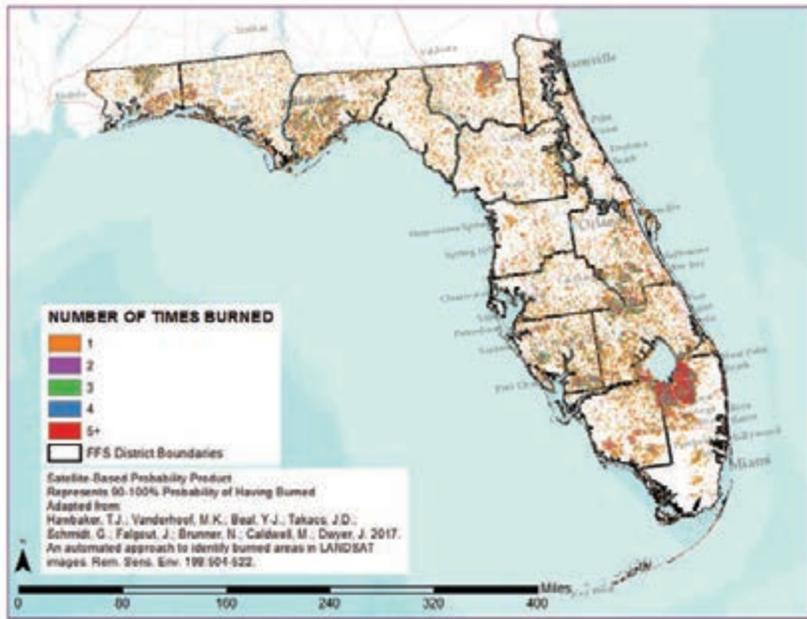
Maps using different data sources to show “year last burned” on Eglin Air Force Base. FFS OBA data for 2006-2016 depict the amount of burning, but not the location (a); landowner provided fire history shows units where fire was applied and when (b); BAv2-derived fire extents show where and when a fire was detected, including the mosaic within a burn unit (c).

burned areas for the period 2006 to 2018. Datasets provided by public and private landowners around the state were used to corroborate the products and improve upon them; meetings showing the products to land managers were very useful – land managers provided suggestions on where fires were being mapped accurately as well as when and where there were challenges.

We mapped fires greater than 2.5-acres across the state. You can see how the different methods of displaying fire history data vary and the utility associated with each method. Perhaps the biggest benefit of this process is that fire history metrics were calculated for all areas in the state, no matter the administrative/ownership responsibility. These metrics include season of burn, number of times burned, longest fire-free period, year last burned, and time since previous burn. These types of metrics allow for conservation and management prioritization activities – some of which are heavily influenced by an area’s fire history – to be evaluated in a robust manner.

We extend our thanks to the Florida Fish and Wildlife Conservation Commission and the Peninsular Florida Landscape Conservation Cooperative for funding, the US Geological Survey for data acquisition and processing assistance, and the

many public and private landowners that provided burn history data for use in validating these products.



Casey Teske (cteske@talltimbers.org) or Joe Noble (jnoble@talltimbers.org) for more information about the fire mapping outputs. More information about the USGS Burned Area products can be found on the USGS website: www.usgs.gov/land-resources/nli/landsat/landsat-burned-area.

The map depicts the fire history of Florida -- showing the number of times burned between 2006 to 2018 -- effectively capturing fires as small as 2.5 acres. This is a vast improvement over previous fire mapping efforts and offers land managers a new tool to better understand landscape conditions and more effectively target management actions."

If you would like information on how to work with Tall Timbers for your area of interest or have suggestions for other fire history metrics that would be of interest, please let us know. We want our products to be useful in the field! You can contact

Photo credit: Wilmington and Beaches CVB

SAVE THE DATE FOR THE LONGLEAF ALLIANCE'S

13th BIENNIAL LONGLEAF CONFERENCE

OCTOBER 20-23,
2020

WILMINGTON,
NORTH CAROLINA

By Gary Burger, South Carolina Department of Natural Resources

News from the Longleaf Partnership Council

“YOU GOTTA KNOW WHAT YOU’RE DEALING WITH”

When I say, “Good site preparation is the key to establishing a stand of longleaf pine,” that is not news to those that regularly work in the longleaf restoration field. But it is essential information to many landowners who are new to the game or are only in the position to be tackling a reforestation effort every now and then. I think of how many different ways that I’ve done site prep, and it quickly becomes apparent, at least to me, that the knowledge of all of the various methods and when and how they are properly applied is a pretty complex matter. Probably the most important and widely used method nowadays is chemical site prep, and the array of chemicals that are available and what they do (and don’t do) is a profession in and of itself. Not to mention the array of methods of applying those chemicals; by air (generally helicopter), by skidder, by tractor, and by hand (broadcast, selectively, spotgun). And then there’s prescribed burning, a wonderful tool, but again a rather complex matter when you get into the details of it, and something that you can devote a whole career to. And then to round it all out, there are quite a few mechanical methods of site prep. Foresters aren’t as dependent on mechanical means as they used to be, primarily because it’s more expensive, but there are a lot of methods that are commonly used to establish longleaf: fuel chipping, mulching/masticating, drum chopping, v-blading, scalping, ripping, shearing, raking, and piling. I’ve used all of the heretofore mentioned methods, some in combinations, within a 50-mile radius of my home outside of Aiken, South Carolina. Given the multitude of longleaf ecosystems across the range, and wide variety of site types, I hope you can imagine that this listing would only grow larger if we really got comprehensive about it. I’ve even planted longleaf on old beds when trying to restore longleaf on a wet site: why not use them to your advantage?

My point in all of this is that the topic of site preparation is rather broad, and the proper approach to any given site is highly dependent on the site itself. Again, not a news flash to many, but the past land use of a site, how it was harvested (or not), how long it has laid out, and what currently occupies the site are all major considerations when mixing and matching from the big list of site prep options. It is a complex subject and not one that we should expect an average landowner to be highly versed. Not to say that we shouldn’t be concerned about educating folks on the pros and cons of “this method versus that,” but when it comes right down to it, the site prep prescription should be decided by someone who knows what they’re dealing with. There are a lot



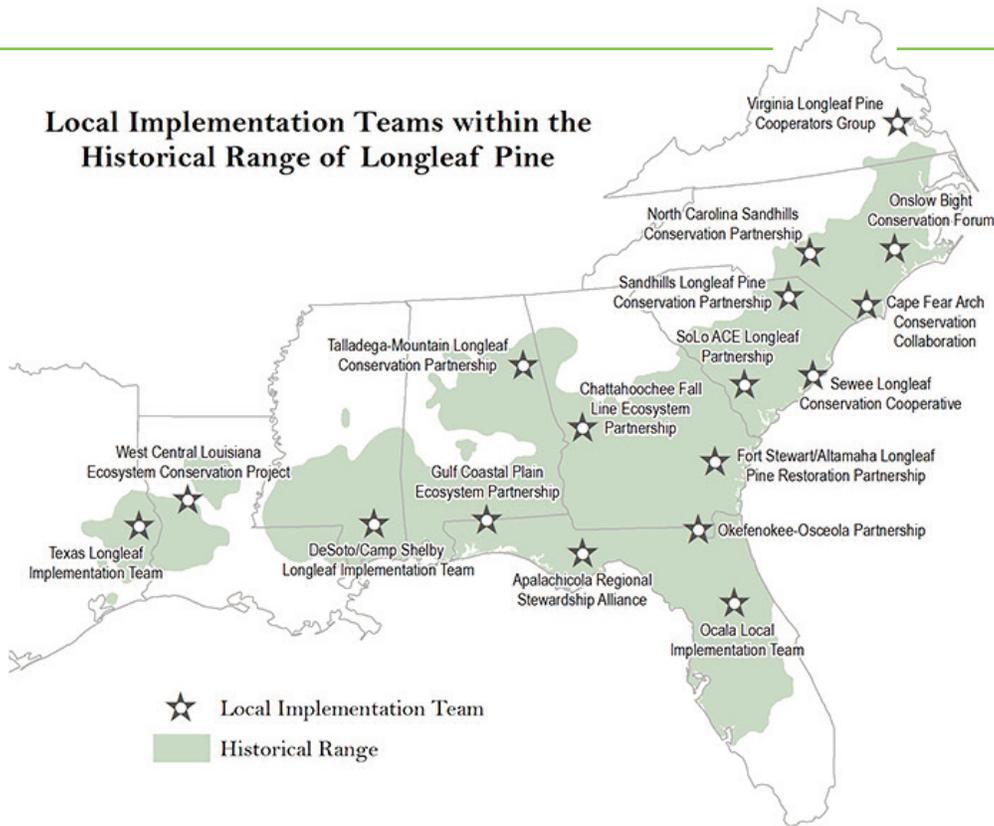
Hamilton Ridge WMA, Hampton County, SC – Native groundcover (and longleaf) restored on an industrial loblolly plantation site via chemical site preparation and burning. Photo by Gary Burger.

of things to think about, and while getting a good stand of longleaf growing is almost always the primary objective, it is not the only consideration.

We at the Longleaf Partnership Council, a group of longleaf “experts,” debate the issues surrounding site prep from time to time, primarily when we consider the impacts (positive and negative) that our site preparation methods have on the maintenance and/or restoration of good native groundcover. This certainly is the proper forum for these discussions, and they are important to have. For many of us, longleaf restoration is not only about the tree itself, but the whole ecosystem. I am happy to report that the Understory and Native Groundcover Working Group of the Longleaf Partnership Council is focused on the importance of the groundcover aspect of longleaf ecosystem restoration, and how we educate landowners not only about its importance but also of the finer details of how good groundcover can be maintained and/or restored.

Many of our efforts at the Longleaf Partnership Council and in the longleaf restoration field, in general, come back around to Outreach and Education of landowners and practitioners. The Longleaf Alliance does a wonderful job of this through their Longleaf Academy series. The long list of Longleaf Partners across the range are also doing a great job, with landowner field days, workshops, and one-on-one interactions (my favorite), and all of these efforts need to continue robustly for longleaf restoration to remain relevant into the future. It is important as professionals though that we recognize that not all landowners have the same goals and objectives for their land. We can, and should, educate about and even advocate for proper site prep methods, but we should not take a stance of dictating what a landowner should do with their land, or how a professional should help a landowner achieve their goals. Longleaf restoration means different things to different people, and we should be willing to embrace all of them. Whether their goals are birds and butterflies or pine straw and dollars, we are all longleaf enthusiasts, and we are all important to the long-term success of longleaf pine.

Local Implementation Teams within the Historical Range of Longleaf Pine



LIT SPOTLIGHT

By LuAnn Craighton, LIT Coordinator, The Nature Conservancy

CHATTAHOOCHEE FALL LINE CONSERVATION PARTNERSHIP

The power of partnership is evident as collaborators across the Chattahoochee Fall Line of west Georgia and east Alabama work together to produce lasting conservation outcomes focused on the restoration and management of the longleaf pine ecosystem.

The Chattahoochee Fall Line Conservation Partnership (CFLCP) was organized in 2011 as a Local Implementation Team (LIT). The Partnership works in three major priority areas across a 4-million-acre region where the mighty Chattahoochee River intersects the geologic Fall Line. One of our priority areas includes a conservation corridor tracking north from the Fall Line up to Pine Mountain Ridge, the southern-most mountain in Georgia. Pine Mountain boasts stands of remnant, montane longleaf and provides amazing opportunities for current and future restoration activities.

The CFLCP is guided by a nine-member Steering Committee including representatives from Georgia-Alabama Land Trust, Georgia Department of Natural Resources, Georgia Forestry Commission, The Longleaf Alliance, Natural Resources Conservation Service, The Jones Center at Ichauway, The Nature Conservancy, U.S. Army, and U.S. Fish and Wildlife Service. Over the years, dozens of additional stakeholders have participated in CFLCP projects providing expertise on topics

ranging from drought resilience research and ecological monitoring to youth-focused tree planting projects and targeted landowner outreach.

Fort Benning, a U.S. Army Installation, encompasses 182,000 acres and is positioned in the center of our priority areas straddling the Georgia – Alabama state line. The Installation serves as a critically important federal anchor property for conservation activities region-wide. Home to the Maneuver Center of Excellence with 83 live-fire ranges and serving over 100,000 personnel daily, Fort Benning demonstrates the compatibility of the military Mission and natural resources conservation. Over 30,000 acres of longleaf have been planted on Fort Benning over the past 20 years, and they burn over 30,000 acres annually with prescribed fire. A frequent fire history across the Installation dating back to 1918 has created ideal red-cockaded woodpecker habitat, and Fort Benning is very close to being formally recognized as a recovery population.

Fort Benning has an active Army Compatible Use Buffer (ACUB) Program, which like the Pine Mountain Region, forms a priority area for CFLCP activities. The ACUB Program formalizes a partnership between the Army and an outside organization to increase Mission flexibility by reducing threats



Image 1.



Image 2.



Image 3.



Image 4.



Image 5.



Image 6.

Image 1. Well-managed longleaf pine forests thrive on Fort Benning near Columbus , Georgia. Photo by Michele Elmore. Image 2. Healthy upland forests protected the water quality of Fall Line streams. Photo by Brant Slay. Image 3. A goal of Georgia’s Sentinel Landscape Program is to protect additional gopher tortoise populations. Photo by RT Lumpkin. Image 4. Diverse outreach programs including hands-on “Learn & Burn Workshops” train private landowners to use prescribed fire effectively. Photo by LuAnn Craighton. Image 5. The new Chattahoochee Fall Line Wildlife Management Area (over 18,000 acres) offers public recreation & longleaf ecosystem restoration opportunities while providing a compatible use buffer to military training on Fort Benning. Photo by LuAnn Craighton. Image 6. Longleaf 101 Academy hosted by Tuskegee National Forest and Tuskegee University. Photo by LuAnn Craighton.

from incompatible land use off-Post and environmental compliance on-Post. The Georgia Chapter of The Nature Conservancy is Fort Benning’s primary ACUB partner. Since 2007, the Conservancy and CFLCP Partners have protected 35,000 acres along the Fall Line from incompatible development. In the future, through a combination of conservation easements and conservation land acquisitions from willing sellers, the Conservancy and its Partners, such as the Georgia Department of Natural Resources, Georgia-Alabama Land Trust and Natural Resources Conservation Service, seek to protect, restore and manage up to 75,000 acres around Fort Benning specifically for conservation purposes. The ACUB Program provides the opportunity to restore landscape-scale conservation corridors of longleaf pine along the Installation’s boundaries. Lands near Fort Benning can provide essential habitat for sustaining the endangered red-cockaded woodpecker, the gopher tortoise, and several rare plants including the relict trillium and Georgia rockcress.

The State of Georgia has a long history of supporting the military and recently received Sentinel Landscape designation – one of only seven such landscapes across the United States. A

portion of Georgia’s Sentinel Landscape is within the Chattahoochee Fall Line region near Fort Benning. Within Sentinel Landscapes, partners including the U.S. Departments of Agriculture, Defense and Interior seek to leverage common interests and collectively promote compatible development, preserve working lands, protect critical natural resources and enhance the military Mission. Partners within the Georgia Sentinel Landscape aim to protect additional gopher tortoise populations to ensure the viability of the species and preclude them from being listed under the Endangered Species Act.

One especially exciting project, strongly supported by the ACUB program, was the opening of the 11,000-acre Chattahoochee Fall Line Wildlife Management Area (CFL WMA) near Fort Benning and Columbus, Georgia in 2014. In 2018, this WMA expanded adding an additional 7,000+ acres. The CFL WMA is co-owned and co-managed by the Georgia Department of Natural Resources and The Nature Conservancy. It offers tremendous opportunities for longleaf ecosystem restoration and diverse outdoor recreation options for the public to enjoy.

Tuskegee National Forest in Alabama is also a federal anchor property integral to longleaf restoration in the CFLCP region and forms a third priority area for LIT activities. Partners are working together to offer a variety of outreach programs in the area supporting restoration efforts on and near the National Forest.

In addition to working on public lands, the CFLCP prioritizes working with individual landowners, seeking to accelerate conservation outcomes on private lands. A broad-based private landowner outreach program is underway providing information and training coupled with technical and financial assistance. Two initiatives have recently launched designed to assist private landowners. The West Central Georgia Forest Landowner Association meets periodically with a mission of: Providing a platform to gather, share, educate and implement sound forest management practices while creating a sustainable forest stewardship culture among landowners that encourages working forests, beneficial wildlife habitats, and improved wetlands. In addition, the Chattahoochee Fall Line Prescribed Fire Cooperative (Co-op), led by the Georgia Forestry Commission with support from multiple partners, was developed to sustain and increase the use of prescribed burning on private lands. The Co-op brings hands-on training, expanded pathways for financial assistance, and an enhanced capacity to assist with burning to the region. This burn season the Co-op assembled a “burn trailer” (cache of prescribed burn equipment) that private landowners

can rent enabling them to burn in a safer, more professional manner.

Many of the stewardship activities and private landowner outreach programs conducted by the CFLCP are made possible by Longleaf Stewardship Funds made available through National Fish and Wildlife Foundation grants. Strong partner collaboration allows for the strategic deployment of these funds to achieve significant conservation outcomes along the Fall Line. During the recent 16th Annual Stewardship Partners Meeting in Columbus, Georgia we were pleased to host our grantors on the landscape, highlight the progress of several current conservation projects, and share the vision for the future of this landscape.

When the CFLCP formed, the Partners agreed their collective vision was: “A sustainable landscape of native wildlife and plant communities including: healthy longleaf pine forests, streams, wetlands, and working lands. Such a landscape supports forestry, farming, hunting, outdoor recreation and tourism while providing a buffer of conservation lands around military training activities on Fort Benning.”

Today, the Partners continue to pursue this vision — working together to conserve the Fall Line’s natural heritage and quality of life.

To stay current on CFLCP activities, follow the Chattahoochee Fall Line Conservation Partnership and the West Central Georgia Forest Landowner Association on Facebook!

Southern Gates
COLLECTION

Proud to Support
the Work of the
Longleaf Alliance

Corporate
Gift
Opportunities
Available

Inspired by historic wrought iron gates throughout the South, this fine collection of sterling silver jewelry celebrates special times both past and present.

Find a store near you at
www.southerngatesjewelry.com/pine

**LEARN MORE
ABOUT THE GROWTH
OF QUAIL FOREVER
IN THE SOUTHEAST.**

www.quailforever.org facebook.com/quailforever

**IN THE PAST YEAR, WE'VE ADDED 10 CHAPTERS
AND 15 PRIVATE LANDS BIOLOGISTS TO ASSIST WITH
HABITAT IMPROVEMENTS IN THE SOUTHEAST.**

Contact Tim Caughran, Director of Field Operations
tcaughran@quailforever.org, to help make a difference.

ARSA's Good News/Bad News 2019

By Brian Pelc, *The Nature Conservancy*



ARSA Partners tour hurricane damaged flatwoods at Tyndall Air Force Base for the ARSA LIT Spring 2019 Membership Meeting. Photo by B. Pelc.

lighter side, a comparison 4-2-1-2 site at Flint Rock WMA (Jefferson County, Florida) was not impacted by the storm and got its first growing season burn since reforestation in 2017.

The fallout from October 2018's Hurricane Michael is still being felt by private and public conservation land managers across the ARSA region. Most of the LIT members attempted to salvage timber, clear sites for reforestation and reduce fuel loads as quickly as possible, but according to those reporting at the Spring 2019 ARSA Membership meeting, shifting markets, contractor availability and interest, and rotting fiber made the process unpredictable and frustrating. Partners met at Tyndall Air Force Base (Bay County, Florida) in late April to engage with each other and tour the base, one of the most devastated locations within the LIT. The Department of Defense has pledged generous support for the recovery, and staff are hard at work getting the site cleaned up and reforested despite many obstacles. One casualty of the storm was the highly anticipated results of a 10-year 4-2-1-2 thinning methodology to convert off-site slash plantations to longleaf flatwoods. Those sites are now more equivalent to a clear cut, but some groundcover benefits were gleaned before the storm, helping to maintain fine fuels and effective fire. On the

Landowners Gather on the Chattahoochee Fall Line

By LuAnn Craighton, *The Nature Conservancy*



The Georgia Forestry Commission's Air Operations Unit demonstrates their fire suppression capabilities. Photo by Randy Tate.

op highlighted the importance of prescribed fire in longleaf and discussed local resources available to landowners to assist in getting burning done. Next, the group visited an area of abundant gopher tortoise burrows and learned more from the Georgia Department of Natural Resources about forestry management in tortoise habitat. The afternoon concluded with a demonstration by the Georgia Forestry Commission's Air Operations Unit showcasing their fire suppression equipment and capabilities. The day provided an exciting opportunity for landowners to share information and discuss diverse land management strategies appropriate across our region.

We can all learn from one another — and with that goal in mind, nearly 90 landowners, foresters, agency and association personnel recently gathered for the “Fall Line Forestry Workshop” in Junction City, Georgia. Landowners and Tree Farmers, Mike and Debbie Buckner graciously hosted the event on their property. A planning committee led by the Talbot County Chamber of Commerce, Georgia Forestry Commission, Chattahoochee Fall Line Conservation Partnership, and West Central Georgia Forest Landowner Association collaborated to provide a diverse and engaging agenda. Participants enjoyed hearing forestry updates from the recent legislative session from Representative Debbie Buckner as well as the latest news from the Georgia Forestry Association and American Tree Farm System. The National Wild Turkey Federation and ArborGen offered participants practical wildlife and forestry advice. During the afternoon field session, the group visited a stand of recently burned longleaf pine. The Longleaf Alliance and Prescribed Fire Co-

Tim Beaty, Chief of Fish & Wildlife Branch at Fort Stewart, Georgia to Retire

By Randy Tate, *The Longleaf Alliance*



Tim Beaty, leading one of many field trips over the years at Fort Stewart. Photo by Randy Tate.

The anchor site for the Fort Stewart/Altamaha Significant Geographic Area, Fort Stewart, is extremely important to longleaf and the many endangered species that call longleaf forests home. For instance, having reached their red-cockaded woodpecker (RCW) recovery goal of 350 groups in 2012, Fort Stewart now has over 500 groups of woodpeckers. Over the last 35 years of managing for RCWs, Tim Beaty has been closely involved in all aspects of this important and successful work. Tim, who has been Chief of the Army installation's Wildlife Branch since 2005, is retiring on Aug. 31st of this year.

Tim started in Sept. 1977 as a forestry tech marking timber. After a couple of years, he became a full-time wildlife tech focused on RCW management. Tim says he "lived" with RCWs for five years working early mornings. That allowed him time to finish his degree in Biology at Georgia Southern University during the day. Tim also attended Abraham Baldwin Agricultural College prior to that. Tim became the lead endangered species biologist in the early 80s, and he became the Chief of Wildlife in 2005.

As Tim looks back, he says, "I remember most fondly all the great people I've been able to work with." Tim received The Longleaf Alliance's True Longleaf Champion Award at the 2016 Biennial Conference in Savannah, Georgia. Everyone in the Fort Stewart/Altamaha LIT wishes Tim well and hopes he'll not be a stranger. His expertise and experience will always be appreciated.

Alabama Forestry Commission New GCPEP Partner

By Vernon Compton, *The Longleaf Alliance*



Gopher Tortoise Burrow Cam on Geneva State Forest. Photo by the Alabama Forestry Commission.

The Gulf Coastal Plain Ecosystem Partnership (GCPEP) is very pleased to welcome the Alabama Forestry Commission as a new partner, joining 15 other public and private landowners in south Alabama and northwest Florida. Geneva State Forest is in the GCPEP landscape and is the largest state forest in Alabama, encompassing 7,120 acres of mainly longleaf pine. Management activities by the Commission have included thinnings, prescribed fires, and final shelterwood harvests to naturally regenerate longleaf. Such management has been very beneficial to a variety of game and non-game species, including the gopher tortoise.

Geneva State Forest has a population of approximately 400 gopher tortoises, making it one of the densest populations on state or federal land in Alabama. Gopher tortoises feed on grasses and other plant materials near the ground, so the fire managed native longleaf forests makes an outstanding home for the species and the numerous other wildlife that depend upon their burrows. The Alabama Forestry Commission, the Alabama Department of Conservation and Natural Resources (Wildlife and Freshwater Fisheries Division), and The Longleaf Alliance have partnered on establishing tortoise enclosures, allowing for rescued gopher tortoises to safely become established on the Geneva. Translocated tortoises have a much higher survival rate when placed in enclosures for a period of 6 months to 1 year.

GCPEP partners look forward to increasing collaboration with the Alabama Forestry Commission to further restoration and management efforts associated with the longleaf ecosystem.

Old Growth Longleaf Restoration Underway Near Fayetteville, NC

By Jeff Marcus, *The Nature Conservancy*



Fayetteville, North Carolina, gateway to Fort Bragg, has seen a significant amount of development in the past few centuries. Bearing witness to it all has been a stand of longleaf which were already a decade out of the grass stage when Fayetteville was established in 1783. The 300-acre Bonnie Doone tract is owned by the Fayetteville Public Works Commission (FPWC) who has teamed up with The Nature Conservancy, US Fish and Wildlife Service, The Longleaf Alliance, Jay Carter and Associates, and Fort Bragg to restore the ancient grove of trees.

The stand had developed a midstory and deep accumulation of duff due to fire suppression. With funding from National Fish and Wildlife Foundation and FPWC, a contractor cut and mulched the midstory, setting the stage for the careful re-introduction of fire. The resulting habitat will benefit foraging red-cockaded woodpeckers on adjacent Fort Bragg and may lead to the recolonization of the RCW cavity trees. Habitat enhancement will also benefit ten rare plant species and should improve water quality in the adjacent reservoir that supplies drinking water to the city.

Bonnie Doone, post-chipping. Photo by Wendy Dunaway.

Ocala Local Implementation Team Update

By Ivor Kincaide, *Alachua Conservation Trust*



On May 7th and 8th, Alachua Conservation Trust and the North Florida Prescribed Burn Association hosted a “Learn to Burn Workshop” structured for private landowners burning in Florida. The workshop was held at a central location in the Ocala LIT, and 17 private landowners from across the LIT worked in the classroom and in the field with prescribed fire practitioners from multiple state agencies to develop burn prescriptions for actual burn units and successfully burned them the following day.

On the ground, the Prescribed Burn Association completed 14 burns on over 500 acres with a total of 28 members participating. Meanwhile, Wildland Restoration International assisted with nine controlled burns totaling 15,230 acres on public and private properties, removed 32.1 acres of encroaching hardwoods, and prepped 67.5 acres of firelines.

Workshop participants split into four groups, toured their zone with instructors, and then worked together to write a prescription. Photo by Ivor Kincaide.

Okefenokee — Osceola Longleaf Implementation Team Update

By Alison McGee, *The Nature Conservancy*



Prescribed fire at Camp Blanding, Florida. Photo by Alan Hallman.

The Nature Conservancy (TNC) hired a new Okefenokee/Osceola Longleaf Implementation Team (O2LIT) coordinator this summer. Rebecca Shelton is a University of Florida graduate, from the School of Forest Resources and Conservation, with a degree in Natural Resource Conservation. She brings extensive experience in forestry and natural resource management as a landscape scale conservation planner.

The O2LIT had a productive spring full of prescribed burning, longleaf plantings, and Longleaf Academies with The Longleaf Alliance (LLA). On April 16th and 17th, TNC hosted The Longleaf Alliance's Herbicides & Longleaf 201 course. This provided the opportunity to connect with 28 participants, including private landowners, land managers, contractors, and educators with the potential to influence restoration on over 51,650 acres of private land and assistance on 313,600 acres of managed lands. Upcoming restoration projects include site preparation and hand planting for the 2019-2020 fall-spring season on approximately 519 acres within the Okefenokee side of the LIT boundary.

Fanning the Flame: Sewee Fire Festival

By Patrick Ma, *The Nature Conservancy of South Carolina*



Prescribed fire demonstration at Sewee Fire Festival. Photo by Lisa Lord.

The Sewee Longleaf Conservation Cooperative (SLCC) hosted its annual Sewee Fire Festival in Awendaw, South Carolina in late March. With over 1100 present, 2019 was the highest attended festival in SLCC history, a contrast to just 187 attendees in 2018 and 150 attendees in 2017. The festival drew a wide variety of community perspectives and levels of awareness of prescribed fire and its uses. SLCC partners provided fun educational activities and materials and facilitated discussion with attendees — both young and old. Key changes attributed to this year's success include: moving the event to a community hub, increasing social media advertising presence, and adding more interactive educational programs to the festival's programming. Rounding out the day were raptor demonstrations from the Avian Conservation Center & Center for Birds of Prey, reptile programs from both the South Carolina Aquarium and the Edisto Island Serpenterium, as

well as two demonstration prescribed fires.

The Sewee Fire Festival's size and notoriety is on an upward trajectory, with the size and impact of the Cape Fear Arch's Fire in the Pines festival in mind. The growing pains of scaling up to a festival of Wilmington's size provides ample learning opportunities in logistics, planning, and operations for continued outreach success.

SLPCP Works with Conservation District to Recognize “Green Team” Students

By Susan Griggs, Natural Resources Conservation Service



The “Green Team” of Ruby Elementary School. Photo by ©2019 Susan Griggs.

The South Carolina Sandhills Longleaf Pine Conservation Partnership (SLPCP), in conjunction with the Chesterfield Soil and Water Conservation District (SWCD) recently presented Ruby Elementary School (RES) fifth graders with custom made “Green Team” t-shirts in recognition of their hard work.

The students are part of the “Green Team” spearheading a school-wide recycling effort led by fifth-grade teacher Natalie Douglas.

“Our fifth graders are the real workers on this project,” said Douglas. “To date, we’ve collected nearly 4,000 pounds of recyclables just from our small school (they don’t collect from home or businesses), which is pretty impressive for our size.”

As one student explained their roles, “Each week, we collect and weigh all the recyclables, and post our progress on a school bulletin board. It’s cool to see other classes checking our totals!”

SLPCP Coordinator Charles Babb talked with the SWCD Board to propose rewarding the student’s efforts in the form of custom shirts which show the front of the school and the words “Green Team” and “RES reduces, reuses and recycles.”

“Being able to educate and encourage students about our natural resources, and watch them get excited is a win-win situation for everyone,” said Babb. “We use that as an opportunity to talk to them about other ways to improve our natural resources- it’s an easy transition into topics like longleaf pine ecosystem restoration. We are building on our “generational education” idea where we must reach the second and third generation landowners if we expect to restore longleaf back to its glory.”

At Christmas, RES students received a refillable water bottle. Over the holiday break, a water bottle “refill” station was installed which tracks the number of water bottles saved by “refilling” at the fountain. As of May 15, 2019, students have saved over 1,000 bottles from the landfill.

South Lowcountry – ACE Basin (SoLoACE) Longleaf Partnership Update

By Bobby Franklin and Lisa Lord, The Longleaf Alliance



One-year-old headstarted gopher tortoise ready for release. Photo by Lisa Lord.

The Longleaf Alliance and the SoLoACE Partnership continue to work on several longleaf species recovery programs. As part of an ongoing effort to restore red-cockaded woodpecker populations on private lands, seven recruitment clusters were installed in late winter on two private properties to provide habitat for woodpeckers dispersing from nearby federal and state populations. LLA is also partnering with the Savannah River Ecology Lab (SREL) to support and augment gopher tortoise populations on two properties in South Carolina by “head-starting” gopher tortoises. The eggs are collected, hatchlings are reared for one year and then released. Fifty-nine tortoises will be released this fall. Also, the Partnership began a new gopher frog initiative with SREL to learn more about the distribution of gopher frogs, a candidate for federal listing, and their populations in the SoLoACE through various sampling techniques, including collecting and analyzing eDNA, and working with

landowners to improve both their wetland and upland habitat.

Spring found the partnership active in outreach. Two Lowcountry Master Naturalist classes totaling 60 laypeople were exposed to longleaf ecology. Thirty landowners attended a bobwhite quail field day in McCormick County, one of a series of three that were held April through June. Thirty landowners learned about the heritage of naval stores production at the Salkehatchie Forestry Association’s April meeting. In addition, 37 landowners participated in a Tree Farm tour on the Hampton County Property of Mac Rhodes to see longleaf pine restoration efforts.

Dr. David Coyle, with Clemson University Extension, and Lisa Lord with The Longleaf Alliance recently completed a new publication on behalf of the Longleaf Partnership Council focused on the resiliency of longleaf pine to insects and diseases. This publication is available on the LLA and other partner websites. Thanks to Carol Denhof for the design and layout and also to International Paper, USFS, and the USDA through the National Fish and Wildlife Foundation for funding this important landowner outreach publication.

Texas Longleaf Implementation Team

By Kent Evans, Coordinator



Ragan Bounds, HFM Senior Forester, John Matel, Texas A&M Forest Service District forester, and Bailee Rose. Photo by Kent Evans.

I joined HFM Senior Forester, Ragan Bounds, on 400+ acres of new longleaf projects and got to enjoy some of their long-term conservation sites as well. One special stand, Woodpecker Hill, located 80 miles inland from the Gulf Coast, was ravaged in 2005 by Hurricane Rita and again in 2008 by Hurricane Ike with 140 mph winds. Here, Ragan carefully navigated the stewardship challenges of losing 100-year-old trees, natural regeneration, prescribed burning and thinning for ideal stand recovery. Ragan is part of an HFM effort to nurture a pilot planting of the federally endangered Texas Trailing Phlox, which is coordinated closely with the Texas Parks and Wildlife Department, US Fish and Wildlife Service, and The Nature Conservancy.

Timberland ownership in southeast Texas has changed drastically in the past 50 years. The area was once dominated by large diversified wood products companies. Now, over 70% of the lands historically covered with longleaf pine are owned by institutions such as Timber Investment Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs) which focus on short rotation loblolly management. Through sustainable forest management, some forest landowners and companies are departing from the common loblolly scheme to do longer rotations or to diversify with longleaf. The Texas Longleaf Team has worked with Campbell-Global lands (now TexMark Timber Treasury) and Resource Management Service as they convert some selected stands to longleaf and steward special places. The TLIT most recently started a collaboration with Hancock Forest Management (HFM), one of the largest TIMOs in the south. HFM has identified marginal and underperforming loblolly stands, well suited for longleaf restoration. Recently,

Learn and Burn Field Day Held in Beauregard Parish, Louisiana

By Chris Rice, The Nature Conservancy



WLEP Learn and Burn Workshop. Photo by Chris Rice, TNC.

Agriculture and Forestry (LDAF). The attendees participated in all aspects of the burn implementation, including burning with a drip torch and receiving hands-on experience with the fire equipment.

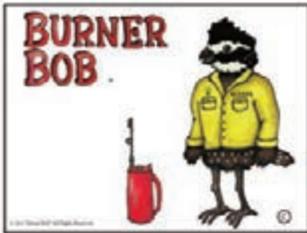
Several attendees expressed interest in continuing their prescribed burn education by signing up for an upcoming burn certification course and were happy to learn about cost-share programs that can assist with the financial aspects of burning. Additionally, many participants showed interest in forming what could become Louisiana's first prescribed burn association.

The West-Central Louisiana Ecosystem Partnership (WLEP) held a February "Learn and Burn" field day in Beauregard Parish that was funded by the National Fish and Wildlife Foundation (NFWF) and the Southeast Regional Partnership for Planning and Sustainability (SERPPAS) to the North Carolina State Extension. This was the second "Learn and Burn" held in west-central Louisiana in the last two years. Forty-two participants including 31 landowners spent the day enjoying presentations and expert training about prescribed fire implementation. The classroom training included burn objectives, planning, preparation, techniques, smoke management, Louisiana burn laws, and various cost-share programs.

Due to inclement weather, the burn implementation field exercises were rescheduled for March. Fifteen participants including ten landowners initiated burns on two separate stands led by the Louisiana Department of

WHILE YOU'RE IN THE GRASS STAGE

By Anne Rilling, *The Longleaf Alliance*



The IDEAL forest has an abundance of grasses and other seed-producing plants. These plants are good for food, but also encourage insects to visit the area. One of Bob's friends is Tom the Turkey. They have fun "bugging," looking for insects to eat; Tom goes after the larger insects, and Bob eats the smaller ones.

Wild turkeys are large (8-30 pounds) birds with iridescent body feathers. Male and female turkeys look different. Male turkeys called "toms" have a fan-shaped tail, a red piece of skin called a "wattle" hanging under their chin, and spurs or spikes on their ankles. Female turkeys called "hens" have

no wattles or spurs.

Turkeys like a well-managed forest, spending their days foraging or looking for insects, acorns, and wild berries in open areas. At night they "roost" in the low branches of trees.

Burner Bob and his Hunting Buddy



© 2017 Burner Bob! All Rights Reserved.



Blanton's

LONGLEAF CONTAINER NURSERY

MADISON • FLORIDA

850-973-2967 PH & FAX

blantonsnursery@earthlink.net

SINCE 2001, THE LARGEST
PRIVATELY OWNED
PRODUCER OF
CONTAINERIZED PINE
SEEDLINGS IN THE STATE
OF FLORIDA.

GROWERS OF 6" PREMIER
CONTAINERIZED PINE SEEDLINGS

*Improved & Natural Stand Longleaf
Advanced Generation Slash & Loblolly*



LOCATED IN NORTH FLORIDA ONLY MINUTES FROM VALDOSTA, GA 31717

E. J. (JAY) BLANTON III
850-566-1884

JASON M. BLANTON
850-566-7175

C. J. BLANTON JR.
850-673-7421

FORESTATE GROWERS LLC



Jacob Moore, Forester & Owner

1535 Harvey Vickers Road ♦ PO Box 2198 ♦ Douglas, GA 31534-2198

912-592-0542 ♦ jacob@forestatellc.com ♦ www.forestategrowers.com

LITERARY REVIEW

SIREN OF THE PINES

By Sarah Frost

Abigail Dowd is a singer/songwriter/guitarist with a gift for telling stories. She grew up under the longleaf pines in the Sandhills region of North Carolina; land that could only be tamed by Scotch-Irish settlers. Dowd brings this heritage of storytelling and determination to her music and weaves together hints of Celtic melodies with the soulful gospel of the south.

Abigail recently released her second album, *Not What I Seem*, which spans songs that tell her story of finding forgiveness, healing, and even gratitude for all that has shaped her. It also features several songs about the longleaf pine.

The album begins with “Wiregrasser” a song about a turpentine worker from Andalusia, Alabama. Abigail explained that as she was writing the song, the first verse came to her and she wasn’t sure whose voice was narrating. Later that day, flipping through the book *Longleaf: Far as the Eye Can See*, as she often does, she came across the word “wiregrasser.” As she read about the Wiregrass Region and its residents who were said to be as mean and tough as the wiregrass itself, she knew that this was the wiregrasser’s song. She scribbled down “I’m a wiregrasser chipping down the pines / There’s no more black belt prairies only pitch, tar and turpentine,” which became the song’s chorus. Listen to her interview with WUNC’s *The State of Things*, where she talks about the longleaf pines and “Wiregrasser”: www.wunc.org/post/abigail-dowd-explores-resilience-and-longleaf-pine-new-album.



Photos by Brady Beck and John Gessner.

Abigail said that “Wiregrasser” is one of her favorite songs on the album as it weaves so much of the longleaf story into the song. The second verse draws parallels between the longleaf pine and the turpentine worker himself:

“I grew up from the ashes / sand in my shoes and pine sap running through my veins / I’ve got catface carved in my sides / and no amount of prayer will save my life.”

And in the bridge, she alludes to fire suppression and the decimation of the forest:

“We cut em down, we bled them dry, we worked them to the bone / Stomped out the devil’s fire and prayed that God would save our souls / I still hear mama calling, but heaven / Is the only place left to call my home / God bless my soul”

Another song, “Goodbye Hometown,” was written after Abigail moved from Southern

Pines, NC, to Maine, and reflected on the South that she left behind. In the chorus she sings:

“Goodbye peaches / goodbye sweet magnolia blossoms in the summertime / goodbye to the whip-o-will singing sweetly in the night among the longleaf pines”

Abigail, who once served on the Southern Pines Town Council would retreat to Weymouth Woods to think, make tough decisions or find a space to breathe, walking under the longleaf pines, and she says it was one of the things she missed most about the South.

Shortly after her move, the longleaf pines brought her back home to be part of the cast for a play, *Bleeding Pines of*

Turpentine, written by Ray Owen about the woman who saved the forest, now Weymouth Woods, and preserved one of the oldest remaining stands of longleaf. Abigail wrote the song “Silent Pines” for the play, and it is featured as the last track on her new album. A haunting, a cappella song about the spirit of the longleaf:

*Can you hear the pines whispering
Can you hear the silence in between
These words I speak to you
It's there you'll find the meaning of this place
Come on children rise up
Don't let em tear you down
Come on children rise up
Don't let em tear down
Can you hear the branches strum their refrain
Rise up to heaven tall above the flames
And stronger than the wounds that bleed them dry
Stronger than you or I
Come on children rise up
Don't let em tear you down
Come on children rise up
Don't let em tear down
Can you hear their silent symphony
Be careful there you just might find yourself
In the thickness where the oldest pine trees grow
They will tell you what your heart already knows
Come on children rise up
Don't let em tear you down
Come on children rise up
They'll never tear us down*

As Abigail travels, touring her new album, she never misses the opportunity to tell audiences about the longleaf pine forest, its rich ecosystem that carries so many universal lessons, and the myriad of ways that it has shaped the culture and art of the South. It has certainly shaped her own.



**The Future
in Longleaf
Propagation**

proptek

**Super Long-Life 6" deep container
designed specifically for Longleaf**

- Mechanizable to save big on labor bills
- Numerous, vigorous air-pruned roots
- Intact root system at shipping
- Easy to pull cell design & no root circling

proptek.com sales@proptek.com (800) 487 1381

LONGLEAF ART SPOTLIGHT

LINNE HUTTO WITH TIMBER WOOD PRINTS

Longleaf Pine - Age 346 Years

The tree was already 107 years old when the Declaration of Independence was signed in 1776. In 1833, when the tree was 164 years old, it was not cut down to supply cross ties and wooden rails for the longest rail line in the world. The "Best Friend Express" ran 136 miles in South Carolina from Charleston to Hamburg and passed the tree at the bottom of the hill on which it grew. Throughout the 1800s, the tree was not cut for timber to construct the homes in Aiken, SC that was expanding with the growth of the railroad. As the land was timbered throughout the late 1800s and early 1900s, it was left to grow and shade the riders that passed through on winter fox hunts and spring rides in Hitchcock Woods. In 2015, it was struck by lightning and taken down for safety reasons. After three years on the ground, decay had entered the sapwood, but the heartwood was sound. A portion of the log was donated to The Longleaf Alliance by the Hitchcock Woods Foundation and sawed at Guerry Lumber Company in Savannah, Georgia.

A portion of all proceeds from the sale of this Longleaf print will be donated to The Longleaf Alliance.

About the Artist:

As a Charleston native and furniture maker, I developed a love for trees and all the marvelous varieties of wood they produce. I started printmaking in 2014 as a way to release some creative energy. I am constantly perfecting my process and



experimenting with new materials and techniques, learning something new every day. There is nothing better than exploring in nature to find the perfect piece that will become a work of art.

The Process:

To start, I surface and burn the wood to prepare it for printing. Fire reduces the soft rings, leaving a printable surface that reflects the life of the tree.

Ink is rolled on the surface, and paper is hand pressed onto the grain. The paper is removed to reveal a unique image of the growth rings, like a thumbprint of the tree itself.

I then use the original relief print to make a variety of screen prints. I utilize traditional silkscreen methods, pulling each print by hand. All prints are handmade in Charleston, South Carolina.

To learn more about Linne's work and acquire your own print, visit his website and follow him on social media:

timberwoodprints.com
 etsy.com/shop/timberwoodprints
 instagram.com/timberwoodprints



Enviva is a leading supplier of industrial wood pellets, a form of renewable fuel that is:

- A renewable alternative to fossil fuels
- Sustainably-sourced
- Beneficial to U.S. forests
- Low in carbon and other pollutants
- Efficient and easy to transport
- Scalable and reliable



Coastal Pine Straw

NATURE'S PERFECT MULCH

Michael H. Dugan

706.533.6072 | 2476 B McDowell Street
 tahoemd2622@yahoo.com | Augusta, Georgia 30904

Gift the Longleaf Pine

*Retirement, Speaker
 Gifts, Merit Awards.
 For Any Lover
 of the Longleaf Pine.*



**Add Your
 Business Logo,
 or Forest Service
 Shield**

Melanie Walter, Artist
 pgb@pinegardenbaskets.com
 www.pinegardenbaskets.com
 910-799-8363





MILLIKEN FORESTRY

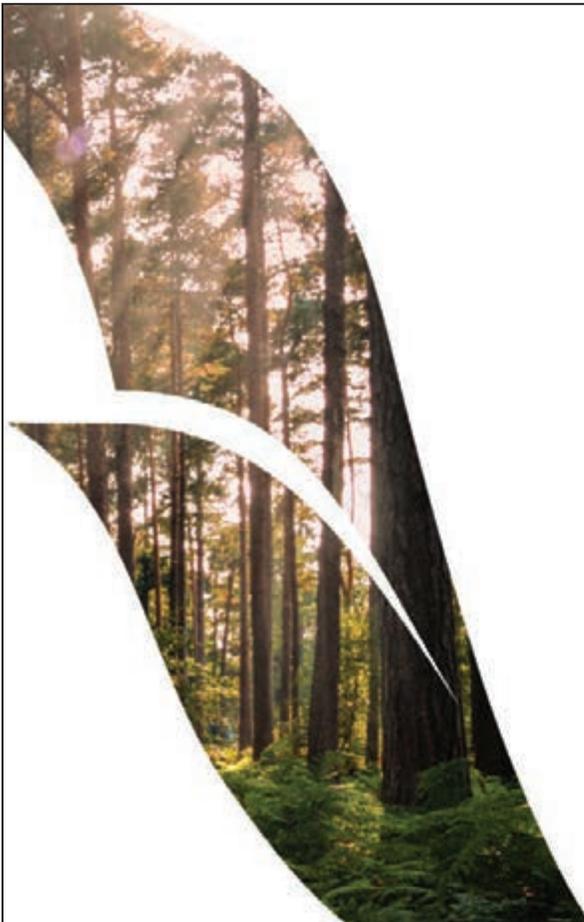
Managing Assets Since 1949

213 N. Grampian Hills Road
Columbia, SC 29223
803.788-0590
millikenforestry.com



Creating working forests
that produce both natural benefits
and landowner satisfaction

TIMBER SALES ■ APPRAISALS ■ FOREST CERTIFICATION ■ HABITAT RESTORATION ■ EXPERT MAPPING ■ FINANCIAL ANALYSIS



*Possibility begins with **empowering you.***

No one knows forest management quite like you. But that will never keep us from nurturing the relationships you've grown to value with us as Crop Production Services. And now with even broader resources and capabilities, your Nutrien Solutions location is even more equipped to help you become a more capable forest land manager, or owner than ever.
nutrienagsolutions.com

Nutrien
Solutions

Visit your local Nutrien Solutions location today.

870.367.8561

Gordon.Forster@nutrien.com

Be a
PROUD Steward
of a
**Beautiful,
Profitable
Forest**

*Get Seedlings & Support to Help You
Make the Most of Your Family's Land*

1

**Contact Your
Reforestation
Advisor**

Set your goals and
create a customized
seedling plan utilizing your
RA's extensive forestry
experience

2

**Prepare Your
Land & Plant
Your Seedlings**

Feel secure knowing
your reforestation
partners are here
whenever you need us

3

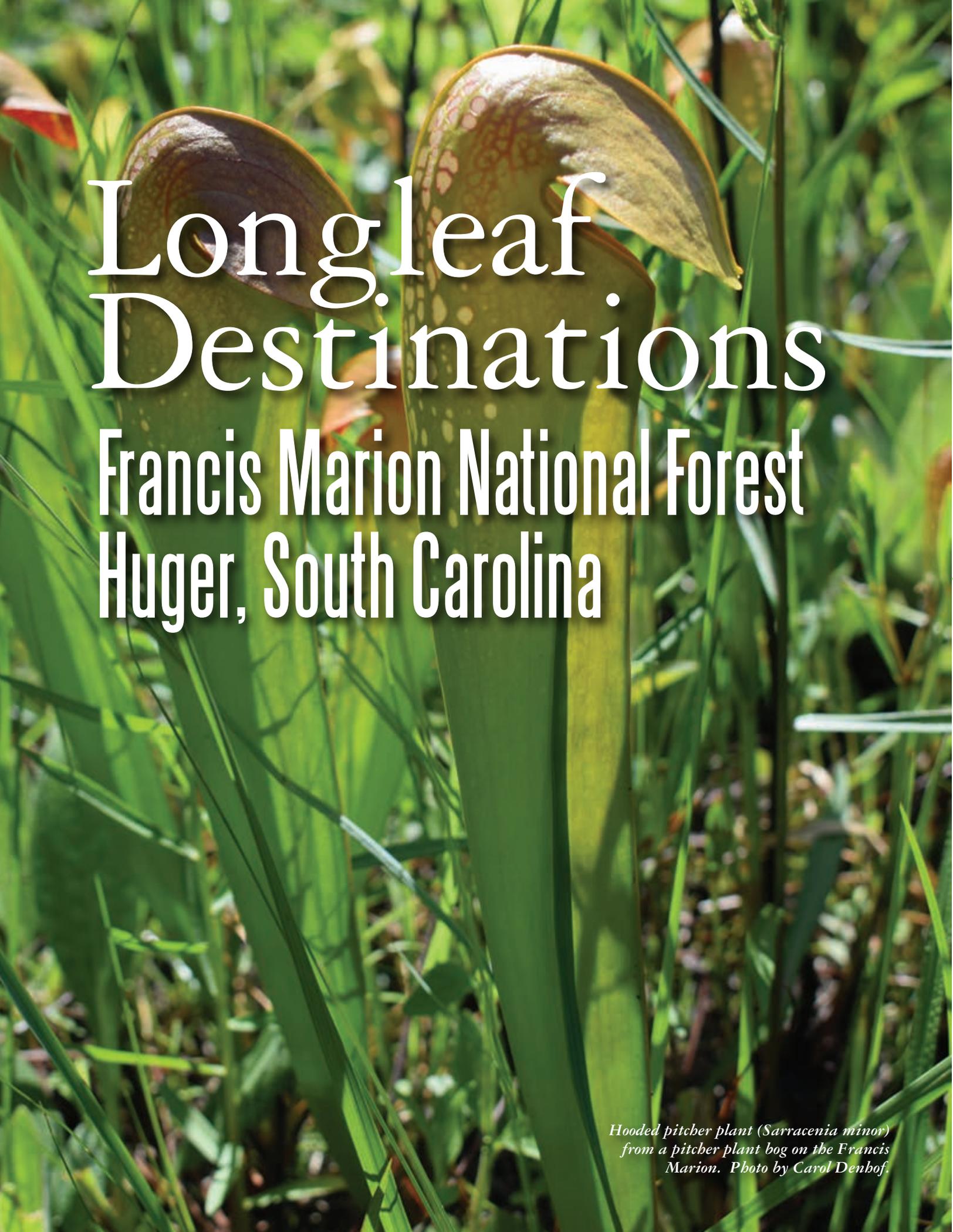
**Feel Proud
and
Confident**

Watch your family's
beautiful forest and
future profits grow!



ArborGen
The Reforestation Advantage

ArborGen.com
855.894.1702



Longleaf Destinations

Francis Marion National Forest
Huger, South Carolina

*Hooded pitcher plant (Sarracenia minor)
from a pitcher plant bog on the Francis
Marion. Photo by Carol Denhof.*



A wide variety of native orchids like this Snakemouth Orchid (Pogonia ophioglossoides) can be found in the wet savannas that are embedded in the longleaf forests of the Francis Marion. Photo by Carol Denbof.

Named for a Revolutionary War General, the Francis Marion National Forest, located just north of Charleston, is a forest literally steeped in history. Indeed, the wet boots of Revolutionary War soldiers under the command of Francis Marion himself splashed through the swamps of the present-day national forest, protected only by the certainty of their enemy's fear of alligators and snakes. Marion, dubbed "Swamp Fox" by the British troops whose supply lines he disrupted with surprise attacks from the swamps, adapted the fighting techniques of the Cherokee Indians to thwart the British in coastal South Carolina.

Prehistoric Indians occupied the area long before Marion and the British would tangle in its swamps. In fact, humans have been making their footprint on the land for more than 10,000 years. A 4,000-year-old shell ring near the salt marsh remains as a monument to their culture. It is the northernmost of a number of coastal shell middens along the Florida, Georgia, and South Carolina coasts. When the 258,000-acre Francis Marion National Forest (FMNF) was established in coastal South Carolina in 1936 by President Franklin Roosevelt, some 75,000 acres were mapped as longleaf pine (*Pinus palustris*) forest types (Grumbine 1936). Longleaf stands found on FMNF in the 1930s were largely second growth that had, against all odds, regenerated naturally following removal of the original forests.

For the past couple of decades, the Francis Marion has been in a state of restoration. Hurricane Hugo hit the Francis

Marion National Forest in September 1989 and left a devastating impact. The forest had some 36,000 acres of longleaf pine, with about 22,000 acres in large trees, mostly 50 years and older-prime habitat for a thriving population of red-cockaded woodpecker (RCW) and other animal and plant species native to the longleaf ecosystem. Hurricane Hugo's 130-mph winds leveled more than a third of the forest. On many acres, up to 95 percent of the larger pine stems were snapped off or uprooted. About half of the 50+ year longleaf stands had standing basal areas of less than 15 square feet, and much of this was in stems of doubtful survival potential. The RCW population was heavily impacted as well: 1990 surveys revealed only approximately 249 of the 477 pre-Hugo groups remained.

In the following years, the resulting resurgence of young trees and understory shrubs posed a heightened threat of catastrophic fire and presented the forest with the unprecedented problem of removing the dense vegetation. Forest managers met the challenge by converting the chipped forest biomass into an energy source for local power; this practice continues today.

Today the Francis Marion National Forest remains a lush landscape of pine stands and wildlife-filled swamps and marshes shaded by towering bald cypress trees. Four wilderness areas, one with a marked canoe trail, offer visitors a unique opportunity to glimpse the wild landscape as it might have appeared earlier in history. The Francis Marion is home to a



Historic photo of the damage caused by Hurricane Hugo in 1989. Photo credit the Berkeley Independent.

Multi-aged longleaf stand on the Francis Marion National Forest. Photo by Lisa Lord.

variety of wildlife, including the endangered red-cockaded woodpecker. Through concerted management techniques such as cavity inserts and translocation the population has surpassed the number of pre-Hugo groups. It also is known as an important bird area and provides habitat for the northernmost concentration of swallowtail kites (approximately 50 pairs). The Francis Marion also harbors many unique native plant communities including pocosins, Carolina Bays and longleaf savannas with an array of orchids, pitcher plants, and other carnivorous plant species. It spans nearly 259,000 acres and offers a wide variety of recreational opportunities ranging from birding, picnic spots, hiking, biking, motorcycle, paddling, and three canoe trails (Chicken Creek, Echaw Creek, and Wambaw Creek) to rifle ranges and a boat launch.

The Francis Marion National Forest is easy to access since it is situated between two major metropolitan areas: Myrtle Beach (30 miles to the north) and historic Charleston (40 miles to the south). If coming to visit the forest, these two cities offer the most in terms of lodging, dining, and other entertainment.

Linking Charleston and Georgetown is U.S. Route 17 which parallels the Atlantic shoreline and passes right through Francis Marion. For camping, Buck Hall Recreation Area offers a premier location to enjoy the outdoors. It is situated along the Intracoastal Waterway and provides great access to Cape Romain National Wildlife Refuge, 65,000 acres of marsh, tidal creeks and beaches; and Bulls Bay, the coast's best shrimp

baiting area. Take the time to visit the Sewee Visitor and Environmental Education Center, Sewee Shell Mound Interpretive Trail, and Cape Romain National Wildlife Refuge. Each is just a short distance from Buck Hall campground. Visit https://www.fs.usda.gov/detail/scnfs/home/?cid=fsbdev3_037393 to find out more about the forest and to plan your visit.

This part of coastal South Carolina is a popular tourist destination, well-known for its freshwater and saltwater recreational opportunities, golf and tennis, beautiful coastal scenery, and historical landmarks dating from prehistoric times through the Revolutionary and Civil War eras.

References

- Bengtson, George, John DuPre, William Twomey, and Robert Hooper. 1993. Longleaf Ecosystem Restoration in the Wake of Hurricane Hugo. Proceedings of the Tall Timbers Fire Ecology Conference, No. 18, The Longleaf Pine Ecosystem: Ecology, Restoration and Management, edited by Sharon M. Hermann, Tall Timbers Research Station, Tallahassee, FL.
- Francis Marion and Sumter National Forests. US Forest Service. www.fs.usda.gov/detail/scnfs/home/?cid=fsbdev3_037393. Accessed 15 May 2019.
- Grumbine, A. A. 1936. Management Plan: Francis Marion National Forest. Unpublished report. 68 pages.



NOT ALL SEEDLINGS ARE CREATED EQUAL.

VISIT US ONLINE

INTERNATIONALFOREST.CO/LONGLEAF

THE LONGLEAF ALLIANCE WELCOMES NEW STAFF

By Kaiden Spurlock, *The Longleaf Alliance*



*WEST Team Member
Kelsea Heider. Photo by
LLA.*



*WEST Team Member
Brian Whalen. Photo by
LLA.*

The Longleaf Alliance welcomes Kelsea Heider and Brian Whalen to the Wetland Ecosystem Support Team (WEST). The WEST team plays a vital role in wetland habitat restoration and rare species recovery in the Gulf Coastal Plain Ecosystem Partnership landscape. They both joined the team in March 2019.

Kelsea has a bachelor's degree from the University of Florida (December 2018) in Natural Resource Conservation with a Minor in Soils and Water Science. Her previous experience includes work as a Hydrology Technician Intern with the University of Florida Watershed Science Laboratory and as a Park Ranger with Blackwater River State Park.

Brian has a bachelor's degree from the University of Florida (2018) in Natural Resource Conservation. He previously served with the US Navy from 2008 to 2014. Additional work experience includes the Sarah P. Duke Gardens, Florida Fish and Wildlife Conservation Commission, and University of Florida Nature Coast Biological Station.

As mentioned in his accompanying "President's Message," Robert Abernethy will soon be transitioning out of his role as president of The Longleaf Alliance. During his tenure, Robert has served the Alliance and the extended, ever-growing longleaf community with distinction, character, and passion. His leadership has elevated and enhanced the knowledge, restoration, conservation and practical forest management applications of longleaf pine and the extraordinary attributes of longleaf pine forests. The mission of the Alliance is to ensure a sustainable future for the longleaf pine ecosystem through partnerships, landowner assistance, and science-based education and outreach. Robert's leadership and the exceptional work of our staff have greatly advanced this mission. On behalf of the Board of Directors and staff of the Alliance, I want to extend a heartfelt Congratulations, and a sincere Thank You to Robert for his outstanding service!

Our Board of Directors is now beginning the search for a new president to lead the Alliance. The Alliance was established in 1995 by Rhett Johnson and Dean Gjerstad and has grown to become a widely recognized and respected source of knowledge, information, advice, and operational expertise in managing the longleaf resource. We seek a motivated and collaborative leader with an excellent personal and professional reputation. Credibility within the public and private sectors of the natural resource conservation and forest management community in the Southeastern United States is essential. An undergraduate degree in forestry or a natural resources field of study coupled with an advanced degree in these fields or a complementary discipline is preferred. Strong organizational, interpersonal, and supervisory skills are required. Our scope of activities and partners span the nine-state region of the longleaf resource and are executed by a staff of 18 full-time employees. A complete job description can be found on the Alliance website at www.longleafalliance.org or by emailing or calling Robert Abernethy at robert@longleafalliance.org or (803) 480-1849.

This is an exciting time for The Longleaf Alliance. The Board and staff look forward to completing this presidential search and finding a new leader that will continue to build on the strong foundation the Alliance has established over the past 24 years!

Best regards,
Marc A. Walley
Chairman of the Board

**THANK YOU
ROBERT
FOR YOUR
SERVICE!**

POSITION ANNOUNCEMENT

PRESIDENT THE LONGLEAF ALLIANCE

The Longleaf Alliance (LLA) is seeking a President to lead the organization.

The mission of LLA is to ensure a sustainable future for the longleaf pine ecosystem through partnerships, landowner assistance and science-based education and outreach. This mission is accomplished through partnerships with forest landowners, wildlife biologists, foresters, state and federal forestry, wildlife and natural resource agencies, other non-governmental conservation organizations (NGO) and corporate partners. We seek a director to lead the LLA as the organization continues to engage with partners to expand the restoration, stewardship, and conservation of the longleaf ecosystem across the nine-state range of the species.

The LLA seeks an experienced, dynamic and collaborative leader with a minimum of eight years' management experience in a forestry or natural resource conservation organization. An undergraduate degree in forestry or a natural resources field of study coupled with an advanced degree in these fields or a complementary discipline is preferred. The President must have a passion for the longleaf ecosystem, an excellent personal and professional reputation and credibility in the Southeastern United States conservation community. A demonstrated ability to create effective relationships with board members and staff, landowners, donors, state and federal agencies, NGO's and other key constituencies is also needed. This position requires strong organizational, supervisory, and interpersonal skills, as well as excellent written and oral communication skills. The ideal candidate would have working knowledge of and/or experience in: longleaf forest management and ecology, fundraising, nonprofit management, natural resource conservation and the broader role of forestland management in the Southeastern United States.

The President is the public face of The Longleaf Alliance; will be responsible for leading the organization, and inspiring staff, partners and other constituents through hard work and effective communication in all forms. The President is required to identify, cultivate and grow new partners while

strengthening relationships with all so that fundraising becomes a natural product of that, rather than the priority itself. The President will: 1) guide the organization in building programmatic objectives that are focused on achieving the Vision and fit within the Mission of The Longleaf Alliance; 2) provide direction and support in fundraising efforts required to support annual operations through major gifts, grants, general support, membership dues and events; 3) act as liaison to the Board of Directors; 4) manage staff; 5) represent The Longleaf Alliance on the Longleaf Partnership Council; 6) supervise budget and finance functions; 7) work with scientists and outreach specialists to identify priorities related to management of longleaf and associated wildlife and ecosystem values; 8) expand public information efforts; and 9) build relationships with new and existing partners in the longleaf conservation effort. The President will report directly to the Board of Directors of The Longleaf Alliance.

The position will be located in the Southeastern United States as agreed upon by the candidate and the Board of Directors.

Salary will be commensurate with experience and includes significant benefits as a portion of compensation. For more information email jobs@longleafalliance.org or call 334.427.1029. Interested candidates are invited to submit a cover letter and resume by email to jobs@longleafalliance.org and addressed to:

Marc Walley, Board Chairman
The Longleaf Alliance, Inc.
12130 Dixon Center Road
Andalusia, AL 36420

**DYNAMIC
COLLABORATIVE
LEADER**

{ REQUIEM }

By Rbett Johnson

It is in the natural course of events that valued friends and mentors pass into and out of our lives, almost always too soon to suit us. Still, over the last two years, three particularly significant friends of the longleaf ecosystem have been lost to us. Almost at the exact time of the Savannah Biennial Longleaf Alliance Conference, Rick Hatten unexpectedly passed away in Southwest Georgia. Rick, when the Alliance was a fledgling organization struggling to find an identity and a place in the conservation pantheon, was the Management Chief of the Georgia Forestry Commission. At the time, the GFC, like its counterparts across the region, had only a cursory interest in longleaf ecosystems. At a critical time in the effort, Rick brought both attention and financial support to the Alliance, sponsoring a series of workshops across South Georgia and worked alongside us as we roped in support from NRCS, the Jones Center, and others to focus attention on the longleaf situation. I think he missed the first Longleaf Conference but was there to support us, usually with a contingent of GFC foresters, until the 2016 conference, when a sudden and ultimately fatal illness prevented his attendance. Rick had retired several years prior but continued his interest in longleaf restoration in private life. In the process, he became a close personal friend, and I valued that relationship tremendously.

More recently, May 2019 saw the departure of two icons of southern conservation with significant implications for the understanding and stewardship of longleaf ecosystems. Dan Speake, a US Fish and Wildlife Service scientist at Auburn University, performed groundbreaking research on sandhill communities common to longleaf ecosystems. He pioneered the development of telemetry on indigo snakes, implanting small transmitters to enable tracking their travels across the landscape. He studied their reproductive processes, hatched and successfully bred adults, and produced numbers of juveniles in the lab for later release across the range. This work was done in the late 1970s and early 1980s and much of it utilized innovative techniques developed on the spot to address situations encountered in the field. For instance, while studying gopher tortoises and indigo snakes, both sandhill and longleaf associates, we were searching for ways to look into the “in-burrow” ecosystem of tortoises. Dan worked with General Electric and others to develop a remote lens on a flexible cable that could be inserted into dens while the view was displayed on a monitor on the surface. Primitive by today’s standards, it worked. We struggled with inserting the lens into the irregular and twisting burrows, trying remote controlled toy tanks and other devices until Dan hit on the idea of using the plastic containers Leggs® pantyhose were packaged in. The smooth curved “eggs” slid into and out of the burrows, around curves, and over obstructions just fine. There were some puzzled looks

in the ladies wear departments when we purchased quantities of “large” pantyhose for the study. Dan later used more advanced versions of our “hole-looker” to examine dens of pine martens in Maine and to peer into prairie dog colonies for black-footed ferrets. His interests, like many of the biologists of his era, were broad; he also studied red wolves, bobwhite quail, wild turkeys, and mesopredators like raccoons. His legacy includes numerous graduate students and associates who went on to become legacies themselves. Syd Johnson, Dale Arner, Lovett Williams, Danny Everett and a host of others passed through Dan’s lab and went on to serve on university faculties and in other significant positions. He was a unique “larger than life” personality whose presence will not soon be forgotten.

Almost simultaneously, Leon Neel, a giant in the longleaf world, passed away in Thomasville, Georgia. Leon, working with Herbert Stoddard, developed a management approach for longleaf that might be best described as continuous forestry. Utilizing a long-time horizon, natural regeneration, single tree selection, prescribed fire, and a keen eye for aesthetics, the Stoddard-Neel approach to longleaf management produced some of the most beautiful forests in the world while yielding quality timber products and robust and diverse wildlife populations. I used to argue with Leon that the approach was not a system, but a philosophy. He would smile that wry patient smile and try once more to explain what he was doing. The landscapes he produced were and are still productive, still remarkably diverse, and harbor amazingly beautiful landscapes rich in plant diversity, game and non-game wildlife populations, and unparalleled bobwhite quail numbers. His personality could not have been more different from Dan Speake’s, but he was no less forceful in his views and would and could defend them against any doubters. He was a true southern gentleman in every sense of the word and could “kill” with kindness. Early in my tenure on the Tall Timbers Board, I would always try to take Leon and his wife, Julie, to lunch — times full of great fun and laughter and gentle reminders of our common goals and interests. Later, I would wonder where my ideas left off, and Leon’s had replaced them. He and Julie were a great team. She is an avid and knowledgeable conservationist and naturalist in her own right, and they made a formidable team. Both Dan and Leon preceded me on the Tall Timbers Board and were valued members of that organization during their times there.

Many people pass through our lives over time, but these three stand out to me for their contributions to the life and health of the longleaf ecosystem. I am grateful for their presence in my life and regret their loss to the natural world we all love.



Roundstone Native Seed LLC is proud to be a part of The Longleaf Alliance. It is our passion, our drive, and our mission to make a positive difference in the natural landscape by working alongside longleaf conservationists and enthusiasts. We are grateful that the seeds we gather and produce grow into appropriate longleaf ecosystem understory.



Call or Email Today
9764 Raider Hollow Road • Upton, Kentucky
sales@roundstoneseed.com • (270)-531-3034 • www.roundstoneseed.com



**Container Loblolly and Longleaf
Pine Seedlings**

**BODENHAMER
FARMS & NURSERY**

910/422-8118

FAX: 910/422-9793

www.bodenhamerfarms.com

ouie: 910/608-9823, Louie@BodenhamerFarms.com

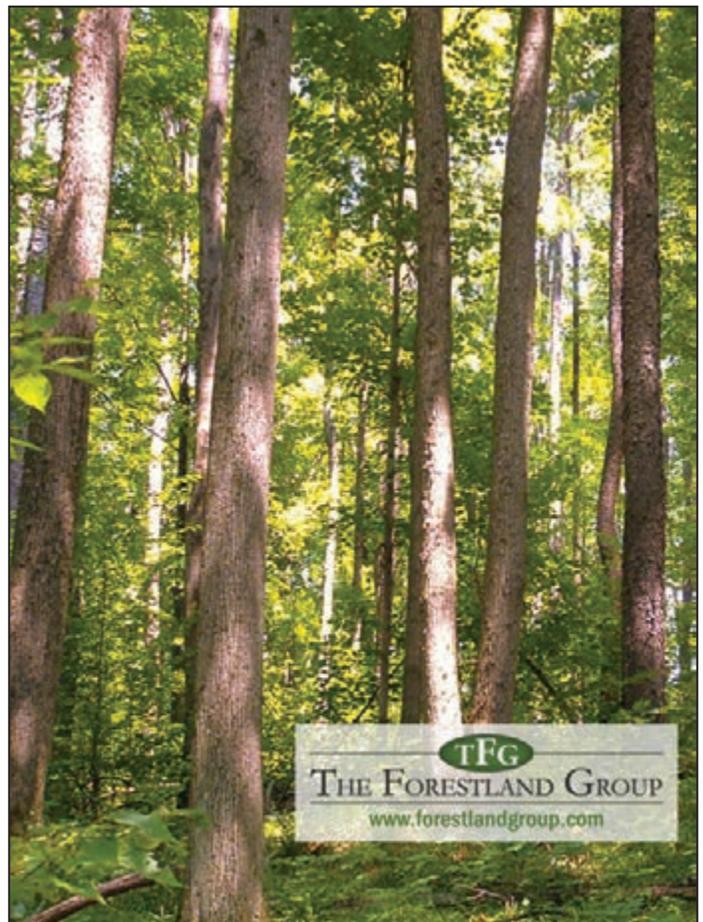
aron: 910/733-2760, Aaron@BodenhamerFarms.com

Rowland, North Carolina ■ Established in 2000

NCDA License # 5643

Seed Lots From NC, SC & GA

Second Generation Improved Loblolly



TFG
THE FORESTLAND GROUP
www.forestlandgroup.com



Advantage

Forestry Container Pines

Your Source for Containerized Pine Seedlings

Our product list of Advanced Generation pines includes

- Loblolly
 - Coastal
 - Piedmont
- Slash
- Shortleaf
- Longleaf
 - Coastal
 - Piedmont

Service and Quality is our number one objective

All of our seedlings are grown in Tifton, GA at LTF Greenhouses

- Located just 5 miles from I-75 and 1 mile from Hwy 82 for easy access
- Large labor force to accommodate short notice needs
- On site cold storage
- Local pick up or delivery to your location
- Custom grown orders upon your request

To place an order or inquire about pricing,
please call 334-341-2059 or visit us at containerpines.com

Advantage Forestry Container Pines
408 N. Commissioners Ave.
Demopolis , AL 36732

By Lynnsey Basala, *The Longleaf Alliance*

The Palustris Society Provides a Unique Opportunity to Strengthen our Mission

The Palustris Society was founded by several members of The Longleaf Alliance Board of Directors to further the legacy that Rhett Johnson and Dean Gjerstad created to protect and restore longleaf forestlands. All of these Palustris Society members share a dream of restoring viable working longleaf forests. Since its inception in Fall 2015, twenty-one members, representing seven states across the range, have joined this dedicated group of conservationists by making a donation or pledge of \$10,000 or more to The Longleaf Alliance. Commitments range from annual contributions of \$10,000 or more to single commitments of \$10,000 to be paid over a period of up to five years. For more information about this major gift program for individual and family foundations, please contact Development Director, Lynnsey Basala, at (314) 288-5654 or Lynnsey@longleafalliance.org.

\$50,000 Level

Barclay & Jane Perry McFadden
Charley & Susan Tarver*

\$25,000 Level

Marianna & Rufus Duncan

\$10,000 Level

Lynda Beam*
Gary & Melda Boyd
Judd Brooke
David & Jane Kidd
Angus & Cary Lafaye

Amanda Haralson & Thomas A. Livesay
Julie Moore
Dr. William Owen, III
Dr. Mickey & Stephanie Parker
William J. Payne
Richard & Rita Porterfield*
Mac Rhodes
Dr. Salem & Dianne Saloom and Family*
Audrey Thompson
Reese Jordan Thompson & Pam McIntyre Thompson
Drs. George & Anne Tyson*
Marc & Penny Walley
Phillip & Debbie Woods

**These donors have designated all or a portion of their contribution to The Longleaf Alliance Endowment.*

The Longleaf Alliance is a 501(c)(3) organization and contributions may be tax-deductible to the fullest extent permitted by law.

Audrey Thompson



Photo provided by Audrey Thompson

is the first young professional to join The Palustris Society.

“As a 7th generation longleaf tree farmer, I was raised to appreciate all of the hard work that my Father and previous generations have put into the land. My favorite part about growing longleaf is the controlled burning that we do throughout the year. Some of my fondest memories are of taking friends from college to our country cabin to do controlled burns. It is so exciting to hand a drip torch to a city kid who has always been told that fire is bad and explain to them the benefits of prescribed fire for sensitive species like the gopher tortoise and indigo snakes. I am thrilled to be a committed member of The Palustris Society to support the work of The Longleaf Alliance.” Audrey Thompson Vidalia, GA

APPALACHIAN MOUNTAIN BREWERY



**FOR EVERY CASE OF LONG LEAF IPA
SOLD, APPALACHIAN MOUNTAIN
BREWERY WILL PLANT A LONGLEAF PINE**

PROUD PARTNER OF

THE LONGLEAF ALLIANCE



 WE CAN SO YOU CAN
FOUNDATION

AMB PROUDLY SUPPORTS THE WE CAN SO YOU CAN FOUNDATION'S
MISSION TO REVITALIZE OUR COMMUNITIES, MOUNTAINS & RIVERS.



GreenAssets®

A Leading Forest Carbon Offset Developer

"Landowners Working with Landowners"

www.green-assets.com

THE NATIONAL WILD TURKEY FEDERATION



“Working hand in hand with our agency partners, we collectively restored the wild turkey across much of North America. Now we must work together to Save the Habitat. Save the Hunt.”

— Becky Humphries,
NWTF Chief Executive Officer



OUR GOAL SAVE THE HABITAT:

We will conserve or enhance 4 million acres of critical wildlife habitat.

We are working to restore and manage longleaf pine ecosystems throughout their historic range.

SAVE THE HUNT:

We will recruit 1.5 million hunters and establish 500,000 acres of new hunting access.



NWTF.org



Templin Forestry, Inc.

2022 N. MacArthur Drive
Alexandria, LA 71301
(318) 445-5566 | Fax: (318) 445-4422
www.templinforesstry.com

**COMPREHENSIVE FOREST
MANAGEMENT SERVICES**
Louisiana State Certified General Appraiser

Steven K. Templin, ACF



For more information contact:

Flynn Miller

Flynn.miller@prt.com / 706-714-4108

Proud to supply:

- Native, Improved & Montane Longleaf
- Shortleaf
- Loblolly
- Slash

www.prt.com

Outdoor Insurance SIMPLIFIED.

Protect your timber investment today!

The team at Outdoor Underwriters has more than 30 years of experience in the outdoor insurance industry and have designed programs to meet the needs of timberland owners nationwide. Protect your timber investment with coverage from Outdoor Underwriters.

To learn more call 866.961.4101 or visit outdoorund.com

Available Coverages:

Hunt Lease Liability Insurance

Timberland Liability

Tractors, ATV's & Implements

and much more....



By Melda Boyd

HEARTPINE

**FOR THE LOVE OF LONGLEAF:
A FAMILY LEGACY**

Melda Boyd and her husband Gary are working to bring back and manage the longleaf on their property in Baldwin County, Alabama.

My husband Gary and I love the longleaf pine. We discovered its beauty and learned about its remarkable history through The Longleaf Alliance, a wonderful organization that we are proud to support.

Gary and I own 132 acres of Alabama timberland not far from the Gulf. The first hundred acres came to us through my family, over the last nine years.

My grandfather, James Mildorf, purchased most of the land in 1921. James had come to America from what is now the Czech Republic in 1907 when he was a young man of twenty. He landed in Galveston, Texas, worked as a cowboy on a big ranch for a few years, then headed north, eventually ending up in St. Paul, Minnesota, where he met and married my grandmother Helen, a descendant of Bohemian immigrants herself. They moved to Phillips, Wisconsin, and James bought a small farm there. He also worked on logging crews and in the cranberry bogs. Through other Czechs and very likely through ads in Czech-language newspapers, he learned that there was inexpensive and plentiful land for sale in Baldwin County, Alabama.

In 1921, James, Helen, and their three children moved down to Baldwin County, to the 160 acres James bought. At one time this land had been a longleaf forest, but by the time the Mildorf family arrived, the land had been logged, and many trees had been tapped for their resin. It's hard to know how many longleaf were left then, but according to family members' accounts, there were many trees to cut and stumps to remove before the family could begin to farm. They only ever farmed a fraction of this land. Eventually, James bought another 60 acres, but he did not farm it.

When the family land came to us, Gary and I knew virtually nothing about the longleaf pine or managing timberland. We did know, though, that it would help us to have access to the part of our family land that lies across the Blackwater River, and in 2015 we were able to buy these 32 adjacent acres.

Much to our delight, we discovered some longleaf pines, including a few mature trees, on those 32 acres. This stand is self-seeding, and there are longleaf in all stages of maturity. There also is a spring-fed pond. We love this land as much as we love our family land.

Gary and I are retired now, after full careers in the Federal government. As new stewards of this land, we are intent on doing all that we can to nurture the longleaf pine across the 132 acres, until the day we hand this work on to the people who will come after us.



I wrote the poem below to express our feelings about the land and our role in its future.

Longleaf-Lover's Prayer

I thank the Lord for the Longleaf Pine
And its golden wood, tight-grained, strong, and beautiful,
Its rugged brown bark, layered and rough,
Host to cockaded woodpecker friends
Who soar from tree to tree,
And nest only here.

I thank the Lord for the Longleaf Pine
And all the wondrous life that flourishes beneath
its branches—
The birds and the tortoises,
The pitcher plants and the sundews,
The bobwhite quail and the wild turkeys,
The berries, the white and yellow flowers, and the little
pink orchids.

I thank the Lord for the glassy pond
That lives in the realm of the longleaf pine,
Invites water-loving plants to flower,
Calls dragonflies to feast,
Gives life to tree frogs, salamanders and snakes,
And hosts the visiting heron.

I thank the Lord for my husband, Gary
Who loves the Longleaf Forest as much as I do
(some days, even more than I)
And for my grandparents, James and Helen,
Who took the long, hard road from Bohemia
and the Midwest 100 years ago,
To buy a piece of Alabama's forest heaven;
From that time to this, our family land.

I thank the Lord for all who care,
The foresters and landowners, Longleaf Alliance and others,
All the people who know how to help the forest grow
and bloom,
Who make the time to teach the rest of us
How to plant and spray and burn,
Helping us in our stewardship tasks.

I thank the Lord for the next generation,
For nephew Mason who's always sought
The turtles and frogs,
Fearless in the face of the wild hogs
And the moccasins and copperheads who share
the woods with him;
For his brother and sisters, who love the land, too,
though maybe in a different way.

I thank the Lord for the song in my heart
That wells up whenever we're on the land,
That makes me burst with joy and wonder,
And for the woods euphoria that fills our souls,
As we tramp in our snake boots and camo, deep in the forest,
Hidden in the green silence and the scents and the beauty.

I thank the Lord for the Longleaf Pine
And the mission it has given us,
Second life after first, now spent, career,
A mission to care for,
Preserve, improve, make whole again,
To bring the land and us back to our true selves.

Whitfield Farms & Nursery SINCE 1996

2561 Lambs Bridge Rd
Twin City, GA 30471

bwhitfield@pineland.net

(912) 515-4103

The Deepest Container on the Market!

Introducing our new 6.5" deep, lower density container for longleaf seedling production. Each cell holds 8.2 cu.in. (134 ml) of soil to help develop a larger root system for a superior stand of trees. The longer plug and greater soil capacity should result in a seedling with a higher survival rate than those with shorter plugs.



GROWER OF CONTAINERIZED LONGLEAF PINE SEEDLINGS

WhitfieldPineSeedlings.com

