



THE LONGLEAF LEADER



**DENIZENS OF
THE LONGLEAF
WOODLAND**



**NOT ALL SEEDLINGS
ARE CREATED EQUAL.**



VISIT US ONLINE

INTERNATIONALFOREST.CO/LONGLEAF

TABLE OF CONTENTS



President’s Message2
 Upcoming Events4
 Letters from the Inbox5
 Green Side Up6
 Migrants in the Piney Woods.....8
 Understory Spotlight10
 Wildlife Spotlight11
 Clarifying the Black Pinesnack Listing Rule12
 Longleaf Alliance joins Long-Term Red Cockaded
 Woodpecker Translocation partnership14
 Landowner Spotlight17

Digging Deeper: Managing a Forest That Includes
 Gopher Tortoises.....20
REGIONAL UPDATES22
 The Longleaf Academy Program29
 While You’re in the Grass Stage31
ARTS & LITERATURE32
 Longleaf Destinations34
PEOPLE36
SUPPORT THE ALLIANCE37
 Heartpine44

PUBLISHER The Longleaf Alliance, **EDITOR** Carol Denhof, **ASSISTANT EDITOR** Margaret Platt, **DESIGN** Bellhouse Publishing
ADVERTISING Carol Denhof 678.595.6405 – editor@longleafalliance.org
COVER Female red-cockaded woodpecker nestling in tree cavity. Photo by Danny Bales.

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 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

2015 was a good year in the Longleaf World.

A recent publication by Anita Rose (USFS, Resource Update FS-36) entitled "Forests of South Carolina, 2013" compared Forest Inventory and Analysis (FIA) Data from 2011 and 2013. Based on 3,445 plots taken all across the state of South Carolina, it looks like longleaf/slash occurred on about 600,000 acres in 2013. What I found really interesting is the research also backed up what we are seeing all over South Carolina. The number of live longleaf trees increased 3% between 2011 and 2013 and has nearly doubled since 2001. As expected, nearly half the trees were in the smallest age class, 1-2.9 inches dbh. The report specifically mentioned that these increases are a testament to the planting efforts that have been taking place for a long time. The private landowners of South Carolina as well as the natural resource management agencies and non-profits that assist them are to be commended for this monumental effort. These increases are not just confined to this state but have occurred all across the South as we work together to restore the longleaf pine to a place of prominence on the landscape.

2015 was also a great year for The Longleaf Alliance (LLA). Between July 1, 2014 and June 30, 2015, we held 7 Longleaf Academies; 17 NWCG approved prescribed fire training courses, and welcomed 359 landowners and partners to the 10th Biennial Longleaf Conference in Mobile, AL. We added a Gopher Tortoise Academy, a Prescribed Fire Academy, and our staff assisted 414 landowners with technical assists. Our staff also gave 73 presentations all across the range and talked with over 2,800 partner representatives and landowners about

longleaf restoration and management. In total, over 4,300 individuals learned about longleaf through LLA staff and programs.

On-the-ground restoration also continued in 2015 where, working with partners like the USFWS, The Nature Conservancy, Arbor Day Foundation, American Forests, The National Fish and Wildlife Foundation, International Paper, The Southern Company, and the Department of Defense, we were able to help public and private landowners plant nearly 3 million longleaf seedlings and prescribe burn almost 70,000 acres of piney woods.

This past year, we also introduced a new method for those individuals capable of contributing significant financial resources to longleaf restoration to do more. The Palustris Society was founded by several of our board members who wanted to do more to conserve this great southern forest. Those individuals willing to pledge donations of \$10,000 or more will be recognized for their contributions. Members of the Palustris Society also have the option of dedicating a portion of their pledge to The Longleaf Alliance Endowment which was also established in 2015. If you are interested, please contact me or Lynnsey Basala, our Development Director.

Longleaf Alliance staff, members and partners are contributing and working from Texas to Virginia to educate people and conserve and restore the longleaf ecosystem. Together, we are striving to achieve the goal of the restoration of eight million acres of longleaf by 2025. Enjoy the winter and get out the drip torches!



Forest Legacy Program

Protecting Forests through Partnership

The Forest Legacy Program protects private, working forests and provides multiple public benefits.

The majority of the nations' forests are in private ownership and they are trending toward some type of non-forest conversion. These forests are key to providing timber products, wildlife habitat, scenic views and recreation. They help to protect soils and provide clean water.



To confront this problem the Forest Legacy Program was started with a mission to protect privately held forests. Administered by the USDA Forest Service, the Forest Legacy Program uses primarily conservation easements to ensure that protected forests will continue to provide their array of public benefits.

State agencies throughout the nation assist the Forest Service in locating land owners interested in protecting their forests for generations to come.

You can learn more about this program at our website <http://www.fs.fed.us/spf/coop/programs/loa/flp.shtml> which also contains a link to federal and state personnel (Federal and State Coordinators List) who could answer specific questions about participating in this program.

Protecting Private Forest Lands from Conversion to Non-Forest Uses



Longleaf Alliance Board of Directors

Barclay McFadden –
Chairman

Salem Saloom –
Vice-Chairman

Judd Brooke –
Secretary/Treasurer

Angus Lafaye –
Past Chairman

Lynda Guerry Beam

Katherine Eddins

Julie Moore

Ken Nichols

Dick Porterfield

Charley Tarver

George Tyson

Marc Walley

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

Lynnsey Basala
Development Director
lynnsey@longleafalliance.org

Ryan Bollinger
Local Implementation Team Consul
ryan_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

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

Brian Schumann
Ecosystem Support Team Member
brian@longleafalliance.org

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

Mike Thompson
Ecosystem Support Team Supervisor
mike@longleafalliance.org

Donna Vassallo
Ecosystem Support Team Member
donna@longleafalliance.org

Casey White
Administrative Assistant
office@longleafalliance.org

Bob Wilken
Fire Specialist
bob@longleafalliance.org

Karen Zilliox
*Ecosystem Support Team Field
Leader*
karen@longleafalliance.org

2016

Longleaf Academy: Longleaf 101
Woodworth, Louisiana
January 11-14, 2016
*THIS ACADEMY IS FULL

Longleaf Academy: Longleaf 101
Jasper, Texas
January 19-21, 2016

Longleaf Academy: Longleaf 101
Tifton, Georgia
February 17-19

Longleaf Academy: Longleaf 101
Tuskegee University, Alabama
March 8-10, 2016

Longleaf Academy: Longleaf 101
North Carolina (location TBD)
April 5-7, 2016

Longleaf Academy: Longleaf 101
Cheraw, South Carolina
April 26-28, 2016

Longleaf Academy
Georgia - Ft. Stewart/Altamaha LIT Area
May 16-18, 2016

Longleaf Academy: Longleaf 101
Alabama/Florida – GCPEP Area
June 7-9, 2016

Longleaf Academy: Understory 201
South Carolina (location TBD)
September 27-29, 2016

11th Biennial Longleaf Conference
Savannah, Georgia
November 1-4, 2016

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

WINTER MANAGEMENT CHECKLIST

- **Site Prep Burns:** It is important to conduct a site prep burn prior to planting longleaf. Site prep burns remove logging slash, lead to better planting jobs, stimulate early growth by increasing available nutrients, and decrease hot spots that may kill young seedlings in subsequent burns.
- **Planting Longleaf:** To take advantage of the winter precipitation and maximize survival, planting early is almost always better than late planting. Remember to keep an eye on planting depth.
- **Prescribed Fire:** Winter is a prime time to conduct fuel reduction burns in mature or sapling stands. Late December through the end of winter is a good time to introduce fire in young longleaf stands to help control unwanted pine seedlings and other competition.
- **Evaluate Young Stands:** Evaluate young stands to determine one year survival and insure adequate stocking. Wait until after the first frost so the grass stage longleaf can be more easily seen.
- **Prune Longleaf:** In some stands that lack fuels or have a low stocking rate, mechanical pruning may be an option to avoid the “Old Field” growth form. Winter is the easiest time to prune and should be finished before the spring green-up. Pruning may not be practical in a large stand.
- **Plant Native Warm Season Grasses:** Later winter through early spring is the recommended time to plant our native understory species. Some plants require a cold-stratification period and need to be planted earlier.
- **Herbicide Treatments:** Basal bark and stem injection herbicide treatments are typically most effective at controlling unwanted or invasive trees and shrubs when applied during the dormant season.

Thinning longleaf pine with a fuel chipping operation in Hitchcock Woods, Aiken SC. Photo by Gary Burger.



Q. Dear Longleaf Leader,
I have an 18 year old planted stand of longleaf pine. I was wondering if anyone could tell me when it should be ready to commercially harvest.

Sincerely,
Wondering...

A. Dear Wondering,
You have a question that more and more landowners are beginning to ask. When are my pines ready to thin? It's actually simple. In order to attract a logger, the stand needs to have trees large enough to commercially harvest. You don't want to take out your biggest and best trees. You want to cut the worst and leave the best. That said, the following criteria should be met:

- The average diameter should be six inches in diameter at breast height (DBH)
- Average tree height should be at least 40 feet tall to accommodate tree length logging.
- The first 16-18 feet of the tree trunks should be clear of any live branches. This is the first sawlog and will be the most valuable part of the tree for sawtimber.
- Stocking, as measured as basal area, should be 120 square feet per acre or greater. This may be a problem for some longleaf stands planted in some of the USDA Farm Bill programs that would only allow up to 500 trees per acre to be planted. Another way of looking at stocking is if the trees have completely shaded out the understory, it's time to do a thinning harvest.

In general, most longleaf pine plantations are usually thinned for the first time between ages 18-22. Trees harvested at this time go for pulpwood and fence posts. A second thinning is done about ten years later, with the trees being large enough for chip-n-saw, small poles and pulpwood. After ten years, thinnings that occur will yield sawtimber, poles, chip-n-saw and pulpwood. After this point, you need to decide if you will regenerate the stand by clearcutting and planting, natural regeneration, or continuing with selective thinnings and moving the stand to an uneven age structure.

Most stands will need to be at least 25 acres in size in order to attract a logger. If smaller in size, adjacent stands on the same property that can be logged will make the property attractive for logging.

These guidelines are in general. Actual timing will vary on site productivity, stocking and other factors. If you are considering thinning or harvesting longleaf pine on your land, it will be worth your while to retain a professional forester to assist you in marketing your timber, sale layout and monitoring the harvest.

For additional information, contact The Longleaf Alliance, your state forestry agency or a consulting forester.

Sincerely,
The Longleaf Alliance

GREEN SIDE UP

LONGLEAF, IT'S WHAT'S FOR DINNER?

By Mark D. Smith, Associate Professor/Extension Specialist, Alabama Cooperative Extension System, School of Forestry and Wildlife Sciences, Auburn University



*Longleaf planting failure due to bog damage.
Photo by Ryan Mitchell.*



Wild pig (Sus scrofa) stop near the Kennedy Space Center Press Site on their daily foraging rounds. Photo by NASA.

Wild pigs are the ultimate opportunist when it comes to food, eating a variety of both plant and animal material. In fact, that's why they are one of the most invasive, destructive, and most difficult to control animal in North America. On average most (>80%) of their diet consists of plant material such as hard and soft mast, seeds, roots tubers, bulbs, grasses, and forbs including most agricultural crop plants. However, consumption of plant material will vary greatly (50-100% diet of plant material) through the seasons based on the local abundance and availability of specific plant foods. One such item on the wild pig's menu is longleaf pine seedlings.

Wild pigs eating longleaf seedlings, mainly the starchy root system of these young plants is nothing new. Back in the 1800s it was noted that wild (or possibly free-ranged domestic) pigs can significantly hinder natural regeneration of longleaf stands due to consumption of seedlings, and in some instances it can be quite severe. What was true back then is, unfortunately, true today. In areas with medium to high wild pig populations, many landowners have experienced this devastation on their longleaf pine plantings firsthand. For example, one study conducted in the late 1970s in South Carolina showed that natural regeneration areas that were fenced to keep wild pigs out produced about 500 seedlings/acre whereas unfenced areas where pigs had free access only produced 8 longleaf pine seedlings/acre. Regardless of whether it's natural regeneration or hand planted, wild pigs can easily cause complete crop loss.

So how will I know if wild pigs will cause a problem to my longleaf seedlings? This is a difficult question to answer and will, unfortunately, depend on some factors. Obviously, if pigs

in your area have previously destroyed other longleaf pine plantings, it stands to reason they'll be back again to cause similar problems. However, in other areas the level of depredation on longleaf pine seedlings will depend upon the numbers of wild pigs in the area, the availability of other food items throughout the year, and the level of removal you and adjacent landowners are conducting to keep wild pig populations at a low level. Keep in mind, one wild pig is capable of consuming several hundred seedlings in a single day.

What can I do if wild pigs are causing a problem? There are only two practical options, neither of which is inexpensive. Keep in mind that in most cases you will only need to manage wild pigs for the first 2-3 years after planting longleaf seedlings. Once seedlings begin putting on some growth, wild pigs don't seem to bother them as much. Fencing, either electric or wire, can be used to exclude wild pigs from the area to be planted. Although this may or may not be a reasonable approach for all situations, 3-strand electric fencing is relatively inexpensive and could be a temporary solution worth considering.

The other option is to begin a concerted wild pig removal program using corral-type traps and shooting. Often, depending upon the size and location of your property, it will be best to coordinate your removal efforts with your neighbors. Remember, pigs can't read property boundary signs. Numerous resources about controlling wild pigs are available online or from your county extension office. However, before undertaking any wild pig control activities, consult your local conservation officer regarding legal means for controlling wild pigs on your property or for any special permits that may be required.

White throated sparrow. Photo by Andy Reago & Chrissy McClarren (White-throated Sparrow) {CC BY 2.0 (<http://creativecommons.org/licenses/by/2.0>)}, via Wikimedia Commons.



MIGRANTS IN THE PINEY WOODS

By Robert Abernethy, *The Longleaf Alliance*

IT IS THAT TIME OF THE YEAR. IN FACT, THEY HAVE BEEN HERE FOR A WHILE.

When the temperature dips below freezing at night and the north wind blows off the arctic, they pack up and head south. They travel light and they travel fast, often in a single night. I am not referring to the snow birds on Interstates 65, 75 and 95 with license plates from Illinois, Ohio, Ontario, and New York. I am talking about the real snowbirds, juncos and mallards, kinglets and nuthatches that spend their summers nesting and growing fat in the cool northern climates but head south with the first sign of snow. Some like the golden-crowned kinglets arrive in November and stay until April while others forsake their southern summer home for more exotic wintering spots in the Caribbean.

Some of the migrants are much sought after gamebirds such as the waterfowl, but many are the inconspicuous “LBJ’s” (little brown jobs) that sound like deer when they are scratching for seeds in the thicket behind your deer stand or the tweety birds that flit through the trees and add variety to a winter walk in the woods. Here are a few of the more common but inconspicuous species that migrate through our Southern Woodlands.

Golden-crowned kinglet, *Regulus satrapa*

The golden-crowned kinglet is one of our smallest birds. Only slightly larger than your thumb (3.25-4 inches), this tiny, mostly green bird can be seen flitting through the tree tops in search of insects. It is named for the gold crown of the female and the gold and orange crown of the male. They show up in the Carolina piney woods in mid-October and early November and stay until early April when they start drifting back to the higher elevations of the North Carolina mountains and all points north into Canada. They appeared in our South Carolina yard on a cold and dreary rainy day (November 9), a day after the second cold front of the year had descended, and the fireplace was roaring. As I looked out the window, the tree tops were absolutely alive with small quickly flying and flitting birds. Closer inspection with binoculars revealed a foraging guild or flock of golden-crowned kinglets, ruby-crowned kinglets, white breasted nuthatches, Carolina chickadees, and tufted titmice moving through the treetops examining every limb, twig, and leaf for chilled and rather slow insects which make up over 90% of their diet. They reminded me of a flock



Chuck-will's-widow. Photo by Dick Daniels (<http://carolinabirds.org/>) (Own work) {CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0>) or GFDL (<http://www.gnu.org/copyleft/fdl.html>)}, via Wikimedia Commons.

of wild turkeys spread out and advancing across a field. I doubt if any insects escaped the three dimensional advance of these efficient predators. Watch for the kinglets and those species

but because they were not the bobwhites we were searching for, we moved on.

During the winter, several species of sparrows descend on the southern piney woods in search of seeds and insects and protection from the winter weather. One of the most common is the white throated sparrow. A large (6.3 to 7.65 inches) brown sparrow, it inhabits the same thickets and field edges as the bobwhite and is often pointed by bird dogs. They prefer the dense thickets for the seeds but also for protection from the avian predators that frequent well-managed piney woods. Dense plum thickets and blackberry canes will slow down Coopers hawks and sharp-shinned hawks long enough for most of the birds to escape.

The white-throated shows up in October and remains until mid-May when it heads back north to nest.

Chuck-will's-widow, *Caprimulgus carolinensis*

Some migrants winter in the Carolina pines while others prefer to seek relief from the winter's cold in South Florida, tropical islands, and even South America. The "other" Whip-poor-will is one such bird. I rarely know exactly when they leave. Usually one night, in late September or early October, I notice they are no longer calling. Many believe it is the Whip-poor-will that calls through the southern spring and intermittently during the hot southern summer but they are mistaken. If you listen carefully, you will discern the four note call of the Chuck-will's from the three note call of the Whip-poor-will. We have Whip-poor-wills within the range of the longleaf pine but only for a short time in late March and early April and then again when they pass through during the fall.

The Chuck-will's is a large bird, 11 to 12 inches long and feeds on the wing with its mouth wide open capturing moths, flying insects, and the occasional migrating small bird. They nest in the longleaf forest as well as the oak woodlands of the piedmont and mountains of the South and are rarely seen. They are most commonly seen, but rarely identified, as a brilliant red eye glowing in the middle of a lonely dirt road late at night. As you get closer, the eye simply vanishes as the Chuck-will's flies off. This coming March, as you are listening for that old gobbler to sound off, listen carefully for that Whip-poor-will calling nearby and you may discover he is saying, Chuck-will's-widow.

References

Robbins, Chandler S., Bertel Brunn, and Herbert S. Zim. 1983. *Birds of North America*. Golden Press, New York.

Sprunt, Alexander and E. Burnham Chamberlain. 1949. *South Carolina Bird Life*. University of South Carolina Press. Columbia, SC.



Golden crowned kinglet. Photo by CheepShot (Golden Crowned Kinglet) {CC BY 2.0 (<http://creativecommons.org/licenses/by/2.0>)}, via Wikimedia Commons.

associated with them any day you are in the piney woods this winter. They tend to frequent the tops of the trees and can be difficult to see without binoculars.

White-throated sparrow, *Zonotrichia albicollis*

It was late winter, no leaves on the trees and our dogs were locked up at a dense plum thicket with blackberry canes so thick you could not see through them. As we moved in expecting the covey rise, we heard the rustling, and suddenly a flock of small brown birds flushed out of the thicket and flew away through the longleaf.

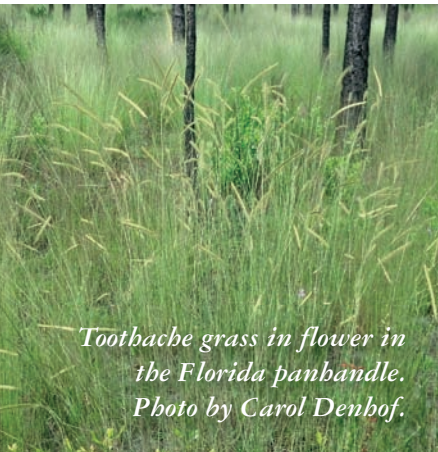
"Stink sparrows," my grandfather said in 1960, "just stink sparrows."

To many bird hunters of his generation, any small brown bird encountered on a day of quail hunting was classified as a stink sparrow. Some bird dogs pointed them (mine mostly),

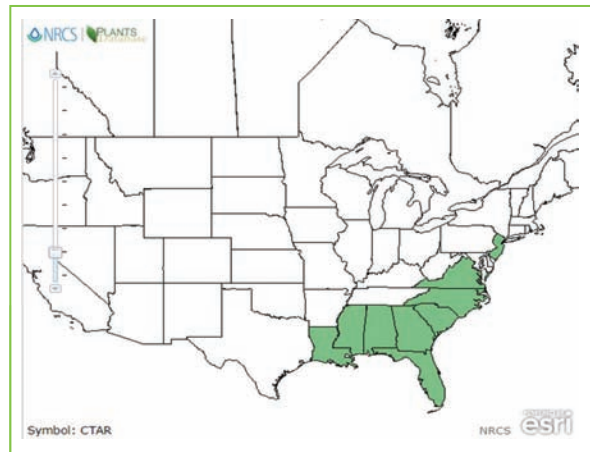
By Carol Denbof, *The Longleaf Alliance*

PLANT SPOTLIGHT

TOOTHACHE GRASS *CTENIUM AROMATICUM* (WALTER) WOOD



Toothache grass in flower in the Florida panhandle. Photo by Carol Denbof.



Map showing distribution of toothache grass. USDA PLANTS Database.



Toothache grass with curled flower stalk in the Blackwater River State Forest. Photo by Ad Platt.

Description

This perennial grass is typically a bunchgrass and can usually be seed growing in clumps of plants. The plants are of significant size with leaf blades measuring up to 16" long and flowering stems rising up to 5'. The leaves are distinctive because the upper side is green and the lower side is more glaucous (blue-green) in color. The flowering stem, which appears in the fall, bears a terminal spike that resembles a comb. As the seeds are released from the stem, the spike starts to curl and will remain upright on the plant through the winter. These stems are sometimes collected to be used in dried flower arrangements.

Distribution & Habitat

Toothache grass occurs throughout the longleaf range. You will find it growing in wet, fire-maintained longleaf savannas and embedded seepage slopes.

Wildlife Uses

Specific wildlife value is uncertain, except for potential seed food source for songbirds. Toothache grass is especially notable for its isobutylamide chemical compound. This compound is found in the rhizome of the plant and causes numbing of the gums and tongue when eaten.

Other common species

In Georgia and Florida, this species may be confused with Florida toothache grass (*Ctenium floridanum*). The latter species tends to grow in drier habitats and is more of a rhizomatous species as opposed to a bunchgrass. Florida toothache grass is also quite rare and is a protected species.

Commercial Availability

Toothache grass has limited commercial availability. Seed and/or plants are available through Roundstone Native Seed, the Florida Wildflower Cooperative, and The Natives nursery.

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. 2015. The PLANTS Database (<http://plants.usda.gov>, 16 November 2015). National Plant Data Team, Greensboro, NC 27401-4901 USA.

By Catherine Rideout, US Fish & Wildlife Service

WILDLIFE SPOTLIGHT

BROWN-HEADED NUTHATCH *SITTA PUSILLA*

One of the many wonderful things about living in the Southeastern US is the fairly moderate climate of the winter months which allows us to get outdoors for hiking, birding, fishing and hunting. When you have the opportunity to take a walk in the woods at this time of year, one bird to listen for is the brown-headed nuthatch. This bird lights up pine habitats even on a cold winter day with a call note many describe as similar to a rubber ducky toy – “chee-da, chee-da”. It is difficult not to be charmed by this active and vocal bird.

The brown-headed nuthatch is endemic to the piney woods of the southeastern US and is a year round resident. It is observed in pine-dominated landscapes including both longleaf and shortleaf pine. The range of this bird lines up very closely with the distribution of these pine forests in the upper and lower coastal plains and the piedmont. This is one of four nuthatch species residing in the United States, including the widely distributed white-breasted and red-breasted nuthatch and pygmy nuthatch, which is similar in looks but dwells in western pine forests.

The brown-headed nuthatch is a small bird, measuring only 4.5 inches long and weighing only 10 grams, approximately the weight of an American half dollar. Despite their tiny size and tendency to spend much time high in the forest canopy, they nest lower in the forest which allows for their frequent observance. These small birds are quite striking with a gray back, wings, and tail. They have white underparts and a brown cap. Their slightly recurved bill allows them to forage on pine seeds and insects which dwell under tree bark. Unlike many other species, nuthatches have a notable tendency to creep along tree trunks and limbs, climbing up and then down in a zig zag fashion.

Many conservationists consider the brown-headed nuthatch as a high priority longleaf species because of its preference for large trees and snags, which are not always retained in our

woodlands and forests. These birds are cavity nesters and prefer well-decayed wood allowing them to excavate their nesting cavities. Nuthatches will also use existing cavities of other species and use nest boxes too. These birds can be seen in larger tracts of forest and woodlands but also reside in suburban areas and are a common visitor to seed and suet feeders.

Research has indicated these birds exhibit cooperative breeding. When adults raise young, ‘helpers’ occur at some percentage of nuthatch territories. Research by Jim Cox and Larry Slater indicates that helpers appear to be closely related to the breeders, potentially young of the previous year. They

assist with nest defense, nest construction, and feeding young of the year. Brown-headed nuthatches continue to be a well-studied bird, so it is likely we’ll continue to learn a great deal about them.

Whether you are a forestland owner or a resident in a suburban area, there are many things you can do to benefit brown-headed nuthatches and other birds. By managing your pine woodlands and implementing prescribed fire and forest thinning as needed, providing a diverse herbaceous and grassy understory, and retaining

larger trees and snags, you benefit nuthatches and other cavity nesting birds such as woodpeckers and chickadees, and other pine woodland species such as northern bobwhite and Bachman’s sparrows. As a suburban resident, providing food, water, and shelter in the form of native plants and a nest box, you can support a diverse number of species on your property. Get outdoors this winter and listen and look for the brown-headed nuthatch!

Reference: Slater, Gary L., and John D. Lloyd, and James H. Withgott and Kinberly G. Smith. 2013. Brown-headed Nuthatch (*Sitta pusilla*), *The Bird of North America Online* (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology.



CLARIFYING THE BLACK PINESNAKE LISTING RULE

By Matt Hinderliter, U.S. Fish and Wildlife Service

*Well-managed longleaf pine habitat suitable for black pinesnakes.
Photo by Matt Hinderliter (USFWS).*

On October 6, 2015, the U.S. Fish and Wildlife Service (Service) listed the black pinesnake as a threatened species under the Endangered Species Act (ESA). This species is native to the longleaf pine ecosystem in south Mississippi and southwestern Alabama. Much like gopher tortoises, black pinesnakes prefer upland, open-canopied longleaf pine forests with a reduced shrub layer, abundant herbaceous groundcover, and well-drained sandy soils. They are a secretive species, spending much of their time underground in stump holes and root channels of burned-out or rotted pine trees. The listing determination was primarily based on threats of habitat loss and fragmentation, occurring as a result of fire suppression and conversion of this ecosystem to densely stocked forests, or agricultural or urban land uses. Secondary threats include road mortality and intentional killing by people. There have been considerable advances in longleaf pine restoration across the Southeast; however, these efforts do not completely overlap the range of the pinesnake, and it may take years of active management for a newly established longleaf pine stand to become pinesnake habitat.

This listing rule includes exemptions from take as authorized under section 4(d) of the ESA, commonly referred to as a 4(d) rule. “Take” is a term used under the ESA to mean harming or killing a listed species. The 4(d) take exemptions were put in place to increase forest management flexibility, by allowing landowners to continue with most normal forestry activities without worrying about possible take of the black pinesnake. Exempted activities include herbicide application, prescribed burning, and most forest management and harvest activities. Such activities, while potentially resulting in harm to a black pinesnake, are much more valuable to the overall conservation of the species and its habitat than the loss of individual snakes.

However, all forest management activities could not be exempted, since to be included in the 4(d) rule, they have to be beneficial to the species’ conservation. Due to the pinesnake’s reliance on underground structures for shelter, activities that may cause significant subsurface disturbance, such as stumping, disking, and bedding could not be exempted. Additionally, since the snake is native to the longleaf pine ecosystem, remaining populations are located primarily in longleaf-dominated forests, and habitat loss is believed to be a major threat; further conversion of longleaf-dominated forests to other cover types could not be included in the list of exempted activities.

This list of exempted activities has caused some confusion among landowners, leading some to believe that if an activity is not exempted, it is prohibited. This is absolutely not the case. If an activity was not determined to be beneficial to the species, it only means the Service could not exempt that activity from take; it does not mean there are now restrictions on it. The Service wants to work with anyone who may be concerned with conducting an activity not exempted from take, to devise a plan to minimize impacts to the species and grant assurances that they are not vulnerable to causing take.

Another concern expressed is that longleaf pine restoration efforts will now be hindered since conversion of longleaf pine forest to other cover types was not an exempted activity. The bottom line is that the 4(d) rule was designed to acknowledge the beneficial management landowners are conducting, and this listing rule is actually less restrictive than previous rules that do not have such exemptions. This rule should have a minimal impact on landowners moving forward and should not impede future longleaf pine restoration. The Service is committed to working with landowners to keep forests working, in the same

way forestry has continued for the past 28 years since the gopher tortoise was listed (which shares similar habitat and geographic range as the black pinesnake). To address concerns that landowners will now be discouraged from converting to longleaf for fear that black pinesnakes may move onto their property, the Service is developing a programmatic Safe Harbor Agreement (SHA), specifically for those landowners whose habitat is not currently in a condition to support pinesnakes (what the Service calls “zero baseline”). Landowners signing up for SHA would agree to manage their lands to create suitable habitat for black pinesnakes, and in return would receive regulatory assurances that they could return to “zero baseline” even if pinesnakes moved onto their property in the future. Under SHA you could convert back to another forest cover type without worrying about take of black pinesnakes.



Adult black pinesnake observed in a longleaf pine stand in south Mississippi. Photo by Tim Dickinson (MS Army National Guard).

Others have expressed concern that listing this longleaf specialist species is a precursor for future positive listing determinations for other longleaf specialists. However, all listing determinations are an independent assessment of threats and their impact on that particular species. The needs of one species do not necessarily mirror the needs of another. By law, the Service must evaluate each species separately, based on the best scientific and commercial data available, and

make a determination based on that data.

If landowners need further clarification on any part of this rule, please don't hesitate to contact either Matt Hinderliter (601-321-1132; matthew_hinderliter@fws.gov) or Stephen Ricks (601-321-1122; stephen_ricks@fws.gov) with the U.S. Fish and Wildlife Service's Mississippi Ecological Services Field Office.

Whitfield Farms & Nursery

SINCE 1996

2561 Lambs Bridge Rd
Twin City, GA 30471

bwhitfield@pineland.net

912-682-4948

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

*Red-cockaded
woodpecker cluster
& foraging habitat
on Apalachicola
National Forest.
Photo by Joel Casto.*

LONGLEAF ALLIANCE JOINS

LONG-TERM RED-COCKADED WOODPECKER TRANSLOCATION PARTNERSHIP

As daylight turned to dusk with the setting sun, the capturing began in earnest. Seven months of hard field work and long hours were now paying off in the Northwest Florida October woods. Once again, for the 12th consecutive year, Joel and a cadre of visiting biologists were going to capture and translocate 10-20 red-cockaded woodpeckers (*Picoides borealis*) in one evening, something Joel and colleagues have accomplished 50 times since 2004.

In 1998, the U.S. Fish and Wildlife Service's (USFWS) Red-cockaded Woodpecker (RCW) Recovery Coordinator (Coordinator) established the RCW Southern Range Translocation Cooperative (SRTC). The SRTC's purpose was to more efficiently allocate the limited number of birds annually available for translocation to the numerous properties/populations (~30) requesting them. Original donor populations included Forts Benning and Stewart and the Apalachicola National Forest. In spite of all partners best efforts, the demand for birds always exceeded the supply – a good sign in one sense in that many entities in the private, state, and federal sectors in Florida, Georgia, Alabama, and Mississippi (SRTC original member states) were willing and able to participate in RCW recovery. The SRTC has expanded in recent years (2008-present) to include North and South Carolina and two new major donor populations, the Osceola National Forest and Eglin Air Force Base; Francis Marion National Forest was also a major donor from 2008-2010.



*Male fledgling red-cockaded
woodpecker. Photo by Danny Bales*

*By Ralph Costa, Wildlife Biologist,
RCWO LLC & Milliken Forestry Company, Inc.*

Significantly, several smaller populations, previous SRTC recipients, also became donors in recent years, e.g., Camp Blanding Training Center and Withlacoochee State Forest. See K. Zilliox's Longleaf Leader article (Volume VII Issue 4) for more detailed information on Eglin AFB's RCW translocation program and more specific details on translocation procedures.

Six years later, in 2004, the Coordinator received a significant phone call. Peter Stangel, then Eastern Partnership Office Director for the National Fish and Wildlife Foundation (NFWF) called to ask what could be done for RCW recovery if grant funds were available. Without hesitation, the response was, "...add another translocation biologist to the SRTC..." It was also suggested that the position be stationed on the Apalachicola National Forest, the largest recovered RCW population already serving as a donor but with more capacity for providing birds. The funds were available thanks to a generous contribution by the Southern Company (SoCo) to NFWF and the subsequent establishment of the Power of Flight (PoF) grant program with NFWF matching the SoCo contribution. Leslie Cox (formerly Montgomery), Environmental Stewardship Program Manager for SoCo, was the champion for helping establish the PoF grant program and subsequently, a key supporter of the RCW translocation component.

The USFWS applied for and received its first PoF grant in 2004 and hired Joel Casto, an experienced RCW wildlife



8-day old red-cockaded woodpecker nestlings. Photo by Danny Bales.

biologist for the job. In 2008 (after 4 years of 1-year grants), with the retirement of the Coordinator and ending of Joel's 4-year federal term appointment, the grant program was shifted to and continued with a new partner, Milliken Forestry Company, Inc. (MFC). Lamar Comalander, then Vice President for MFC and Angus Lafaye, then President of MFC, agreed to "host" the ongoing project. The translocation/grant program under MFC continued for 8 more years (2008 – 2015).

However, for the 2016/2017 PoF grant cycle, RCW projects were shifted to the NFWF Longleaf Stewardship Fund program and therefore required a non-profit partner, something not previously required for PoF grants. I, along with Joel, Lamar, and Angus, am pleased to announce that The Longleaf Alliance is our new non-profit partner for this very successful and critical long-term RCW recovery program! We are particularly excited about this partnership because the RCW translocation program funded by NFWF/SoCo has not only directly benefited RCW recovery but also substantially helped conserve, maintain, or restore ~39,600 acres of longleaf pine since 2004 (Table 1).



Translocation biologist Joel Casto.

Joel and his recipient population biologist partners were now fully engaged in the evening trapping event. Captured birds were all "juveniles" (aka "subadults") banded as 7-10 day old nestlings with unique combinations of colored bands in April and May. Joel had spent the last 4 months (June – September) determining which juveniles were roosting in what cavities, knowing that he needed 20 birds (10 males and 10 females) on this critical, "one-chance to get it right" capture night. Each bird captured would be placed in a transport box, translocated to its new forest that evening (typically in another state), placed and secured (screened) in an artificial cavity in a large mature pine tree, usually longleaf pine. The bird is released at dawn along with its new potential mate, an unrelated bird that was also translocated to the release cluster.

Success of these translocations is determined the following breeding season. In reality, few birds either remain at their release cluster or with their initial potential mate. However, on average and based on 6 years of SRTC translocation results, 50% of the

Metric	Result
RCWs Translocated	38 in 2014; 329 (2004-2014); x=30/Yr.
Total Increase for 21 Populations	219 to 717 territories (188% increase)
5-Year Average Annual Geometric Growth Rate for 21 Populations	7.6% (range 0.5-18.2%) vs. 5.0% recommended in recovery plan
Estimated Recovery Plan Population Goal for 2014	12 of 17 recovery populations meet or exceed 2014 goals; averaging 18.1 years "ahead of schedule"
"Off-line" Populations	17 of 41 (41%) of SRTC locations
Achieved 30 potential breeding groups or their stated population goal	12 of 17 (71%) are PoF sites
Longleaf Pine Acres Conserved, Maintained or Restored	39,600 acres

Table 1: NFWF/SoCo recipient population accomplishments.

birds remain on the recipient property (36% as breeders, 8% as solitary birds, 3% as helpers and 3% as floaters) albeit at a different cluster and with a different bird if it had formed a pair bond (Table 2).

Year (# recipients)	# RCWs (#/%) ¹	PBGs (#/%) ²	Solitary (#/%) ³	Helpers (#/%) ⁴	Floaters (#/%) ⁵
2007 (12)	76 (39/51.3)	32/42.1	1/1.3	2/2.6	4/5.3
2008 (19)	133(71/53.4)	43/32.3	20/15.0	2/1.5	6/4.5
2009 (15)	124 (68/54.8)	52/41.9	12/9.7	2/1.6	2/1.6
2010 (19)	157 (73/46.5)	51/32.5	11/7.0	4/2.5	7/4.5
2011 (14)	124 (63/50.8)	39/31.5	11/8.9	9/7.2	4/3.2
2012 (16)	124 (60/48.4)	47/37.9	9/7.3	4/3.2	0/0.0
Means	123 (62/50.9)	44/36.4	11/8.2	23/3.1	23/3.2

¹Total # of RCWs translocated (# birds successful/% success). Success is determined the first breeding season post-translocation and defined as a bird becoming a breeder, solitary bird (occupying and defending a territory), a helper or a floater (an adult bird not associated with a breeding group)

²# of breeding birds/% success; success is defined as the bird remaining with the same mate in the same cluster for at least 6 months including the breeding season, or there is evidence of nesting (eggs or nestlings present or adults provisioning nestlings).

³# of solitary birds/% success

⁴# of helpers/% success

⁵# of floaters/% success

Table 2: NFWF/SoCo recipient population accomplishments.

After multiple years of receiving birds and in combination with natural reproduction, all NFWF/SoCo recipient populations have increased since 2004 (Table 3). In total, the number of active clusters (i.e., occupied territories) on the 21 (7 federal, 11 state, 3 private) recipient populations had increased from 219 to 717 by 2014. At least 3 recipient populations have been saved from extirpation and 3 new populations have been established. On average, since 2004, the NFWF/SoCo birds provided by the program have annually contributed 27% of the total SRTC available birds. Our goal from 2004 to 2013 was to provide 20 birds annually; Joel averaged an incredible 30! Based on those results we increased our annual goal to 30 birds for 2014 and 2015; Joel provided 38 in 2014! Our goals for the 2016 and 2017 grant with our new Longleaf Alliance partner are 30 birds annually.

This long term, dynamic NFWF/SoCo RCW recovery grant program has over the past 12 years achieved remarkable success. Recipient population accomplishments are summarized in Table 1. Additionally, the bird's conservation effect on overall RCW recovery has been substantial, including:

- Directly augmenting 14 recovery populations and 5 support populations

Agency	# of Populations	State
<i>Federal</i>		
U.S. Forest Service	5	AL, MS, FL
U.S. Fish and Wildlife Service	1	FL
U.S. Air Force	1	FL
<i>State</i>		
Florida Fish and Wildlife Conservation Commission	4	FL
Florida Forest Service	3	FL
Florida Department of Military Affairs	1	FL
St. John's River Water Management District	1	FL
South Florida Water Management District	1	FL
Georgia Department of Natural Resources	1	GA
<i>Private</i>		
Disney's Wilderness Preserve and Park	1	FL
Joseph W. Jones Ecological Research Center	1	GA
St. Joe Land and Timber Company	1	FL

Table 3: NFWF/SoCo red-cockaded woodpecker recipient population.

- Directly/indirectly augmenting 19 designated recovery populations and 11 support populations
- Contributing to down-listing objectives
- Consideration of their range-wide benefits in an ongoing Species Status Assessment

The indirect outcomes of NFWF/SoCo RCWs are also significant, including:

- Increasing total number of SRTC recipient populations served
- Reducing competition among recipient property managers for limited donor RCWs
- Relieving geographic-logistic constraints between donor-recipient populations

By 8:30 pm, Joel and his trapping teams had captured all 20 birds without incident. Final bird identification checks were completed, birds were “paired” with a potential mate (in separate boxes) and loaded into pickup truck cabs for the ride to their new homes; most would be “put to bed” between midnight and 2:00 am. Biologists snoozed for a couple hours somewhere and returned to their assigned cluster at dawn to simultaneously release the pair from their respective cavities; they will return in 6 months (April) to determine who is where and with whom as the birds first potential breeding season approaches.

As noted earlier, Joel, Lamar, Angus and I are honored and pleased to continue this long-term and highly successful NFWF/SoCo endangered species conservation program with our new partner, The Longleaf Alliance.



VESTIGES OF VIRGIN LONGLEAF PINES

Deadhead heart pine section with the logger brand. Photo courtesy of Jon Gould.

By Jon H. Gould, Private Landowner

As a private landowner, part of the enjoyment taken from your land comes from exploring and discovering what the property “once was” and how it has been used over time. Figuring out these mysteries is so important in not only determining how the land should be managed going forward, but also to be able to appreciate the history of your property. Our family owns property in the Florida Panhandle on the Choctawhatchee River. Since acquiring the property in 1966, our family has discovered many pieces of the puzzle that reveal its history, some that have been quite surprising.

This is a property that, like many of the upland forests in the southeastern US, had at one time been filled with virgin longleaf timber. Soon after early settlers started occupying Virginia and the Carolinas they realized the value of the tall majestic native longleaf pines. As the forests of the Midwest and Northeast were over-harvested to build big cities like Chicago, Detroit, Boston, and New York, the northern lumber mills began looking at the Southeast to supply them with timber. Throughout the 1800s and well into the early 1900s nearly all of the virgin longleaf pines were harvested for lumber, starting in southern Virginia and North Carolina and

progressing south. By the late 1800s most of the longleaf were gone from their native Southeast, except for small protected areas of Georgia and the Gulf Coast states.

In Florida the virgin longleaf pines and cypress trees were being stripped from the woods and swamps. The two primary means of transportation of the massive logs was by rail or water. Where rivers and major creeks were nearby, it was common practice to float the logs downstream, tied together in large rafts, to ships waiting to load them for transport to saw mills. By the 1920s most of the virgin longleaf pines had been harvested from Northwest Florida. Many of the local families participated in the harvesting of the longleaf, as well as the cypress trees. In fact, for some of these families this was their livelihood for many years. One of these families was the Croftons who had moved down from south Alabama after the Civil War and settled in Washington County, along the Choctawhatchee River.

Mr. L.C. Crofton was Dad’s attorney when I was growing up in Titusville, FL in the 1940s and 50s. He was born in 1889 and raised in the backwoods of Washington County, FL. He graduated from the University of Florida with a law degree and



Jon Gould standing next to a second generation longleaf. Photo courtesy of Jon Gould.

served as a state representative for both Washington and Brevard Counties. Mr. Crofton used to reminisce about how his father and he and his brothers cut big virgin longleaf pines and cypress trees near the banks of the river in the early 1900s. He said that many of the longleaf pines and cypress trees were 3 to 4 feet in diameter at the butt. They cut logs 60 to 70 feet long and dragged them to the river with their two oxen. They would tie the logs together in a large raft and float them many miles down the river to Choctawhatchee Bay where they were paid a Silver Dollar for each log. One of his favorite places along the river that he often talked about was Lassiter Landing where they liked to camp. Dad had never been to the Florida Panhandle, so he was not familiar with any of the places Mr. Crofton talked about, but he enjoyed hearing about Mr. Crofton growing up in that wild country and how his family made much of their living from logging.

In the 1950s and 60s, the U.S. Government took all of our land on Merritt Island by eminent domain for the original Cape Canaveral Air Force Station and as it expanded the Merritt Island Launch Area for the space program. During that time Dad purchased a large timber tract in Dixie County and left

the Brevard County area. In 1965 a friend of his in real estate in north Florida asked him to ride along as he made a trip to the Panhandle to look at a timber tract he was considering buying. It was at this time that Dad was first introduced to the Panhandle and the Choctawhatchee River. His friend decided not to purchase the timber tract, but Dad liked the land and sale price and that it had a small house, so he purchased it. As he began exploring the property more closely and talking with local people whose families had lived in the area for several generations, he was told there was a boat landing on the property that had been used as a ferry crossing for stage coaches traveling between Tallahassee and Pensacola in the 1830s. When he learned the landing was called Lassiter Landing, named after the family that settled this land in the 1820s, he remembered Mr. Crofton telling stories about camping at this place with his family and rafting logs down the river.

Needless to say, there are no longer first generation virgin longleaf pines on any of this 174-acre timber tract. The natural regeneration and planted longleaf, loblolly, and slash pines have been harvested and replanted several times since the virgin

timber was harvested in the early 1900s. There are a few large (18 to 20 inch DBH) natural longleaf pines that may be second generation pines dating back to the 1930s. These trees are primarily located in about 10 acres of successional forest (likely disturbed little in the last 75 years) and along the edges of major drainage features and in the yard around our house. I have also found many old heart pine stumps of longleaf that once lived on our land. Most of these stumps suggest that the trees were harvested many decades ago utilizing hand tools like axes and two man crosscut saws. Most stumps also show scarring from fire. In most cases the stumps don't show the outline of the original stump, including the sapwood and bark. However, in those cases that do, some of the stumps at the ground surface measure 24 to 36 inches in diameter. One of our past foresters once told me that a good rule of thumb to estimate the diameter of a longleaf pine if only the heart pine remains is to assume that the heart pine is probably somewhere between 30 to 60% of the original diameter. Based on my limited number of measurements in the field, that seems to be a pretty good rule of thumb. I have measured several heartwood only stumps and determined that many of these longleaf pines must have had a DBH in the range of 30 to 48 inches. My

conclusion is that most of the larger stumps are probably the remaining heartwood of first generation virgin longleaf pines.

One of our friends who lives a few miles down the river was raised on the river fishing, hunting, trapping, and catching wild hogs with his specially trained dogs, and generally roaming and camping up and down the river. A few years ago, he got interested in "deadheading," removing the sunken logs of longleaf pines and cypress trees that had been lost while floating them down the river during the late 1800s and early 1900s. He purchased the equipment he needed and obtained the required permits and licenses. One day he called and said he had found a heart pine log at the bottom of the river next to our property. There was a brand on one end of the log which signified the harvester of the log. Many of the loggers would mark the logs they cut with their own brand, much as cattle are branded, so they could be easily identified when being paid.

He gave us a short section of the branded end of the log, and we have preserved it. After all of the years in the water, the brand is not very discernible, so we haven't been able to identify the harvester. I also don't know if the Croftons even had their own brand, but it made me think about their family rafting logs down the river about 100 years ago.

In researching the history of the Crofton family I have also learned that they settled on land only a few miles north of our property in the late 1800s, and also with four other people established Unity Baptist Church, which still has an active congregation. What a coincidence that after knowing Mr. Crofton many years ago on the other side of the state, Dad, and now my wife and I, should end up owning one of Mr. Crofton's favorite boyhood places on a river over 300 miles away. Dad would also live out the last many years of his life on this property, dying at the age of 95. He called this timberland along the river "a paradise" and one of his special places was Lassiter Landing.

Even though none of the virgin longleaf pines remain, we plan to protect some of their more interesting and larger heartwood stumps from future regeneration operations, harvesting of pines, and prescribed fire. These stumps can last for many years, as sort of tombstones reminding us of

the majestic virgin pines that once covered this land. We also plan to protect the remaining second generation longleaf pines, and will continue to plant longleaf seedlings that, hopefully, will someday be big beautiful pines that our children and grandchildren will enjoy and appreciate, as we do today.

People come into landownership from different directions. Some inherit the land, some purchase as a financial investment, and some purchase to invest in the future of a landscape. In our case, our family became forest landowners because of our love of the land and trees, especially pine trees. Regardless of how and why you own land, as a private landowner it's important to learn from the past, appreciate the history of your property, and determine how you can maintain your piece of the earth into the future.



*Large heartwood pine stump.
Photo by Jon Gould.*

DIGGING DEEPER: MANAGING A FOREST THAT INCLUDES GOPHER TORTOISES

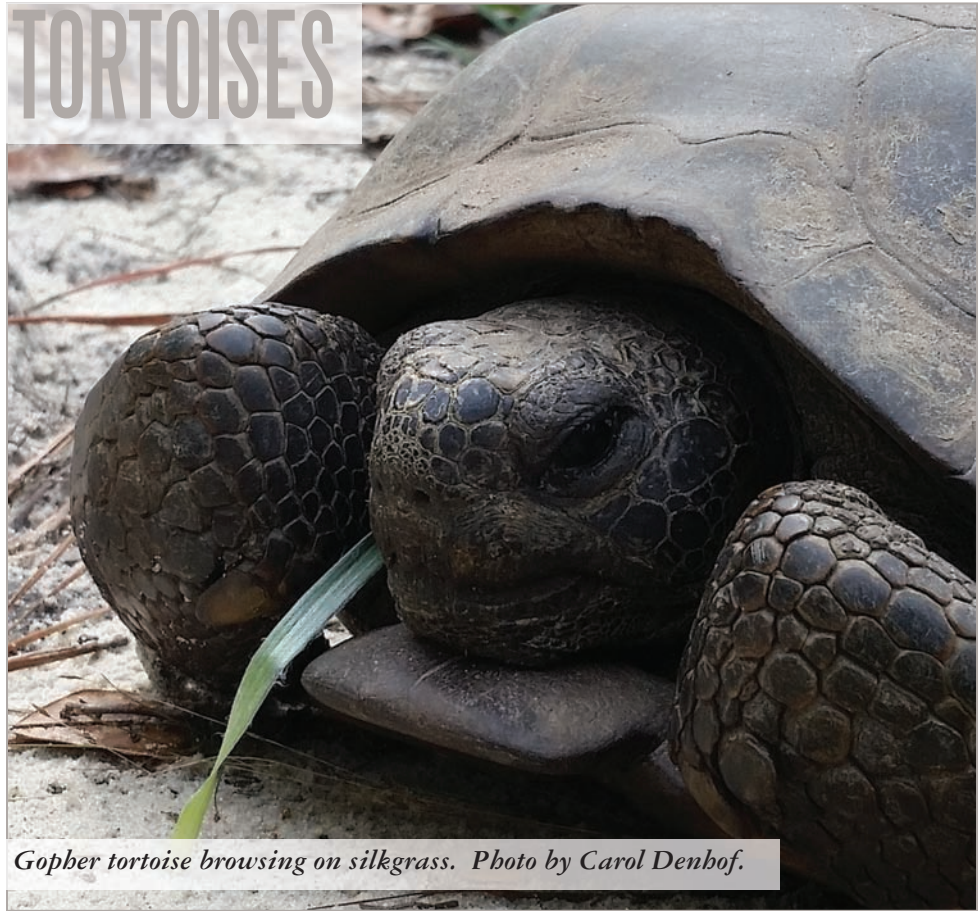
By Ad Platt, *The Longleaf Alliance*

I still remember the first gopher tortoise I ever encountered, though it was many years ago. And each one I've encountered since, though there have been many of all sizes. For me and countless others, the gopher tortoise is one of those gateway creatures that connect many folks to the longleaf ecosystem. The gopher tortoise is also properly referred to as a keystone species, since the way they influence the ecology, structure, and function of their environment also makes it possible for over 360 other species to prosper.

This species is as much a southern icon as the longleaf habitat it prefers, though it can also do well in other managed pine stands. Fortunately, the gopher tortoise still survives across much of its former range and can be fairly common in some locations. But the 80% decline in populations led to formal protection in every state and a federal listing as “threatened” west of the Mobile and Tombigbee Rivers in Alabama. The good news is that protection of this tortoise need not be a problem, especially if a landowner is already actively managing their forest for other values. What benefits the gopher tortoise also benefits many other species of wildlife, especially quail, songbirds, and wild turkey.

The gopher tortoise's needs are basic and easily defined. In the simplest definition, they prefer sites with sandier soils which are well drained and easy to dig in and have an open pine canopy allowing considerable light to reach the ground. This abundant light, along with regular fire, maintains a diverse grassy and herbaceous understory that offers food throughout the growing season that is low enough for them to reach. As Rhett has been fond of saying in his talks, “the dinner table needs to be kept low, as tortoises just can't jump.” Longleaf offers several advantages over other southern pines. It allows more light through the open crown, is tolerant of fire at an early age, and its superior disease, insect and wind resistance enable longleaf stands to be carried into longer rotations.

For the forest manager or landowner, providing for tortoises is straightforward. Know your land, locate (GIS/GPS) and mark known sites so they can be protected. Communicate these



Gopher tortoise browsing on silkgrass. Photo by Carol Denbof.

locations with any contractors on site. Incorporate prescribed fire and other practices that will promote rather than simplify biodiversity and habitat. In any mechanical operations like mowing, harvesting, firelines or road work, keep machinery at least 25' away from burrows. If conducting broadcast herbicide applications on the tract, provide a buffer for their foraging needs, or consider banded applications that cost less and retain 50% of the food and habitat. Find and control exotic invasive species. Fortunately for this iconic species, these practices are easily incorporated and in many cases what you wanted to do anyway.

Gopher tortoises continue to decline overall, and their struggle to survive will require our help. They may live 60 or more years, but a low reproductive rate and continuing declines in habitat work against them. They typically lay only 4 to 8 eggs per year, from April to June, in the apron at the burrow entrance, and these take 80-100 days to develop. Mortality of eggs and hatchlings is often over 90%. Predators are everywhere, and include raccoons, foxes, opossums, armadillos, hawks, snakes, fire ants, coyotes, dogs, pigs, and humans. Invasive species such as cogon grass, kudzu, fire ants, and wild hogs are particularly problematic. Gopher tortoises can and will move to open areas

to avoid overly dense stands or declining habitat. Observing numerous gopher tortoises near your roads or food plots may not be a good sign; you may likely need to implement some practices to provide better habitat. Once you remove the midstory and provide more sunlight on the forest floor, tortoises will readily move away from openings and back into the stands.

An important opportunity to help also comes in the timing of forestry operations. Now that we know the breeding and hatching seasons, we can avoid them. In areas with high populations, log or thin in the winter when possible, buffering the burrows. Gopher tortoise habitat tends to be well suited for winter logging. Prescribed burning is normally conducted in the dormant season for fuel reduction, but transitioning to growing season is even better in longleaf and more effective in controlling hardwood competition and improving habitat. Using what we have shared in the Herbicide & Longleaf 201 Academy, apply your knowledge of herbicides, rates, and timing to deal with specific problems while also improving your habitats.

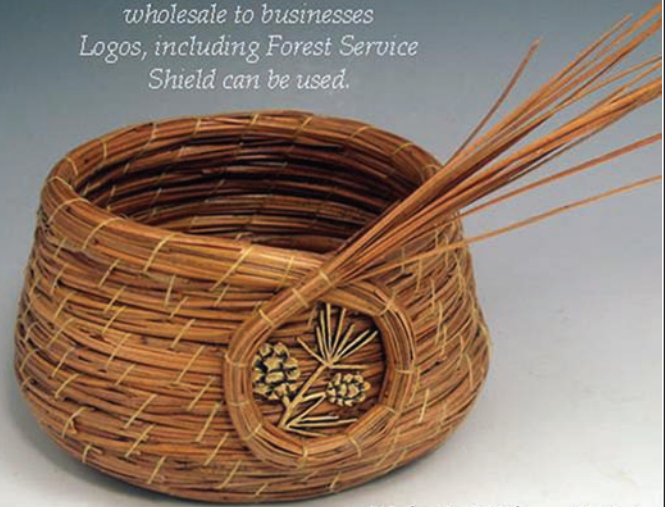
Having gopher tortoises on your land can be to your advantage, especially if you are interested in the numerous financial incentives that have been created to improve habitat conditions for this species. The NRCS has funded programs in each state of the gopher tortoise range (LA, MS, AL, GA, FL, SC) to assist landowners with practices, including longleaf restoration and prescribed burning, that benefit tortoise habitat. The USFWS also has assistance to offer, including the Partners program, and protections for landowners doing the right thing through Candidate Conservation Agreements with Assurances that provide certainty for the landowner while protecting future management options. State agencies across the gopher tortoise range also offer a variety of incentives to promote habitat improvements for this species in recognition of all it does for the longleaf system.

Even casual visitors to tortoise habitats can help. Gopher tortoises know their home well and will try to return if moved, even up to great distances. If you help a tortoise cross a road, try to move it in the same direction it was heading. Leash your dog in tortoise habitat if it shows an active interest before it can cause injury.

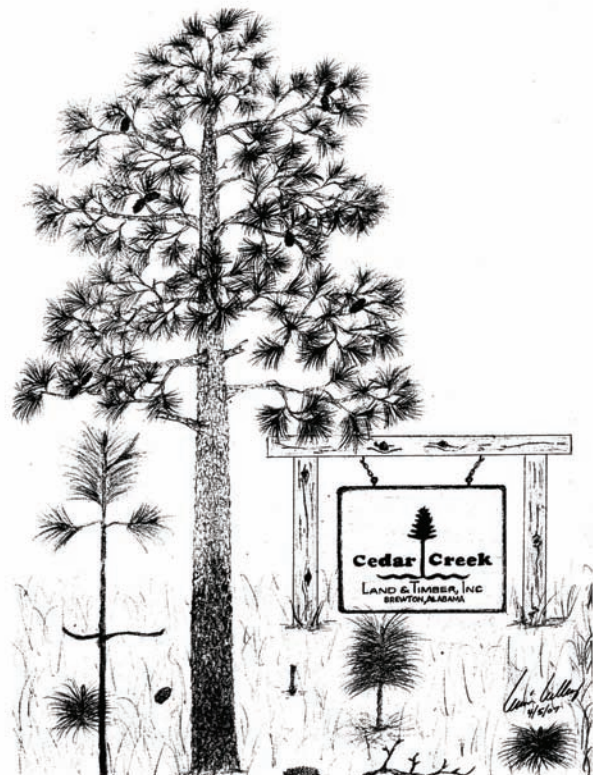
Enabling the gopher tortoise to thrive, rather than just survive, does a lot for a landowner. They perform a huge service in their movement of soil and seeds, while sheltering potentially hundreds of different species of life from heat, fire, and predation in their burrows. Both the tortoise and the many creatures they shelter catch the attentions of the young, or young at heart, and provide a powerful hook to that next generation of longleaf enthusiasts to continue your legacy.

Splendor of the Longleaf Pine

*Baskets, art pieces, project kits, & jewelry.
Retail to individuals or
wholesale to businesses
Logos, including Forest Service
Shield can be used.*



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



By Troy Ettel, *The Nature Conservancy*,
Longleaf Partnership Council Chair

Longleaf Partnership Council Update

LOOKING FORWARD WHILE ACKNOWLEDGING WHERE WE HAVE BEEN: SOME THOUGHTS ABOUT THE JOURNEY TO 8 MILLION ACRES

Transition was the dominant theme of November's Longleaf Regional Partnership Council meeting in Baton Rouge, Louisiana. As I was ushered in as Council Chair for 2016, other impending changes too were on the minds of many.

The frenetic presidential campaign season is a constant reminder that the politics, from which longleaf pine emerged as a fairly constant priority, are changing. The America's Longleaf Restoration Initiative (ALRI) thus far has existed under only one presidential administration, one that prioritized the longleaf pine ecosystem, allowing the formation of the Longleaf Pine Federal

Coordinating Committee (FCC) with membership from the Departments of Defense, Interior, and Agriculture. The FCC members mutually agreed "to provide federal leadership to achieve the goals of America's Longleaf Restoration Initiative."

This leadership has been on display through progression of restoration and management on national forests, wildlife refuges, military bases, and through funding made available to engage private landowners in restoration as well. Although the federal partners have led the way, many state and nongovernmental agencies and private landowners stepped up too.

As we look to what we have accomplished, there is a lot that we should stop, take a deep breath, and appreciate. Today, ALRI rivals the best collaborative conservation initiatives anywhere on the globe. When ALRI was launched with the publishing of the Range-Wide Conservation Plan in 2009, it was generally accepted that only 3.3 million acres of longleaf pine remained across its historic range. Today, we are adding approximately 150,000 acres of longleaf pine range wide annually, a major achievement, with the majority of those gains (>75%) seen on private lands. The best, most recent estimates put current total longleaf pine forest acreage at approximately 4.7 million acres. So, the current pace, while laudable, will not allow the ALRI partners to reach our 8-million-acre goal by 2025.

What does that mean to the partnership and the future of



Smoke rises during a prescribed fire in a mixed slash/longleaf pine forest on the Osceola National Forest in northern Florida. Using authorities like the Stewardship Authority and the Collaborative Forest Landscape Restoration Program, innovative managers like district ranger Ivan Green continue to accelerate longleaf pine restoration. Photo by Sherry Crawley – TNC.

longleaf pine restoration, especially given this time of transition? Could the argument be made that the proverbial "low hanging fruit" is behind us? Will the next 3.3 million acres be harder to get?

First and foremost, we have to be thinking about a strategy for engaging the new administration; this must be a continual dialogue over the course of the next year. We cannot afford to miss our opportunity to keep the foot on the gas pedal. We have to listen to our federal partners to see how we can effectively and appropriately do that, and then we each must play our part. Secondly, we cannot just maintain our

foot on the accelerator; we have to push it down harder. All of us that are partners in the restoration and conservation of longleaf pine must ask what more can we do, within our agencies and ourselves, to dig a little deeper and find a way to increase the pace of restoration even above the impressive rate that we are at today.

This might require new programs, such as one that targets the rehabilitation of private forestland that has some longleaf component, but perhaps not a dominant one. Such forests can more quickly and affordably be steered in the right direction with management and fire. The strategy will also require public agencies to look more closely at how they can quicken the pace and advance restoration on acres appropriate for longleaf. Of course these things do not happen in a vacuum; we must all play a part.

I found that remarks made by Frank Beum, the Director of Forest Management for the Forest Service's Southern Region, provided a great example of what we all must do. Frank said that the Regional Forester, Tony Tooke, will be looking at ways to set stretch goals for restoration in the Southern Region for the next year that utilize existing authorities to accelerate the current pace. It won't be easy, but we need to look similarly at everything that we are currently doing for longleaf pine for opportunities that might allow us to do the same.

Apalachicola Regional Stewardship Alliance (ARSA) Update: Local Conservation

Alliance Scores a Big Win in Washington *By Brian Pelc, Restoration Project Manager, The Nature Conservancy*



Rep. Gwen Graham assists staff from USFS and TNC on a cooperative prescribed burn day at Apalachicola National Forest. Photo by D.Keller.

Requests from the elected representative to the US Congress don't come every day, so when Rep. Gwen Graham wondered if a workday could be organized in the ARSA region the affirmative answer came fast. With only a couple of days' planning, three options emerged for the specified date including a prescribed fire on the Apalachicola National Forest, a wiregrass planting project, and a Longleaf Pine Landowner's Workshop. Rep. Graham was ultimately treated to great weather and an exciting day burning flatwoods on the Wakulla Ranger District. This was more than a feel good publicity stunt. Five days after Rep. Graham's day in the woods, she formally signed on to co-sponsor a reauthorization of the Land and Water Conservation Fund and has committed her support to the Wildfire Disaster Funding Act.

In other news, ARSA members are excited to offer a brand new resource: *Managing Longleaf Habitat: a North Florida Landowner's Guide*. This 75-page book lays out longleaf management for private or public managers and is free of charge thanks to the generous support of the National Fish and Wildlife Foundation and Southern Company through a grant from the Longleaf Stewardship Fund.

Wilmington's "Fire in the Pines Festival" is Big Success

By Debbie Crane, The Nature Conservancy



Smokey Bear watches a controlled burn at the Fire in the Pines Festival. Photo © Jessie Birckhead/TNC.

Four thousand people learned about the importance of controlled burning during October's "Fire in the Pines Festival" in Wilmington, North Carolina. The highlight of the festival was a successful controlled burn, which was lit by local television meteorologist Gabrielle Deabler. Of course, another celebrity – Smokey Bear – was also on hand for the event.

This is the sixth "Fire in the Pines Festival," the second held at Halyburton Park in Wilmington. Organizers say moving the festival to a more urban setting has helped boost attendance. Originally, the festival was held in a smaller town about 30 miles from Wilmington.

The festival is a family event – including kid-friendly activities such as face painting, crafting, and hayrides as well as displays of live raptors and reptiles. The N.C. Forest Service provided some of the most popular displays – including a giant Smokey and a helicopter.

In return for a beach bike raffle ticket, attendees were encouraged to fill out a survey regarding their attitude toward controlled burning and how they found out about the festival. Nearly 90 percent of those surveyed agreed that controlled burns reduced wildfires, benefited plants and animals, and could be conducted

safely. Although organizers had paid for some print and radio advertising, the majority of attendees said they found out about the festival from a friend or via Facebook.

Event sponsors include The Nature Conservancy, National Fish and Wildlife Foundation, PepsiCo, International Paper, and the North Carolina Prescribed Fire Council. For more details about the event contact the Conservancy's Angie Carl or Zach West at (910) 395-5000.

News from the Chattahoochee Fall Line Conservation Partnership (CFLCP)

By LuAnn Craighton, *The Nature Conservancy – Georgia Chapter*



CFLCP Full Partnership Meeting participants discuss longleaf restoration strategies for a predominantly pastureland site. Photo by L. Craighton.

In late August, the CFLCP hosted a Steering Committee meeting at Oxbow Meadows Environmental Learning Center in Columbus, Georgia. The agenda focused on discussing the best strategy and process to continue to develop the draft Conservation Plan for the CFLCP.

Following the morning Steering Committee meeting, the CFLCP hosted an afternoon Full Partnership Meeting. Nearly 60 participants, representing 26 organizations/affiliations attended. The goal of the annual Full Partnership Meeting is to incorporate an expanding affiliation of individuals and organizations into the current and future activities of the Partnership. The meeting agenda included updates on land protection, stewardship progress, outreach programs, and funding activities along the Chattahoochee Fall Line. Recently awarded National Fish and Wildlife Foundation (NFWF) funding will support the CFLCP working more actively in the Alabama region of the Fall Line. The Full Partnership meeting agenda reflected this expanding

group of partners and included presentations from Tuskegee University's Carver Integrative Sustainability Center and Tuskegee National Forest. Dr. Edward Lowenstein, School of Forestry and Wildlife Sciences-Auburn University, also reviewed Proportional-B, an Alternative Approach to Selection Silviculture.

The next morning, the Full Partnership meeting continued with a field trip to Oakland Farm, a landholding owned by The Nature Conservancy, which is a key "connector" tract or hub in the Army Compatible Use Buffer (ACUB) landscape around Ft. Benning. The meeting concluded with lunch at the new Chattahoochee Fall Line Wildlife Management Area (CFL WMA) with Georgia Department of Natural Resources staff providing highlights from the first year of operation. The CFL WMA opened in 2014, is co-owned and co-managed by the Georgia Department of Natural Resource and The Nature Conservancy and is managed with an emphasis on longleaf ecosystem restoration.

Altama Plantation Permanently Protected by The Nature Conservancy and GA Department of Natural Resources

By Randy Tate, *The Longleaf Alliance*



Gopher tortoise on Altama Plantation. Photo by Jacob Thompson.

Several partners within the Ft. Stewart/Altamaha Longleaf Partnership have come together to complete another major land protection project along the Altamaha River. The Nature Conservancy, US Fish and Wildlife Service, US Marine Corps/Navy, GA DNR, and two private foundations have pooled resources to purchase and permanently protect Altama Plantation, a 3,986-acre tract that contains longleaf/wiregrass communities and a good population of gopher tortoises.

Altama Plantation is an important asset to Georgia's natural, outdoor and historical heritage. Altama consists of 1,800 acres of uplands, including 1,500 acres of longleaf pine –wiregrass, and flatwoods in near-pristine condition (and to be restored). Gopher tortoise and other important wildlife are common to the site. Also on site is 2,140 acres of pristine wetlands, including the globally rare tidal bottomland hardwood forest. Managed as a private hunting retreat since 1914, the public will be excited to access Altama's scenic forests and well maintained natural habitats. Located in Glynn County near Interstate 95, it will be easily accessible to the region's hunters and outdoor recreationists. Altama (an early spelling of Altamaha) and its owners' place in Georgia history are significant and noteworthy. Acquired first in 1763 via a Crown Grant of England to William Hopeton of South Carolina, it eventually was converted into an iconic southern plantation by James Hamilton Couper, complete with an intricate system of dikes, canals and tidal floodgates for growing rice and a moveable rail system for transporting crops. Couper became famous for scientific, cultural, architectural, and other contributions including leading the survey for the Georgia-Florida boundary and designing Christ Church in Savannah. The indigo snake's scientific name, *Drymarchon couperi*, is named for Couper, as the first recorded specimen was collected by him in 1842 on the grounds of Altama.

Gulf Coastal Plain Ecosystem Partnership (GCPEP) Welcomes Resource Management Service as New Partner *By Vernon Compton, The Longleaf Alliance*



A longleaf stand being managed with prescribed fire on RMS land in the GCPEP landscape. Photo by Jimmy Bullock, RMS.

Partners were pleased recently to add Resource Management Service, LLC (RMS) as the 13th and newest partner to GCPEP. RMS becomes the largest private landowner in the partnership with 205,000 acres in a working forest called Coastal Headwaters Forest. The majority of the lands are in three contiguous blocks found in northwest Florida and south Alabama. With the addition of RMS to GCPEP, partners now have over 1.25 million acres enrolled in the collaborative conservation effort.

RMS is working with federal, state, and private partners in an effort to restore the Coastal Headwaters Forest back to longleaf pine through the use of conservation easements. Besides planting longleaf pine on appropriate soils, RMS plans to use prescribed fire and employ longer forest stand rotations, all while maintaining an economically viable forest with

the numerous jobs, markets, and local community benefits associated with it. Restoring longleaf on RMS lands would permanently protect a vast working forestland across portions of major watersheds in Alabama and Florida.

The Range-Wide Conservation Plan for Longleaf Pine recognized the very important role that private landowners would play in re-establishing longleaf pine across its historic range. It was also recognized that both small and large private landowners would be crucial in the recovery effort if the goal of 8 million acres of longleaf pine was to be reached. Restoration of longleaf on RMS lands would of course help to reach that goal, and would do so in one of the landscapes recognized as a priority for recovery of the species. In addition to longleaf recovery, other benefits would include maintaining an economically viable and sustainable working forest, protecting water quality and quantity, and enhancing and maintaining habitat for imperiled and at risk species. Benefits to one such species, the gopher tortoise, can already be seen through longleaf restoration efforts completed to date.

A hearty welcome to RMS and our thanks to RMS and the many partners already working in collaboration to assist with the recovery of the longleaf ecosystem on their lands. A special thanks to The Conservation Fund, the National Fish and Wildlife Foundation, and the Regional Conservation Partnership Program of the Natural Resources Conservation Service for the essential support they have provided to date in this important effort.

Private lands conversion supported by National Fish & Wildlife Foundation (NFWF) and Louisiana Longleaf Implementation Team *By Dan Ryan, The Nature Conservancy*



Mixed pine forest in transition to longleaf dominated stand. Photo by The Nature Conservancy.

The West Central Louisiana Ecosystem Conservation Project (WLEP) initiated a partnership with The Ecological Forestry Center of Louisiana established by the A. J. and Nona Trigg Hodges Foundation (The Foundation). The Foundation has begun an aggressive restoration effort utilizing prescribed fire, reforestation, and herbicide on approximately 4000 acres of forest in Sabine Parish located in west central Louisiana. Formally longleaf forest, today slash and loblolly pine are being removed and replaced with longleaf. A cost share agreement provided to the Foundation by WLEP leveraged NFWF funds matched by the landowner to apply herbicide to heavy woody brush on 847 acres of emerging longleaf forest. The restoration effort is already paying off, and in some areas thousands of longleaf seedlings are observed in the ground layer.

The Foundation desires to make the forest available to research and for education at all levels. The Louisiana Chapter of The Nature Conservancy has established survey plots in the area to track the effectiveness of the treatment. The question of

how best to control undesirable brush while maintaining and promoting diverse, native ground cover vegetation in longleaf restoration is one that land managers in the region are attempting to resolve.

Safe Harbor Program Celebrates 20th Anniversary

By Susan Miller, US Fish & Wildlife Service



Attendees of the 20th Anniversary Safe Harbor Program event. Photo by Karen Anderson/USFWS.

mature pine forests. Safe Harbor Agreements now help protect 5.2 million acres of habitat for nearly 90 species in 26 states. In addition to birds, these agreements also protect habitat for endangered and threatened mammals, fish, amphibians and reptiles, mussels, butterflies and other insects, and plants. All because of a program that began in the North Carolina Sandhills 20 years ago!

The U.S. Fish and Wildlife Service, landowners, and cooperators recently celebrated the 20th anniversary of the Safe Harbor Program, which began in the North Carolina Sandhills in 1995. That first Safe Harbor Agreement was designed to engage non-federal landowners in managing their longleaf pine habitat to benefit the federally endangered red-cockaded woodpecker. Safe Harbor was, and remains, a great idea – allowing property owners to enter into a voluntary agreement to protect habitat for a species listed under the Endangered Species Act without worrying that their management actions may lead to additional land use restrictions. Today 120 landowners have enrolled in the North Carolina Sandhills Safe Harbor Program, protecting more than 62,500 habitat acres on golf courses, town parks, residential areas, scout camps, horse farms, and school property. Range-wide, today seven Safe Harbor Agreements benefit this woodpecker which makes its home in

It's a Zoo Out There!

Alan Dozier, Coordinator, Okefenokee and Osceola Local Implementation Team (O2LIT)



The Pulaski Award trophy. Photo by Terri Jenkins.

Based on a referral from The Longleaf Alliance, the O2LIT initiated outreach to the horticultural staff at the Jacksonville Zoo and Gardens. The intent was to facilitate a growing conservation effort on the part of the Zoo by pairing the horticultural staff with a conservation minded landowner interested in longleaf. Lucretia Norman owns a mostly loblolly pine plantation which she plans to gradually convert to longleaf ecosystem. Her desire is to have a natural forest suitable for both pollinators and to serve as an educational site for how to restore a natural forest. The Zoo offers their horticultural staff of 15 personnel with a diverse set of skills, funding, greenhouse and nursery plant propagation, and manpower for off-site projects including longleaf pine restoration. Staff at the Zoo were also very interested in learning about prescribed fire. The next step decided during the meeting is for Ms. Norman to invite the staff up for a visit on her next prescribed burn.

In other news, The South Georgia-North Florida Fire Initiative has been named recipient of the 2015 Pulaski Award. The Pulaski is awarded each year by the National Interagency Fire Center to recognize outstanding work in the field of fire management. Okefenokee National Wildlife Refuge manager Michael Lusk recognized the role of O2LIT in promoting longleaf pine and good fire management. The Greater Okefenokee Association of Landowners will conduct a presentation ceremony at their upcoming group meeting with the Department of

Interior's Director of the Office of Wildland Fire, Jim Douglas, presenting the award.

Sewee Longleaf Conservation Cooperative Update

By Tom Dooley, *The Nature Conservancy*



Longleaf restoration on TNC property certified by FSC in Berkeley County, SC. Photo by Colette Degarady.

In 2014, The Nature Conservancy of South Carolina (TNC) certified more than 2,000 acres of forestland with the Forest Stewardship Council (FSC) on 3 tracts of land within the Sewee Longleaf Conservation Cooperative (SLCC). TNC partnered with International Paper's Certified Forest Management Group, LLC to certify the forestlands. Presently, more than 1,000 acres of longleaf pine forests are being actively restored across the three tracts. Certifying the forests was a sensible choice for TNC, as the mission and guiding principles of FSC Forest Management directly align with the practices involved in restoring longleaf pine forests across its historic range. Restoration and maintenance of longleaf pine forests is inherently responsible forest management. FSC sets standards for responsible forest management, ensuring forest products originate from forests that provide environmental, social and economic benefits.

FSC Forest Management certification allows for typical forest management practices associated with restoring and maintaining longleaf pine forests. These practices include the use of chemicals, planting practices, silvicultural treatments and, of course, burning. Based on TNC's experience, owning and managing a FSC-certified forest is no more onerous than a forest with no certification. Planning and documentation of activities are essential to ensuring FSC Forest Management Certification compliance, which is usual practice for many programs associated with longleaf pine forest management.

Increasing awareness and demand by consumers for sustainable, responsibly managed forest products have pressured many major companies to develop policies stating a preference for FSC-certified products. This demand will only grow over time. With the wave of longleaf pine forests being established in the southeastern U.S., certifying forest management practices is not only the sensible thing, it is the right thing.

SoLoACE Longleaf Partnership Update

By Bobby Franklin, *The Longleaf Alliance*

So far fall has been uncharacteristically warm and wet in the Southern Low Country and ACE Basin (SoLoACE) Longleaf Partnership region. Early October saw us get part of the historic deluge that hit South Carolina with record flooding. Fortunately, most of the SoLoACE region was spared the severe flooding and road damage that impacted much of the coastal plain of South Carolina.

In August 2015, SC Department of Natural Resources (SCDNR) installed 13 artificial cavities in large longleaf pines at the Aiken Gopher Tortoise Heritage Preserve. This work was funded by a grant from the National Fish and Wildlife Foundation (NFWF), International Paper (IP), US Fish & Wildlife Service (USFWS), and Natural Resources Conservation Service (NRCS) and was administered by The Longleaf Alliance.

The September 23 field day at Clarendon Plantation in Beaufort County that we co-sponsored with the SC Prescribed Fire Council was attended by 90 landowners, land managers, and natural resource professionals. The next day's annual Fire Council meeting in Walterboro was attended by 150.

In addition, we have been awarded a Conservation Innovation Grant by the SC NRCS. Through this grant, we will be able to work with 20 landowners within the project area, assisting them with the training and logistics necessary to burn at least 25 acres of pineland on their property. We are also assisting the USFWS in administering the Partners Cost-Share Program for Longleaf Pine in the SC areas that are outside of the LITs. We are continuing to work with landowners to cost-share planting of longleaf pine and now cost-sharing of prescribed burning in longleaf pine forests.

We are grateful to SC NRCS, NFWF, IP, and USDA NRCS for the funding to make this work possible. SoLoACE Longleaf Partnership would not exist without the cooperation & teamwork from the following partners: The Longleaf Alliance, Clemson University, Ducks Unlimited, Hitchcock Woods Foundation, National Wild Turkey Federation, NRCS, The Nature Conservancy, Nemours Wildlife Foundation, Open Land Trust, SCDNR, South Carolina Forestry Commission, USFWS, U.S. Forest Service, and Savannah River Forest Station.

Texas Longleaf Implementation Team Update

By Kent Evans, Coordinator, Texas Longleaf Implementation Team



Landowner Amanda Haralson and family (Tyler County, Texas) hosted a site visit by a cadre from our LIT: The Nature Conservancy, US Forest Service, Texas Parks and Wildlife, Texas A&M Forest Service, NRCS, International Paper and Resource Management Services

The Texas Longleaf Implementation Team is organized around a Declaration of Partnership by 15 conservation organizations committed to working together in accelerating longleaf restoration inside two significant geographic areas of east Texas: Longleaf Ridge and Big Thicket. Grants from National Fish & Wildlife Foundation (NFWF) and International Paper (IP) Forestland Stewards administered through Texas A&M Forest Service allow our team to provide technical assistance and cost share for landowners that will establish new stands of longleaf pine or enhance existing stands with burning and competition control. The soggy spring and scorching summer delayed some projects, but our team has completed numerous landowner site visits and workshops. Included in restoration efforts is the challenge for the Team and landowners to address how best to establish and enhance the desired herbaceous understory grasses and forbs native to east Texas. Landowners are benefitting by having a cadre from our team visit their land and exchange information and experience with them. Some visits are done in association with the draft review of a Forest Stewardship Plan prepared by Texas A&M Forest Service.

Those plans serve as excellent baseline documents for discussion on alternative ways to do site prep, enhance existing longleaf, or to develop a burn rotation. Several owners arranged for their consulting forester, biologist, and burn contractor to join our cadre visit to discuss challenges they are facing with restoration objectives. We have completed five site visits to provide assistance on lands that represent approximately 6,000 acres of private land in the Longleaf Ridge SGA.

Our professional staff can assist you in your turn-key Silvicultural Programs:

PRESCRIPTIONS

FERTILIZATION • TREE PLANTING

HERBICIDE APPLICATIONS

(including Site Prep, Release and Herbaceous Weed Control)



CPS offers customized services to facilitate the management of your forest in an environmentally responsible manner, utilizing the concepts of sustainability and "Best Management Practices".



Arkansas/Oklahoma
Greg Hay: (501) 908-2255

North Carolina
Jeff Tapley: (804) 514-7546

Coastal Georgia
Freddy Dennis: (912) 565-7777

North Mississippi
Nathan Traywick: (601) 503-6080

Florida
Jeremy Miller: (386) 623-0754

South Alabama
Randy Rilling: (251) 363-2173

Georgia/ East Tennessee
John Wood: (706) 224-4240


South Carolina
Greg Boozer: (803) 351-2768

Mississippi/ East Louisiana
Lendel Schutzman: (318) 680-5866

Texas/West Louisiana
Jon Lunsford: (936) 433-5460

North Alabama
Dean Gillespie: (334) 322-7849

Virginia
Doug Pond: (804) 241-8118



Several members of a management team conducting longleaf new germinant counts in DeSoto National Forest, MS.

By Ryan Mitchell, The Longleaf Alliance

THE LONGLEAF ACADEMY PROGRAM

In 2008, The Longleaf Alliance introduced the Longleaf Academy program. Designed to better prepare natural resource professionals and private landowners, the course provided knowledgeable technical assistance in the areas of longleaf restoration, management, and management problems specific to longleaf forests. An additional focus was to create a uniformly well-informed network of longleaf managers to extend the reach of The Longleaf Alliance. This flagship academy, Longleaf 101, offers the essential foundation anyone investing in longleaf needs to know to ensure success. Three years later, in response to the demand from Longleaf 101 graduates, The Alliance began to develop in-depth academies focusing on single topics. Currently the advanced academies consist of three 201 level and one 301 level academy. These include Understory 201, Herbicides & Longleaf 201, Fire & Longleaf 201, and Gopher Tortoise 301. Understory 201 provides an introduction to some of the most important plant families of a healthy native understory and shares techniques for successful restoration and management. During Herbicides & Longleaf 201, attendees learn about herbicide selections and their respective use for ecological restoration specifically in longleaf pine forests. The Fire & Longleaf 201 academy was created to provide training in how to better apply fire for beneficial effect in managing longleaf systems. Finally, Gopher Tortoise 301 is conducted on a request only basis and covers the biological needs and management of the gopher tortoise, a keystone species.

At the end of fiscal year 2014, The Alliance had held a total of 46 Longleaf Academies, conducted in every state of the historic range of longleaf except Texas and Virginia. We began fiscal year 2015 with the goal of growing the program and conducting an unprecedented 10 academies to better meet the demands for training across the range. The Alliance partnered with different Longleaf Implementation Teams (LITs) to conduct some of these academies. The seventeen LITs are tasked with coordinating longleaf restoration efforts in their regions and have the best working knowledge of their local areas and the education and outreach needs, so partnering was a natural fit. We worked with the West-Central Louisiana Ecosystem Conservation Partnership, Ocala Local Implementation Team, Chattahoochee Fall Line Conservation Partnership (two academies), SoLoACE Longleaf Partnership (two academies), Mississippi Longleaf Coordination Team, and Talladega Mountain Longleaf Conservation Partnership during 2015.

With the recognized success of this training approach, The Longleaf Alliance received a generous grant from a private foundation in February of 2014 to expand our Longleaf Academy program. We have been able to apply a portion of this grant to each academy and extend the support from other partners (including the previously mentioned LITs). This unrestricted support allows The Alliance to hold academies in areas we may not have been able to reach otherwise, and to keep

the registration costs significantly lower. It is a great synergetic relationship that allows us to further longleaf restoration through outreach and education.

The inaugural debut of the Fire & Longleaf 201 academy was held in Garnett, SC this past August at the Webb Wildlife Center. We partnered with the SoLoACE Longleaf Partnership for this academy. This course was requested to help landowners and managers better apply prescribed fire for best effect in longleaf pine forests. The topics included: basics of fire physics, fire weather, burning techniques, useful tools to acquire, burning young longleaf stands, returning fire to long unburned stands, writing burn plans, and the basics of smoke management, among other topics. In addition to the in-depth



The inaugural Fire & Longleaf 201 academy class immediately after the prescribed burn.

classroom work, students were tasked with developing management plans for their 'landowners' during their Management Scenarios. The weather cooperated and the SCDNR staff was able to conduct a 62-acre growing-season prescribed burn during the field trip portion. This was the first time many of the attendees had observed a growing-season burn, and the feedback and evaluations showed it was a hit.

The Longleaf Alliance successfully held 10 academies this past fiscal year: five Longleaf 101 academies, three Herbicides & Longleaf 201 academies, one Understory 201 academy, and one Fire & Longleaf 201 academy. At time of press, The Longleaf Alliance had completed three academies in FY2016, with another eight scheduled (listed in sidebar). As landowner interest in longleaf restoration continues to grow, we continue to expand the training we offer to meet their needs. Our many great partners help make it possible. So 2016 will be a new record year if we can conduct all 11 planned academies.

We are currently developing the next Longleaf Academy, the Legacy 201, which will focus on techniques for successful generational transfer. Look for this academy to debut in late 2016.

Upcoming Longleaf Academies

Jan. 12-14, 2016 – Longleaf 101
Woodworth, Louisiana - Full

Jan 19-21, 2016 – Longleaf 101
Brookeland, Texas

Feb. 17-19, 2016 – Longleaf 101
Tifton, Georgia

Mar. 7-9, 2016 – Longleaf 101
Tuskegee, Alabama

Apr. 5-7, 2016 – Longleaf 101
North Carolina

Apr. 26-28, 2016 – Longleaf 101
Cheraw, South Carolina

May 17-19, 2016 – Longleaf 101
Ft. Stewart, Georgia

June 7-9, 2016 – Longleaf 101
Alabama or Florida

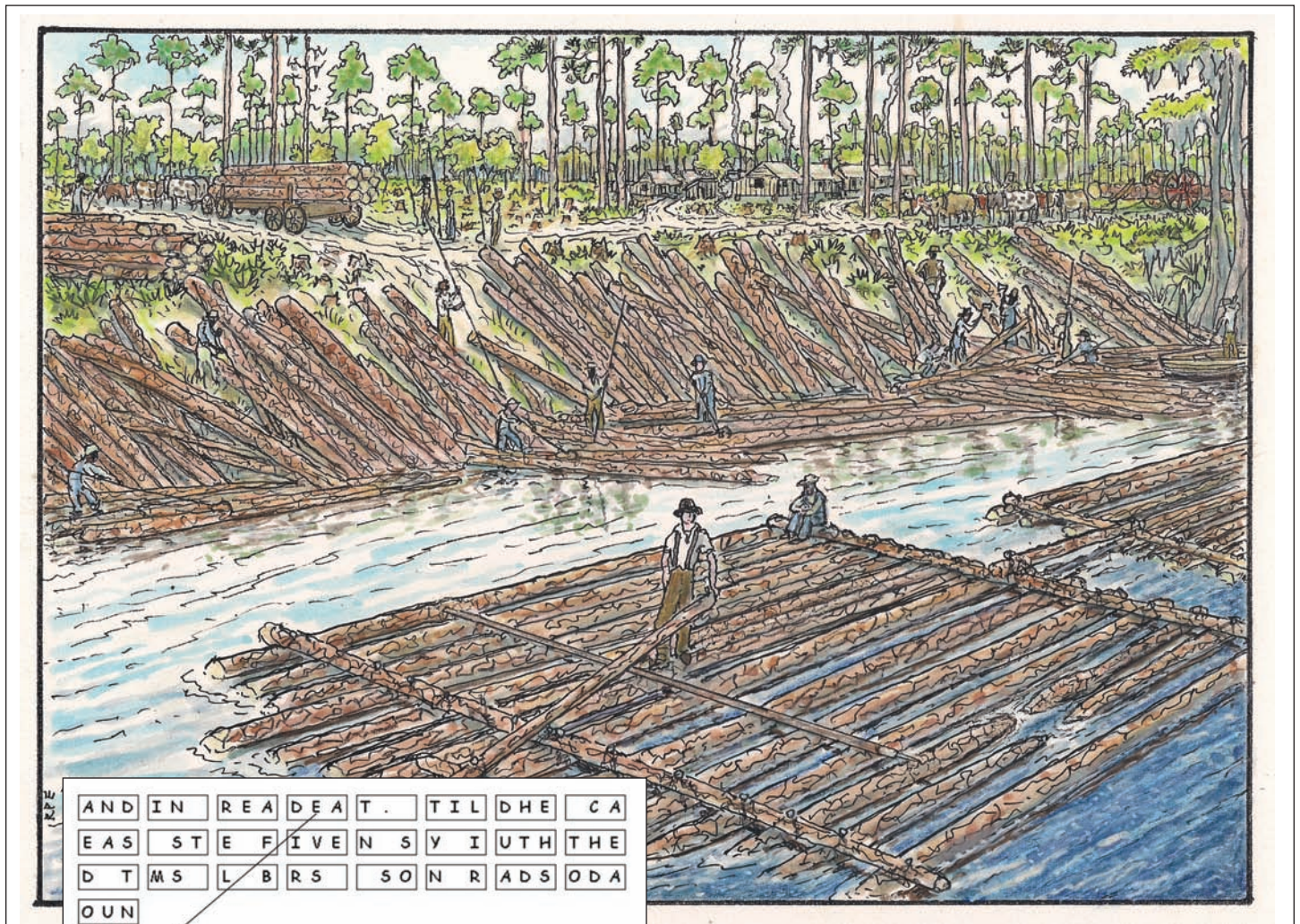
Thanks to our Partners who made this possible!

National Fish and Wildlife Foundation
Southern Company
The Nature Conservancy
South Carolina Forestry Commission
Florida Forest Service
Louisiana Department of Wildlife & Fisheries
Meeks Farm & Nursery
Mississippi State University
National Wild Turkey Federation
South Carolina Prescribed Fire Council
South Carolina Tree Farm Committee
US Army at Fort Benning

While you're in the Grass stage...

Grass Stage is a section just for kids and/or kids-at-heart. Longleaf forest management is a long-term endeavor; in order to keep the longleaf pine ecosystem in longleaf, the next generation must get engaged or else all of the hard work, restoration, and protection currently going on will be for naught. We hope you share Grass Stage with your "next generation" longleaf enthusiast.

Lesson Eighteen: A little over 100 years ago, there were no trucks and few railroads. Those roadways that did exist were often overused, dirt roads with many potholes. In those days, horses, carriages, and gopher tortoises were often the only traffic. When logging, heavy items like logs had to be floated or carried on boats if they were to be moved very far. Rivers were the highways of the time. Use Lesson Eighteen found on our website (www.longleafalliance.org/next-generation) to help unscramble the tiles to reveal the message. Answers can be found below the picture.



AND	IN	READ	DEAT	TIL	DHE	CA
EAS	STE	FIVE	N S	Y I	UTH	THE
D T	MS	L B	RS	SON	R ADS	ODA
OUN						

Answer
Deadheads can still be found today in rivers and streams
in the Southeast.

LITERARY REVIEW

By Robert Abernethy, *The Longleaf Alliance*

Tar Heels: North Carolina's Forgotten Economy: Pitch, Tar, Turpentine & Longleaf Pines

By Kent Wrench

2014, CreateSpace, Charleston, SC.

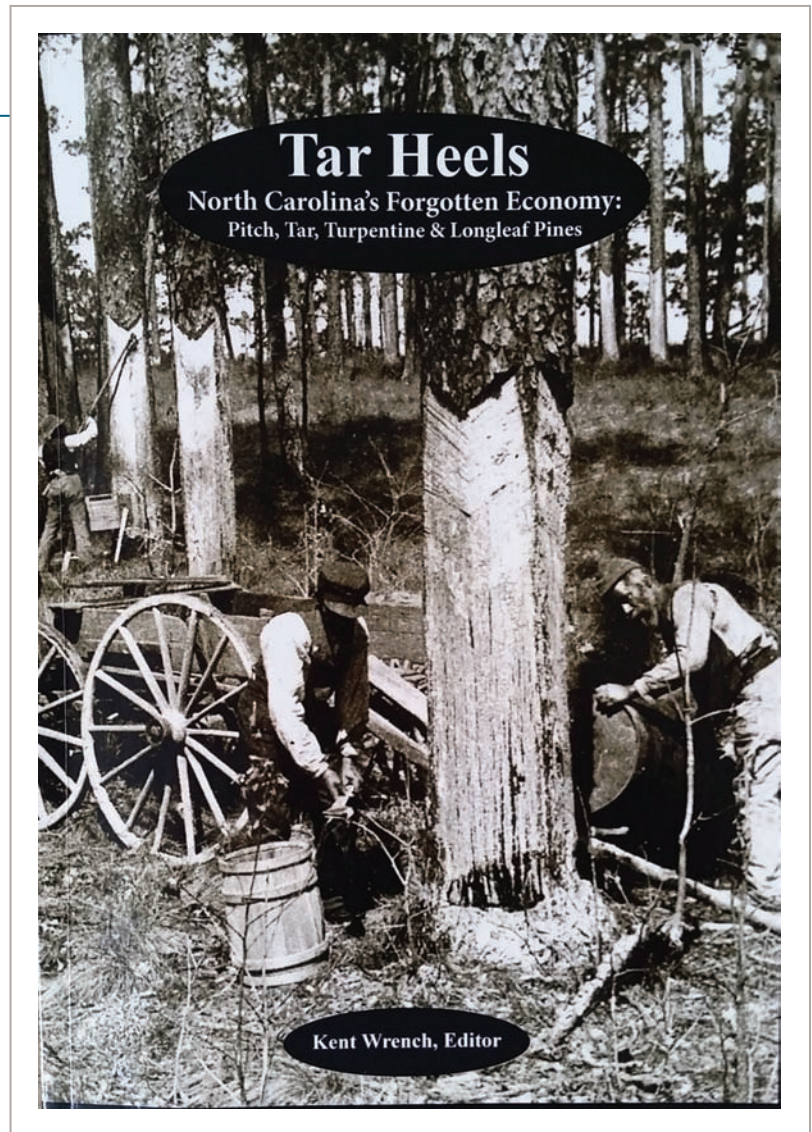
An Amazon.Com Company

I read *Tar Heels* while sitting in a deer stand adjacent to the Northeast Cape Fear River in Duplin County North Carolina, where 160 – 180 years ago tar, pitch, turpentine, and longleaf pine timber was floated down river to Wilmington and from there shipped to ports all over the world. In the early 19th century, this part of North Carolina was the center of the naval stores trade that was built on the destruction of the longleaf pine forests. Today, all that remains of this forgotten economy are the catfaced stumps, an occasional longleaf, and mounds surrounded by a circular depression indicating where someone burned a tar kiln long, long ago.

Kent Wrench tells this story masterfully through personal experience, family legends, old letters, and photographs. In this wonderful little book, completed just months before Kent died, we learn about Hugh Larkin Wrench (1819 – 1902), the author's great-great-grandfather, who was a turpentine, tar-maker, and timber man. We learn that the earliest record of the nickname "tarheel" came from a diary entry dated February 6, 1863 by Second Lieutenant William B. A. Lowrance of the 46th Regiment, North Carolina Troops while encamped in Pender or Onslow County North Carolina.

We learn that "gum" is what comes from the scarred longleaf pine and when distilled, produces turpentine in liquid form and rosin in solid form. We also learn how to lay a tar kiln that would produce tar and how to further refine the tar by burning off the volatile compounds to produce a thicker product called pitch. Turpentine, tar, and pitch were highly valued for waterproofing ship's hulls as well as decks, ropes, and sails. In 1850, 96% of the US naval stores production came from North Carolina. Without these products, the US navy would not have remained afloat.

As the trees were tapped out after the Civil War, they were cut and rafted downriver to Wilmington, where they were sawn



and sold throughout the Eastern Seaboard and Europe. River traffic was the only way the products from these massive trees could be moved until the railroad arrived in 1840.

In spite of several typos, I highly recommend this quick read for anyone wishing to learn more of the value the longleaf held for our country and how the naval stores were produced, refined, and shipped. It is a welcome addition to anyone's longleaf library.

By Carol Denhof, *The Longleaf Alliance*

LONGLEAF ART SPOTLIGHT

SOUTHERN PINE COMPANY

The Longleaf Art Spotlights in 2016 will showcase artists that will be taking part in the inaugural art show entitled "Longleaf Regenerated" at the upcoming Biennial Longleaf Conference to be held in Savannah, GA November 1-4, 2016. The show will be a celebration of the creativity that this landscape inspires in us all.

Southern Pine Company of Georgia

There is now great interest in using reclaimed wood products for functional structures such as flooring, furniture, and mantels. Instead of demolishing historic buildings & other structures without a thought, more people are coming to see the beauty in their parts and also the potential for rejuvenating this wood to create modern day heirlooms. One company who has been a leader in this industry for decades is the Southern Pine Company in Savannah, GA. For 25 years, they have been reclaiming, preserving, restoring and supplying vintage old growth wood for renovation and new construction.

A division of RK Construction and Development, Southern Pine Company grew from the dreams of its president, Ramsey Khalidi, of preserving the irreplaceable treasures of Savannah, Georgia's historic districts. A born preservationist, Ramsey was appalled at the destruction of historic properties



going on in Savannah in the 1980's. He was soon involved in rescuing buildings scheduled for demolition, moving many of them to new locations, restoring many in place, and salvaging the valuable materials from those that could not be safely moved or restored. Much of the wood that is pulled from these buildings is longleaf pine. The longleaf that was historically used for building all over the south has a very distinctive grain that lends itself perfectly to being shaped into extraordinary objects whether they be flooring, cabinets, furniture, or sculpture.

The products that they produce can certainly be seen as art. Their eye for seeing the potential of the wood, the expert craftsmanship, and their love for their work allow for not only making what is old new again but also creating a final product of unparalleled beauty and history.

Longleaf Destinations

Pensacola

by the Sea:

*White sands of Pensacola Beach.
Photo by Carol Denhof*

A Thriving City Once Again

How the verdant shore must have called to that Spanish explorer so long ago. There was deep water close to shore, a bountiful bay full of fish, and a gentle landscape of green, with virgin longleaf pines covering most of the land down to the sea.

As Don Tristan de Luna established the continental United States' first European settlement along Pensacola Bay in 1559, it was impossible to know that the harshness of a primitive life in the new world would bring a quick end. A hurricane struck one month later, sending ships and supplies to the bottom, and dooming the colony to a year and a half of struggle before abandoning the settlement.

Today, Pensacola takes pride in that early history that eventually led to a permanent Spanish settlement and a series of struggles among European colonial powers over this prized land and its deepwater access to the Gulf of Mexico. The city grew to be one of Florida's largest and most prosperous in those early years, and is undergoing a 21st Century renaissance as Americans are returning to cities to live and play.

Pensacola is still anchored by its downtown, with narrow streets lined by masonry buildings that once housed marine supplies, saloons, drug stores, and other more general needs of

a hard-working city. Following a long decline over the second half of the 20th Century, those same storefronts are now rejuvenated to serve-up a range of new urban needs--coffee, fine clothing, Pilates, art, distinctive foods, and the requisite drinking establishments that keep the sidewalks alive on weekend evenings.

Two distinctive public squares help to define the older area of the city. Plaza Ferdinand is surrounded by historic municipal buildings and was the sight for military parades during colonial times. Several monuments mark historic events, and in 1821 General Andrew Jackson and U.S. troops stood in the square to officially accept the West Florida territory from the Spanish. On the north side of the square is the old A&N National Bank Building, a product of Chicago school architecture that at ten stories was the tallest building in Florida in the early 20th Century before the boom years in South Florida.

The historic Seville neighborhood surrounds Seville Square just east of the heart of downtown and is populated by wood frame vernacular homes of the 19th Century. Each one is constructed from the virgin Southern pine that helped to build the city and also fueled its early economy. This is one of

Pensacola's most pleasant areas for walking, and includes a historic village administered by the University of West Florida.

While today's port is comparatively quiet, in the late 19th Century Pensacola was a major center for the shipment of pine lumber and naval stores as the lumber boom sent shiploads of virgin pine to the industrializing economies of the northeast and Europe. Along forgotten areas of the waterfront lie thousands of ballast stones, tossed out from wooden sailing ships taking on cargo in bygone days.

Following decades of decline and industrial pollution that fouled the once magnificent bay, people are coming downtown again. A large new waterfront park with a stadium housing the Pensacola Blue Wahoos minor league baseball team brings thousands for games and festivals, or just to stroll along the water. The City also converted one way streets to two way traffic, and narrowed another from four lanes to two—all of which slowed automobiles and has helped to bring out the pedestrians that have made downtown streets more alive than in decades.

Venturing out a bit from the downtown there's Belmont Devilliers, once the heart of the historically-black shopping and cultural district that is coming alive again with local restaurants and shops. Up the hill are the large homes of North Hill, where railroad and lumber tycoons displayed their wealth in fine homes along the city's highest ground.



Longleaf-wiregrass habitat on Blackwater River State Forest. Photo by Carol Denhof.

Other favorite nearby destinations include the Pensacola Lighthouse and its high perch overlooking the Pensacola Pass—the best view on the Gulf coast. Gulf Islands National Seashore offers miles of beautiful white beaches where nature ebbs and flows on its own terms. Thirty miles to the northeast is Blackwater River State Forest—Florida's largest—and its gently rolling hills of longleaf pine bisected by miles of streams lined by sandbars—ideal for swimming and canoeing.

Pensacola is a city thriving once again, advantaged with a beautiful coastal location and a lengthy and dynamic history. It's a city flowing with the energy of the millennial generation and the advantages of a well-designed urban form that connects people and places.



Maritime Park in downtown Pensacola. Photo by The Pulse.

*Bobby Franklin in a longleaf forest.
Photo courtesy of Bobby Franklin.*



LONGLEAF ALLIANCE STAFF RECOGNIZED

By Society of American Foresters (SAF)

Robert M. Franklin, CF, received on Nov. 4, a SAF Presidential Field Forester Award at the SAF National Convention in Baton Rouge, LA. The purpose of this award is to recognize foresters who have dedicated their professional careers to the application of forestry on the ground using sound, scientific methods and adaptive management strategies.

Presidential Field Forester Awards are presented to individuals who have displayed uncommon talent, skill, and innovative methods to achieve a record of excellence in the application of forest management. Through presidential direction, eleven members (one from each of the eleven SAF districts) are selected for these awards.



GreenAssets®

A Leading Forest Carbon Offset Developer

"Landowners Working with Landowners"

www.green-assets.com

By Lynnsey Basala, *The Longleaf Alliance*

However You Choose To Donate, You're Furthering The Longleaf Alliance Mission

As we conclude another successful year and ring in 2016, I would like to take this opportunity to publically recognize and thank the dedicated and generous non-profit state and federal conservation partners, individuals and families, corporations, foundations and organizations that have allowed The Longleaf Alliance to make exciting progress in several key areas last year, specifically education, habitat management, and longleaf restoration. All of us share a core commonality: an affinity for the great southern longleaf forest. Whether you donated \$10 or \$10,000 in 2015, your contribution does not go unnoticed, and we are forever grateful for your trust and efforts to strengthen The Alliance mission which is to ensure a sustainable future for the longleaf pine ecosystem through partnerships, landowner assistance, and science-based education and outreach.



The complexity of contributions we received this fiscal year enabled LLA to reach beyond the traditional grants, contracts, and day-to-day operations of the organization. The Alliance received its

first memorial, collected seed money for an endowment, founded its first major gift initiative “The Palustris Society,” launched the vehicle donation program, recruited its first Sustainability Partner and was included in its first planned gift. It is because of our inventive members and partners in conjunction with steady monetary and in-kind donations, that we can humbly offer multi-channel giving vehicles to members and constituents for years to come. Together, we will continue to do good works for the longleaf pine ecosystem and inch closer to our goal of 8 million acres of longleaf by 2025.

Winston Churchill famously quoted, “We make a living by what we get, but we make a life by what we give.” Quite simply: Thank you for choosing to give your thoughtful donations to The Longleaf Alliance which allow us to work more aggressively to secure a sustainable future for longleaf pine ecosystems through more extensive research in the areas of forest restoration as well as converting lands back to the ecologically diverse and productive forests they once were.

This list contains those that contributed funds between October 1, 2014 and September 30, 2015. If you find that we have made an error, please don't hesitate to call or email us at office@longleafalliance.org so we can correct our records.

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

Private landowner and Longleaf Alliance Board Member Julie Moore.

Why did I include The Alliance in my will?

“LLA is the only conservation organization focused on helping the private landowner manage and conserve longleaf forests across its range from southeastern Virginia to east Texas. The longleaf ecosystem with its unique flora and fauna has been a focal point of my work with rare species and their habitats for over 35 years.

This urgent need to educate and assist timber owners about longleaf management led me in 1995 to join the then ‘infant’ Longleaf Alliance. I want to help the Alliance continue its mission and provide the up to date information and technical assistance that forest owners need to effectively manage and perpetuate this iconic forest and all its components.” –Julie Moore

Julie Moore grows longleaf on her family property in East Texas and currently serves on the LLA Board of Directors. Like Julie, if you would like to include The Longleaf Alliance in a planned gift, contact Development Director, Lynnsey Basala, at (314) 288-5654.

2015 SUPPORTERS

The Palustris Society Founders

Earlier this year, several members of The Longleaf Alliance Board of Directors founded The Palustris Society to further the legacy that Rhett Johnson and Dean Gjerstad created to protect and restore longleaf forests. The vision is to create a group within The Longleaf Alliance comprised of dedicated conservationists who share our dream of restored and viable working longleaf forests by making a donation or pledge of \$10,000 or more to The Alliance. Commitments to The Palustris Society range from annual contributions of \$10,000 or more, to single commitments of \$10,000 including pledges paid over a period of up to five years. Donors may designate all or a portion of their contribution to be allocated to The Longleaf Alliance Endowment. These individuals are acknowledged below with an asterisk. For more information on The Palustris Society, contact Development Director, Lynnsey Basala, at 314-288-5654.

\$50,000 Level

Barclay and Jane Perry McFadden
Charles and Susan Tarver*

Julie Moore
Richard and Rita Porterfield*
Dr. Salem and Diane Saloom and Family*

\$10,000 Level

Lynda Beam*
Judd Brooke
Angus and Cary Lafaye

Reese Jordan Thompson and Pam McIntyre Thompson
Drs. George and Anne Tyson*
Marc and Penny Walley
Phillip and Debbie Woods*

The Longleaf Alliance Endowment

The Longleaf Alliance Endowment was established in 2015 and is comprised of memorial and restricted Palustris Society pledge contributions. The endowment offers a unique opportunity to strengthen the Alliance's mission and ensure that the longleaf forest is conserved for our children and grandchildren to enjoy for generations.

Dr. Douglas Tappan Memorial

J. Awkerman
Center for Sight of Northwest Florida
Dr. Downing
V. Hudson
Melanie Krebs
Jessie Leonard
D. Luce
C. Luscher

Priscilla McKee
T. Montgomery
M. Moore
S. O'Brien
M. Parker
J. Peebles
Adlai and Margaret Platt
Price Living Trust
Marsha Reeves

C. Roose
H Rushing
K. Schreiber
F. Sitten
W Smith
L Vogelsang
Susanna and Joe Watson

Friends of The Longleaf Alliance

\$5000 & Above Level

Richard and Rita Porterfield
Charles and Susan Tarver

C. Martin Wood
Dan Rather
John and Faye Vick
Michael Wetherbee

\$250-\$499 Level

Jay Addison
Austin Arabie
Clifton Bailey
Christopher Baldwin
Craig Barrow
David Batts
Frank Bradshaw
Noel Brinkley
Gordon Carlisle
Ann Carswell
Tom Darden
Robert Demere
Andrew Easterling
Davis Easterling
Patrick Franklin
Conrad Franz
Susan Glenn

John Hiers
Rick Horsley
James and Susan McCracken
Michael McEnany
Michael Parker
Johnny Russell
John Saad
James Simons
Beverly Smith
R. Scott Taylor
Lindsay Thomas
Reese Jordan and Pam McIntyre Thompson
M. Frank Thompson
Joel Wernick
D.L. Willett
Joseph Williams

\$2500-\$4999 Level

Judd Brooke

\$500-\$999 Level

Charles Rutherford
Cornelia Corbett
William Hunter
Brenda Brickhouse
William Crosby
Chip and Deborah Parrott
William Payne
Clifford Preston
David Ratcliffe
Sonny Roberts
Jeff Taylor
Enoch Timothy
John Winn

\$1000-\$2499 Level

Dr. Salem and Diane Saloom
Angus and Cary LaFaye
Drs. George and Anne Tyson
Barclay and Jane Perry McFadden
Vaughan Hedrick
Julie Moore
George Watkins
John Carswell
Annie Lee

\$100-\$249 Level

Robert and Yvonne Abernethy
 Russell Acree
 John Adams
 Troy Ammons
 Alan Bailey
 Julie Ballenger
 Jan Barlow
 Josalyn Barnett
 John Bauknight
 Lynda Beam
 Jeff Beason
 Frederick Beaujeu-Dufour
 Roger Birkhead
 W. Robert Blackledge
 William and Laura Bodiford
 Mark and Marsha Bollinger
 Detreville Bowers
 Daniel Bradley
 Gertrud Briggs
 G. Arthur Brinson
 Richard Broadwell
 J.H. Carter
 Robert Carter
 Cecil Chambliss
 Charles Chandler
 Charles Chapin
 Emily Clem
 Ellen and Dan Corrie
 Sam Cothron
 James Curry
 Daniel Davison
 H. Lane Dennard
 Don Dickmann
 Martha Dixon
 C. C. Dockery
 Charlie Donaldson
 Rufus Duncan
 R. Patrick Elliott
 Thomas and Judith Ellis
 Sam Erby
 John Fezio
 Frank Flanders
 Sarah Marie Flaningam
 James Flournoy
 Charles Fore
 James Fowke
 Kirk Glenn
 Howard Gnann
 Jon Gould
 Monty Graham
 Bryan Green
 John Green
 Jimmy Greene

Robert Griffin
 Mark Hains
 Don Handley
 F. Simons Hane
 Will Harrelson
 George and Jo Ann Harris
 James Harris
 Wade Harrison
 Don Heath
 James Helmers
 David Hoge
 Michael and Mary Ann Huston
 Karen Jackson
 Harold James
 Felton and Karen Jenkins
 Clifford Johnson
 Charles Jones
 Maria Kendall
 Allen and Theresa Kirchner
 Paul Langford
 Rob and Martha Langford
 Ethelwyn Langston
 L. Keville and Weezie Larson
 Judy Latham
 Thomas C. and Mary Leslie
 Harriet Little
 Robert Livingston
 Nan Locher
 James Lockwood
 Ed Longino
 R. Barry Lurate
 Douglas Lurie
 Dudley Maples
 Thomas Martin
 Thomas McCullough
 Mark and Peggy McElreath
 Barclay McFadden IV
 Kevin McIntyre
 Joe McNeel
 Wendy McNeil
 Chris Melton
 Ryan and Kathryn Mitchell
 Buddy Moody
 Eric Moore
 Ginger Moore
 M. Lane Morrison
 Margaret Newbern
 Darin Newman
 R. Erle Norton
 Taylor Norton
 Robert Peet
 Sidney Phillips
 Donald Pittman
 Adlai and Margaret Platt

Richard Powell
 Dan Pridgen
 James Richburg
 Abraham Rifkin
 Andrew Saunders
 Thomas Savage
 Richard and Patricia Schulze
 Harry Shealy
 Gerhard Skaar
 Geoffrey Sorrell
 James and Beverly St. John
 Ken Stanton
 Deck Stapleton
 Linda Stine
 Ken Stocks
 Bill and Shanna Sullivan
 K. O. Summerville
 Doug Tappan
 Claude Thomas
 Audrey Thompson
 William Tietjen
 Russ Tillman
 Gena Todia
 William Turk
 Lomax Walker
 Clarke Weeks
 James West
 Frank Wetherbee
 Joe Whatley
 James Wise
 William Wolfarth
 David Woodmansee
 Phillip Woods
 George Wright

Up to \$100 Level

Walter Adams
 Nell Allen
 Janice and David Allen
 Nigel Alleock
 W.D. Altman
 Eric and Sherri Amundson
 Guy and Jan Anglin
 Matt Aresco
 John Arnold
 John Ashworth
 Jason Ayers
 W. Wilson Baker
 C. McNeill Baker
 Harold Balbach
 Clay Bales
 Dan Barnes
 Scott Barnes
 Rita Barrow

Michael and Lynnsey Basala
 Sara Beavers
 William Bedsole
 Barbara Bell
 Amy Bell
 Roy Belser
 John Bembry
 William Bennett
 Ken and Mary Jo Beverly
 Bill Black
 Mike Black
 Martha Bobbitt
 Alex Boldog
 Jerry Booker
 Mac Borland
 Danny Boulet
 Gary and Melda Boyd
 Jesse Bradley
 Heather Brasell
 Larry Brede
 Nancy Brennan
 Dale Brockway
 John Brooks
 Paul Brouha
 Ledley and Oberly Brown
 Jerry Brown
 Zebulon Brown
 Daniel Bulger
 Ansel Bunch
 John Burke
 Jim Burke
 Joe Butler
 Terry Butler
 Dale Caldwell
 Charles Cammack
 Tamara Campbell
 Rick Cantrell
 Candy Carroll
 Bob Carter
 Douglas Carter
 William Cate
 Caroline Causey
 Melanie Chambliss
 Steve Chapman
 Lloyd Douglas Chapman
 John Charbonnet
 George Chastain
 David Chastain
 Ben Christensen
 Martin Cipollini
 Gregory Clayton
 Herbie Clearman
 William Cleckley
 Betty Cleveland

William Clyburn	William Forbes	Rick Jacob	C. G. Meador
Joe Cockrell	Larry Ford	Robert Jenkins	Roger Mickelson
Bill and Doris Cole	Joey Francis	Kay Jenkins	Susan Miller
Thomas Coleman	Robert Franklin	Jon Johnson	Robert Mills
Hal Collier	Reed Freeman	David Jones	Susan Moore
Brent Collins	Glen Gaines	David Jones	Stan Moore
Winston Collins	Peggy Galis	Kyle Jones	John Morgan
Darrell and Sue Commander	Karla Gaskins	Ralph Jowett	Rosemarie Mulholland
John Cooley	Bob Glenn	Robert Kerr	Kim Mumbower
John Corey	Charles Grantham	Barry Kesler	Jeb Murray
Ralph Costa	Matt and Aubrey Greene	Debra King	Howard Muse
Bud Coward	Ralph Greene	Norm Kinney	Coy Myers
Charles and Claire Cox	Susan Griggs	Kay Kirkman	Fred Nation
David Craig	Vince Grund	Joyce Klaus	Alex Nixon
LuAnn Craighton	Travis Guinn	Carole Knight	VB Norris
Harry Cramer	Richard Hall	David Koch	Anna Norton
Elwin Cropp	Michael Hall	Lisa Kruse	Mike and Bettye Older
James Cummins	James Hamrick	Karen Kuers	Dixon Olive
David Daigle	Eleanor Hand	John Ladson	Raymond Oliver
Nick Daily	Trent Harris	Lee Laechelt	Julia O'Neal
Ellen Davis	Mike Harrison	Wm Laseter	Brian Oswald
Nicholas Day	James Harrison	John Laurent	Kenneth Outcalt
Richard Deas	David Hayden	Tom Ledbetter	C. Frederick Overby
Janne Debes	Lark Hayes	Wendy Jo Ledbetter	William Owen
Phil Delestrez	Richard Hayes	David Lee	J. Mark Paden
William Delk	Phil Hazle	R.E. Lee	Ronnie Padgett
Samuel Denham	Jeffrey Hearn	Bobby Light	William and Vicky Parker
Aubrey Lee DeRouen	Holmes Hendrickson	Frank Lipp	Nealy Pearce
Jay DeValk	Stephanie Hertz	George and Jennifer Lodge	Tami Pellicane
Tracy Dickerson	Tom Hess	Terry and Lisa Love	Timothy Penton
Joshua Dickinson	Kevin Hiers	Neil Loyd	Clarissa Pipes
Wilbur Dixon	J. Hudson Hines	Jack Lufkin	David Pitts
Arthur and Alice Domby	Arthur Hitt	Camille Luscher	Rusty Plair
William Dopson	Harry Hodges	Gil and Anne Mackey	Stan Polinsky
Jacalyn Duncan	Larry Hodges	John Magruder	Dotty Porter
Walt Durham	Valentijn Hoff	Sharon Marsh	Sara Potts
Gerald Duvall	Thomas Holbrook	Cloyce Martin	Rich Pouncey
Lawrence Earley	Michael Holland	Nancy Martin	Glen Powell
Marcus Early	John Hoomes	Craig Martin	Michael Prevost
Katherine Eddins	Doug Hornbeck	Jerry McCallister	Tom Proctor
Andrew Edelman	William Horton	Marvin McCaskill	Tommy Purvis
J.E. Eldridge	Julie Hovis	Frances McClary	Howard Putnal
David Elliott	Cecil Howard	Jack McClung	Sally Querin
Jeffery Elliott	Marc Howlett	Mitchell McElroy	Steve Raper
David Ellison	William Humphries	Thomas McFadden	Wayne Rast
Danny Epting	Thomas Husley	George McFadden	Bob Rawlins
George Farmer	George Inge	Trippy McGuire	Bob Reid
David Farnsworth	Jon Ingram	John McIntosh	Joe Reinman
Robert Fisher	A.J. and Mary Beth Isacks	Linda and Dennis McKeon	Armeto Reynolds
Earl Fleming	DW Ivans	Robert McLendon	Charles and Suzanne Rhodes
Wade Fletcher	Joe Ivey	Frank. McLeod	Phil Richardson
Corey Flowers	Steve Jack	Charles McMillan	Max Riddick
Elizabeth Foose	Ted Jackson	Tom McNeil	Joseph Riley

Louie Rivers
 Kevin Robertson
 Jack Robinson
 Jordan Robitaille
 Chad Rogers
 Marion Rogers
 Johnny Roscoe
 Lydia Rose
 Kathleen Roth
 Bill Rounsaville
 Rob Routhier
 George Russell
 Landon Russell
 Scott and Julie Sager
 Gerald Saleeby
 Thomas Sanders
 Tom Sanders
 C. David Sawyer
 Mary Anne Sayer
 William Schoell
 Nick and Linda Scovanner
 Randall Shaffer
 Brent Shaver
 Gates Shaw
 Neal Shealy
 Richard Shelfer
 David Sherman
 J. Wayne Short
 Barry Sikes
 Graham Simmons
 George Simmons
 Charles Simon
 Mary Sims
 Michael Small
 Byron and Patricia Smith
 Christopher Smith
 Max and Marie Smith
 Carl Stearns
 Beth Stewart
 David Stewart
 Jonathan Stober
 Matthew Stoddard
 Johnny Stowe
 Perry Stowe
 Robert Strange
 Carl Strojjan
 Walter Carl Swann
 Nancy Talton
 Johnny Tate
 Philip Tatum
 Lee Taylor
 Keri Teal
 Donald Temple

W. Lee Terrell
 James Thacker
 Willy the Losen, Jr.
 Sudie Thomas
 William Thomas
 Henry Thompson
 Helen Thompson
 Whitman Till
 Stanford Tillman
 Paul Trianosky
 Keith Tribble
 W. Bennett Tucker
 James Turner
 Duncan Tyson
 Merrill Varn
 Ben Wall
 William Walley
 Marc Walley
 Melanie Walter
 Thomas Ward
 Ronnie Ward
 Clay Ware
 Larry Warren
 Shirley Watson
 Elliot Weaver
 Charles Webb
 Joe Webb
 David and Gisela Weiss
 Carl Wernicke
 Timothy West
 Hoyt Welchel
 E. John Welchel
 Oliver Whipple
 Katrina White
 George Whitehurst
 Trey Whitley
 Carl Wiggins
 James Wildasin
 Billy and Joy Wilkinson
 Linda Wilson
 Fremont Wirth
 Andrew Woodham
 David Woodward
 James Woodward
 John Woodward
 Charlene Woodward
 Larry Wright
 Benjamin Wyche
 John Yeiser
 Samuel E. and Roberta
 Youngblood

Corporate Conservation Partners

\$10,000 Level

CHEP; A Brambles Company
 International Paper
 The Southern Company

\$6,000 Level

Luce Packaging
 Meek's Farms & Nursery, Inc.
 Westervelt Ecological Services
 Whitfield Farms & Nursery

\$5,000 Level

Blanton's Longleaf Container Nursery
 Hancock Natural Resource Group
 International Forest Company

\$4,000 Level

Dow Agrosiences, LLC

\$3,000 Level

Bodenhamer Farms and Nursery

\$2,500 Level

Forest Investment Associates
 Green Assets
 Resource Management Service

\$2,000 Level

Hood Industries, Inc

\$1,500 Level

Enterprise Holdings

\$1,000 Level

Charles Ingram Lumber Co.
 Chasley Land Timber LLC
 Crop Production Services
 The F.A. Bartlett Tree Expert Co.

\$500 Level

Deep South Growers
 Molpus Timberlands Management
 Southern Seed Company, Inc.
 Wake Stone Corporation
 Woodstone Resources, LLC

\$250 Level

Cheeha Combahee Plantation
 Deep South Land, Inc.
 Stuewe and Sons, Inc.

Up to \$100

A.J. Hodges Industries, Inc.
 Berger Peat Moss
 Charles Dixon & Co., LLC
 Cleveland Farms, Inc.
 Crosby Land & Resources
 Dargan, King & Knight, LLC
 Forest Lodge Farms, LLC
 Forestall Company, Inc
 Forestar Group, Inc.
 Jenkins Timber Properties, LLC
 K & L Forest Nursery
 Loblolly Forest
 Milliken Forestry Company, Inc.
 Never Fail Farms
 North Bassett's Creek Timber Management
 Oak Grove Farm
 Ole Pataula Farms, LLC
 Plantation Pinestraw
 Rayonier Forest Operations, LLC
 Roundstone Native Seed, LLC
 Rutland Forest Nursery
 Stone Forestry Services, Inc.
 Superior Trees
 The Horton Trust
 Truax Company
 Woodward GA Stewardship Forest

Agency Conservation Partners

Chesterfield County, SC Soil and Water Conservation District
 Florida Fish and Wildlife Conservation Commission
 Florida Forest Service
 Georgia Department of Natural Resources
 Louisiana Department of Wildlife & Fisheries
 Mississippi State Department of Plant and Soil Sciences
 Natural Resources Conservation Service
 Natural Resources Conservation Service - AL
 Natural Resources Conservation Service - MS
 North Carolina Division of Forest Resources
 North Carolina Forest Service
 North Carolina State University
 SC Forestry Commission - Taylor Tree Nursery
 St. Marks National Wildlife Refuge
 St. Marks Refuge Association
 State of Florida
 US Army - Ft Benning
 US Department of Defense - Eglin Air Force Base
 US Department of Defense - NAS Whiting Field
 US Department of Defense - NAS Pensacola
 US Department of Defense - Tyndall Air Force Base
 US Fish & Wildlife Service

US Forest Service
 US Forest Service - National Forests in Alabama
 US Forest Service R8 Southern Region National Forest System
 US Forest Service, Conecuh National Forest
 US Forest Service, Talladega National Forest, Oakmulgee Ranger District
 Virginia Tech University
 Wofford College - Environmental Studies Program

Nonprofit Conservation Partners

Alabama Forest Owner's Association
 Alabama Treasure Forest
 Alabama Wildlife Federation
 American Forest Foundation
 American Forests
 Anonymous
 Arbor Day Foundation
 Bicknell Family Charitable Fund
 Catawba Master Naturalist
 Conservation Leaders for Tomorrow
 Critz Family Fund
 D. W. McMillan Trust
 DGL Family Partnership
 Eastern Native Grass Alliance
 Exelon Foundation
 Florida Wildlife Federation
 Golden Triangle RC & D
 Henry Fair Family Fund for the Environment
 Hitchcock Woods Foundation
 Hot Diggity Doggie Camp, LLC
 J. C. Kennedy Foundation
 J. W. Jones Ecological Research Center
 Jacksonville Zoo and Gardens
 L. McGowin Foundation
 Max McGraw Wildlife Foundation
 Mississippi Fish & Wildlife Foundation
 Mississippi Wildlife Federation
 Mobile Botanical Gardens
 National Fish and Wildlife Foundation
 National Wild Turkey Federation
 Plum Creek Foundation
 Robert K. Johnson Foundation
 Rosalyn B. Ashworth Family Trust
 Sid and Vivian Beech Trust
 Smith Charitable Trust
 Solon and Martha Dixon Foundation
 South Carolina Prescribed Fire Council
 South Carolina Tree Farm Committee
 South Carolina Wildlife Federation
 St. Marks Refuge Association
 Sustainable Forestry Initiative, Inc.
 Tall Timbers Research Station
 The Crampton Trust

The Eichold Foundation
 The Nature Conservancy
 The Sandhills Area Land Trust
 The Skelton Foundation

Longleaf Academy Graduates

David L. Adams, Jr.
 Nigel Allecock
 Sherri Boyd Amundson
 Duane Andrews
 Tony Artman
 Colby Auckland
 Daniel Barrineau
 Daron N. Battle
 Jared Beauchamp
 Amy Bell
 Brian Beter
 Jonathan Bias
 Ryan Bollinger
 Daniel Booke
 Jonah Boucher
 Allen Brady
 Bradley Breland
 Susie Bridges
 Roland Bridges
 Michael Broom
 Abigail Brown
 Wes Brunson
 Jody Burdette
 Joe Butler
 Holly Butler
 Jared Bynum
 Mark Byrd
 Dale Caldwell
 Chad Camp
 Russ Carter
 Cecil Chambliss
 Benjamin Christensen
 Brian Cobble
 Allison Cochran
 Joe Cockrell
 Tracy Cole
 Thomas Coleman
 Gretchen Coll
 Brandon Collins
 Ryan Collins
 Winston Collins
 Claire Cox
 John Crenshaw
 Brandon Crummey
 Luis A. Cruz-Arroyo
 Tanya Culbert
 Jeff Davis
 Matt Davis

Mike Dean
 Phil Delestrez
 Jeff Dennis
 Tim Dickinson
 Kathy Duncan
 Chris Dunn
 Eddie Edwards
 Michael Edwards
 Theresa Edwards
 James Ernst
 David Findley
 Susan Fischer
 Derek Fogle
 R. Larry Ford
 James Fountain II
 James L. Fowler, IV
 Conrad Franz
 Brannon Frazier
 Edward Galmon
 Jason Gardner
 Blake Garner
 Caleb Garrett
 Jonathan Garrow
 Joel Glover
 Daniel Goins
 Aubrey Greene
 Tyler Greiner
 Richard Hagerty
 Jesse Hall
 James Hampton
 Cathy Hardin
 Mike Harrison
 Kate Hasapes
 Ron Hasken
 David Hayden
 Richard Hayes
 Stephanie Hertz
 Tim Higginbotham
 Amanda Hiott
 Arthur Hitt
 Sheena Holley
 Ben Holten
 Doug Hornbeck
 Stephen Hudson
 Michael Huffman
 Thomas Hulsey
 Terry Hurley
 Jeff Hutcherson
 Tommy Hutcherson
 Henry Hutto
 Calin Ionita
 DW Ivans
 Earlene Jackson
 Porche Jackson

James Jenkins
 Steve Johnson
 Richard Johnston
 Steven Jones
 Kyle Jones
 Justin Kania
 Ben Kendall
 Daks Kennedy
 Jamey Kent
 Steve Kerlin
 Robert Kerr
 Barry Kesler
 Donald King
 Skip Kizzire
 Marc S. Krider
 Joyce Lane
 Cody Langford
 Robert Larimore
 Jason Launius
 Kori Legleu
 Joseph Lemeris
 Telma Leonard
 Terrence Lewis
 Kandra Lewis
 Doug Linden
 Jaqueline Lintzenich
 Frank Lipp
 RT Lumpkin
 TJ Lyell
 Chelsea MacKenzie
 W. Tom Mallett
 Kyle Marable
 Tim Marston
 Joel Martin
 Mike Mathis
 Jack McClung
 Paul McCoy
 Suella McCrimmon
 Paul McDaniel
 Thomas McDaniel
 Babe McGowan
 Tom McNeil
 Scott Mellard
 Ben Miley
 Lucas Miller
 Jay B. Mitchell
 Kevin Mock
 Joseph Moore
 George (Buddy) Mzingo
 Matthew Mrizek
 Mark Musselman
 Stephen Musser
 Mitchell Newman
 Joyce Nicholas

Katrina Noland
Lucretia Norman
Lynn Norman
Darrell Odum
Dixon Olive
Anthony Page
Matt Pardue
James Parker
Greg Paschal
Chris Pearce
Mike Perot
Ryan Phillips
Rusty Plair
Jonathan Poe
David Poletti
Chris Potin
Dustin Potter
Frank Range
Bobby Joe Ray
Todd Reynolds
Cecilia Richmond
Tommy Riley
Jordan Robitaille

Jacob Schimph
Jim Schrenkel
Robert Scoggin
Adam Z. Sconyers
Linda Scovanner
Marcus Shorter
Charles Simon
Gary Skaar
Peggy Skaar
Matthew Skinner
Phillip Slater
Brant Slay
Michael Small
Ronald Smith
Robert Smith
Clayton Smith
Bobby Solomon
Hannah South
Aaron J. Souto
Matthew Stoddard
Rodney Stone
Ian Stone
Eric Strickland

Scotland Talley
Eric Taylor
Lee Taylor
Keri Teal
Nathaniel Tetakis
Jared Teutsch
Sara Thames
Reese Thompson
Roderick Mark Thornton
Paul W. Trawick
Tyler Trent
Keith Tribble
Darrius Truss
Sandra Vardaman
Alex Varner
Fernando Vazquez
Brian Waldrep
Corey Walk
Tom Waller
Derek Ware
Larry E. Warren
Tracy Watson
Cody Watts

Shannon Weaver
George F. Weick, Jr.
Nikesha Wells
Walter Whetstone
John White
William Whitley
James Wildasin
Bradley Williams
Tim Williams
Daniel Williams
Keith Williamson
John Willis
Maria Wilson
Ryan Witt
Brent Womack
Andrew Woodham
Frank Wooten
John Yeiser
Matt Young

Donate a Vehicle to Support The Longleaf Alliance

Got a vehicle you don't need anymore? Donate your car, truck, boat, motorcycle, tractor, jet skis, or farm equipment to the Longleaf Alliance. Your donation will help support the Alliance's mission.



Simply go online to the website at www.1car1difference.com or call 877-557-1CAR. It is easy and quick. They will pick up the vehicle, handle all the paperwork, auction it and send the proceeds to the Alliance. You receive a receipt for tax deduction purposes. Thank you for making a difference!!!

Sleeping Gardens

By Carol Denhof, The Longleaf Alliance

*Planted wiregrass and longleaf pine.
Photo by Carol Denhof.*

I am a gardener. I am in my happy place when I am on my knees in the garden, with dirt under my finger nails and a garden tool in hand. To me, there are few things more rewarding than digging your hands into the soil, preparing a space, and then transforming that space with plants. The textures, the fragrance, the colors all blend together to form a beautiful landscape that can at once inspire creativity, provide needed solace, and supply a feast for wandering wildlife.

My gardens are not generally filled with vegetables, but instead are filled with flowering perennials of all shapes, sizes, and colors. I especially like those “tough as nails” plants that can make it through our harsh summers with ease. They remind me of plants that you can find in our much loved longleaf ecosystem. I’m always amazed at how these species have adapted to deal with extreme climates and have shaped their morphology to both attract and repel insects and other critters to insure survival and regeneration. There can truly be no more beautiful a place than a longleaf forest at the peak of fall blooming. The

purple, gold, and white color assemblage is breath taking. The abundant flowering species that comprise the groundcover layer is certainly reflected in my garden projects. My ultimate aspiration is to capture just a hint of this in my own personal space.

I’m currently planning a new garden on the Georgia coast. This garden will be much different from my urban space in Atlanta. My palette of plants to choose from has expanded greatly. The soils are sandy, temperatures are warmer, and we tend towards more tropical rain patterns. The consideration of these factors, among others, is so important in determining what will grow and flourish here. I admit, there may be a fair bit of trial & error these first couple of years.

As the “growing season” comes to a close though, planning and installation will go into full swing. If you are a gardener, you know exactly what I’m talking about. Your coffee table is littered with seed & plant catalogs. Your shovel stands at the ready for moving plants from one spot to another and dividing those plants

that have grown a bit out of control. The cooler months are used to clean up, sort out, and establish plants without the stress of heat and drought. This is not unlike what happens in our longleaf forests.

It may not be a commonly shared view, but I'm always reminded of gardening when I think of the work we are doing to restore longleaf. Just as gardeners care for small scale spaces, forest owners and managers are also tasked with creating and shaping a landscape, but on a much larger scale. We are always looking forward: making plans on how to manage existing forests, setting burn prescriptions, and planning out how to establish the trees and native groundcover that make up this system. As we restore longleaf habitats, we have to remain



cognizant of the natural variation that occurs across our southeastern landscape. Much the same as in a garden setting, soils, hydrology, and climate all must be considered when attempting to reestablish native species for habitat restoration.

A gardener friend once told me that in planting a garden, “the first year plants sleep, the second year plants creep, and in the third year plants leap.” I’ve always found assurance in this saying. As I watch either newly planted gardens or newly established longleaf species for signs of growth, I am able to remain patient and know that with time and careful tending, these spaces will start to take shape and begin to resemble the landscapes that inspire us all in different ways. No matter the size of your “garden”, wait and watch for the much anticipated leap, as our sleeping and creeping gardens approach spring.

Brown-eyed Susan in the garden. Photo by Carol Denhof

Instagram
Photo Contest
#RestoreLongleaf

To enter, simply follow these instructions:

1. Follow @Longleaf_Alliance on Instagram
2. Instagram a photo associated with Longleaf Ecosystem Restoration
3. Use the hashtag #RestoreLongleaf
4. Tag @Longleaf_Alliance in your photo

Awards will be given out at The Longleaf Alliance's Biennial Conference in Savannah November 2, 2016.
Contest ends Friday September 30, 2016 at Midnight.

Per Instagram rules, we must mention this contest is in no way sponsored, administered, or associated with Instagram, Inc. By entering, entrants confirm they are 13+ years of age, release Instagram of responsibility, and agree to Instagram's term of use. By submitting an entry, you are allowing The Longleaf Alliance to use the images with full credit to the entrant in future publications or materials to promote longleaf restoration.

SAVE
THE
DATE

11th Biennial Longleaf Conference

November 1-4, 2016

Savannah Marriott Riverfront
Savannah, GA



THE LONGLEAF LEADER