



# Longleaf Pine

Protecting and Restoring an  
American Treasure

The Nature  
Conservancy 

Protecting nature. Preserving life.®

In association with The Conservation Fund, Trust for Public Land,  
and America's Longleaf Restoration Initiative



Green Swamp. © Skip Pudney

It's impossible to definitively quantify the benefits and value of a natural system. Yet by any conceivable measure—economic impact, cultural significance, ecological importance—America's longleaf pine forests are vastly underappreciated.

Longleaf forests sustain life. They provide shelter for people and animals, help create the air we breathe and are important to maintaining the clean water we need to survive. The openness of healthy longleaf forests on military bases provides preferred training conditions for infantry, special forces and armored divisions. Longleaf forests also help buffer military facilities from incompatible development that could jeopardize troop readiness and help contain wildfires that might arise through normal training operations.

America's longleaf forests once rolled like an endless green tide across 92 million acres of the southeastern United States. Today, less than 4.4 million acres of longleaf pine remain in Virginia, the Carolinas, Georgia, Alabama, Florida, Mississippi, Louisiana and Texas.

Those remaining forests harbor species rare and common, and help define iconic landscapes like North Carolina's Cape Fear Arch, Georgia's Okefenokee Swamp, and Texas' Big Thicket. They're also part of a timber industry that contributes billions of dollars and nearly one million jobs to regional economies.

Longleaf pine forests are fire-adapted systems, meaning they thrive on periodic burning. As a result, healthy longleaf systems act as buffers for human communities against the devastation of wildfires that feed on other, less balanced forest types.

Many of the largest remaining tracts of longleaf are found on public lands and offer unparalleled recreation options for hikers, birdwatchers and hunters. Those same forests also help maintain clean, flowing water in the rivers and streams that provide millions of Americans with water for consumption, agriculture and industry.

There are also large remaining tracts of longleaf on many of the region's largest military facilities, including Forts Bragg and Benning, Camps Shelby and Lejeune, and Eglin Air Force Base. There, the conservation community and the Department of Defense are cooperating to protect longleaf systems while simultaneously optimizing training conditions for our nation's defenders.

Our nation was built with—and built upon—longleaf pine. Its timber and other products fueled Colonial expansion and were the foundation of a vast forest ecosystem supporting a diversity of life rivaled only by those found in the species-rich tropics. The longleaf pine forest is more than just trees; it is a rich assemblage of life that includes more than 900 plants found nowhere else on Earth and more than 30 federally endangered species. Restoration includes that full complement. And though millions of acres of our longleaf forests are gone, we have the ability to bring them back.

There are currently 17 separate longleaf protection teams working throughout the species' historic range. Some are new alliances while others represent a new direction and focus for collaborations that have been in place for decades. Some are driven by a small core of partners while others are large alliances of multiple government agencies, conservation organizations, private sector businesses and individual landowners.

The teams are collaborative groups of stakeholders, both public and private, who share resources, ideas and best practices and who are united around common goals of managing existing longleaf forests and identifying new opportunities to restore the species in its historic range.

Each team has identified high-priority tracts of longleaf habitat that are available for outright purchase or protection through conservation easement. They've also identified tracts either embedded within or adjacent to public lands that are essential to protect from incompatible development that could jeopardize fish and wildlife habitat and land management.

In order to promote cooperative conservation among local communities, the teams host regular seminars and workshops on forest stewardship, and provide direct assistance to landowners interested in planting longleaf pine.

Much of the combined work of the longleaf implementation teams is made possible by the National Fish and Wildlife Foundation, the Southern Company, and federal partners, who since 2011 have provided millions of dollars in support of these efforts through the Longleaf Stewardship Fund.

While each team faces its own unique challenges, they're all working toward a common goal—to protect a natural system as essential as any on Earth.



Young Longleaf. © Jodie LaPoint/TNC

## Conservation & Restoration Benefits

There are seven core benefits within the wide range of value longleaf pine provides to wildlife and people. While each of these is important, ecological and economic conditions where teams work may make some categories more significant than others.



### Military Readiness

Longleaf conservation on or adjacent to military facilities that can positively impact the training and operations capacity on base.



### Public Recreation

Public lands containing longleaf forests that offer recreational benefits such as opportunities for hunting, camping and hiking.



### Working Forests

Longleaf forests that support substantial timber industry jobs and contribute directly to regional economies.



### Heritage Landscapes

Longleaf forests that comprise or contribute to iconic landscapes in their state or region.



### Wildlife Protection

Forests that provide habitat for native animal communities, including rare or endangered species.



### Wildfire Control

Forests that, when healthy, help buffer human communities from the devastation associated with wildfires.



### Water Quality

Watershed forests that directly contribute to and improve the quality of water consumed by people and used for agriculture and industry.



Longleaf pine on Bill Owen's Raccoon Creek Pinelands near Yale, Virginia. © Danny White/TNC

The Virginia Longleaf Pine Cooperators' Group works in a region encompassing more than 3.5 million acres. Within that landscape, roughly 20,000 acres of land have been identified as priority sites for protection over the next five years. Those efforts will benefit endangered species such as the red-cockaded woodpecker—Virginia's longleaf forests represent the species' northernmost range—and will improve regional water quality while protecting heritage lands.

## Partners

- Farm Service Agency Meadowview Biological Research Station
- Natural Resources Conservation Service
- The Nature Conservancy
- Old Dominion University
- U.S. Fish and Wildlife Service
- Virginia Department of Conservation & Recreation
- Virginia Department of Forestry
- Virginia Department of Game & Inland Fisheries

## Conservation & Restoration Benefits



Military Readiness



Water Quality



Working Forests



Wildlife Protection



Heritage Landscapes



Wildfire Control



Public Recreation

# Virginia Longleaf Pine Cooperators' Group



Herman Hauck

When Bill Owen inherited his family farm in 1993, he found himself facing a tough choice. His career as a musician had drawn him away from the land, and he had little experience with management or stewardship. "I wasn't particularly motivated to be a landowner," he confesses.

But he couldn't help noticing that, while the stock market fluctuated at the whims of unseen forces, his land value held strong and even increased year to year. So he decided to take a chance and keep the land, which at the time was scattered with stands of loblolly and slash pine that had been inconsistently timbered.

**"I thought, if I'm going to own this thing, I want to do it right," Owen says. "But I needed help."**

That help came in the form of the Virginia Longleaf Pine Cooperators' Group, composed of six state and federal agencies, The Nature Conservancy, Old Dominion University and the Meadowview Biological Research Station.

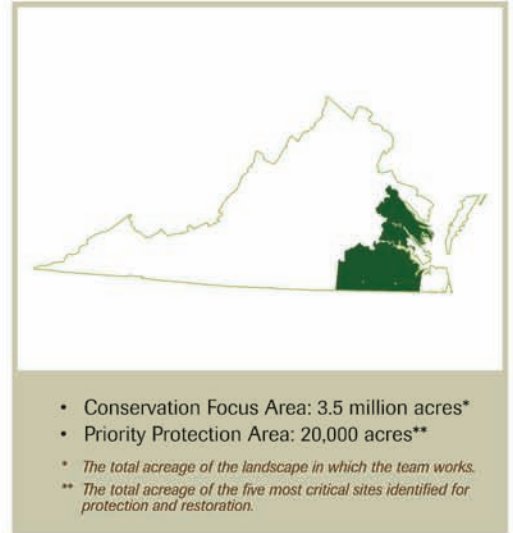
"I knew of The Nature Conservancy," Owen says, "so they were the first people I called."

Brian van Eerden of The Nature Conservancy in Virginia saw potential for longleaf pine on the property and devised a sort of test by planting one acre of seedlings on the property's logging deck, the former staging area for tree harvesting equipment. If longleaf could grow there, where the sandy soil had been heavily compacted by years of activity, then the tree would likely grow anywhere on the property.

"We planted that little acre 12 years ago," Owen says, "and it's done remarkably well." In 2005, an ice storm leveled 15 acres of loblolly that had just been thinned, giving van Eerden and Owen the opportunity to plant more. Then Owen began looking outside his own borders. "I bought an adjoining 180 acres of loblolly, and we cut that timber," he says. "I decided to take the big plunge and plant the whole thing in longleaf."

Grants from the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, Virginia Department of Forestry and The Nature Conservancy have helped cover most of the costs of replanting. The process went so well that Owen decided to do it again: He cleared and planted another 225 acres and then, in December of 2013, doubled the project size by buying and replanting an adjoining 450 acres.

Dubbed Raccoon Creek Pinelands, the project now totals 820 acres, making Owen the owner of the largest private-land longleaf restoration project in Virginia.



Raccoon Creek Pinelands near Yale, Virginia. © Danny White/TNC



Planting longleaf. © Danny White/TNC

# North Carolina



Onslow Bight savanna. © Mark Daniels/TNC

Chartered in 2003 after three years of unofficial cooperative work, the Onslow Bight Conservation Forum works in a landscape spanning more than 3.7 million acres along the North Carolina coast. The 16-member team has targeted a core area of 18,000 acres of publicly and privately owned high-quality longleaf habitat for future restoration efforts.

## Partners

- Coastal Plain Conservation Group
- The Conservation Fund
- Ducks Unlimited
- Endangered Species Coalition
- Natural Resources Conservation Service
- The Nature Conservancy
- North Carolina Coastal Federation
- North Carolina Coastal Land Trust
- North Carolina Department of Environment and Natural Resources
- North Carolina Department of Transportation
- North Carolina Wildlife Resources Commission
- U.S.D.A. Forest Service: Croatan National Forest
- U.S. Fish and Wildlife Service
- U.S. Marine Corps: Air Station Cherry Point
- U.S. Marine Corps: Air Station New River
- U.S. Marine Corps: Camp Lejeune

## Conservation & Restoration Benefits



Wildlife Protection



Water Quality



Military Readiness



Working Forests



Public Recreation



Heritage Landscapes



Wildfire Control

# Onslow Bight Conservation Forum

The Onslow Bight is a landscape as unique as the word “bight” itself, which is derived from the Old English word for “bend.” The Onslow Bight is a fittingly meandering expanse of barrier islands, marshes, wetlands and savannas that stretches along North Carolina’s coast. The region is a hotspot for animal and plant life, including longleaf pine.

“There’s a lot of high-quality habitat in an almost unbroken line stretching from Holly Shelter Game Land up the coast to Croatan National Forest,” explains Jon Blanchard, Natural Resources Program Manager for North Carolina Parks and Recreation.

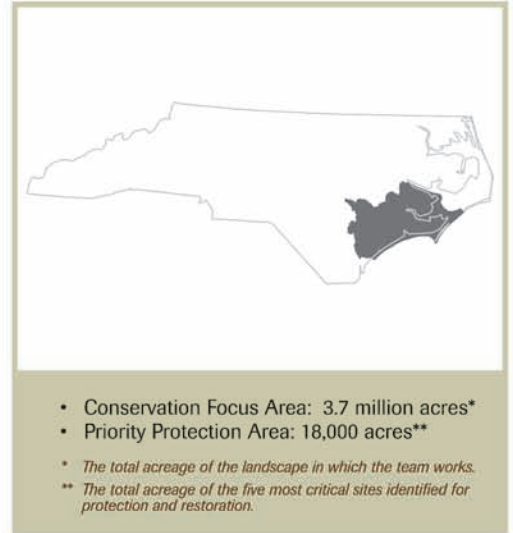
Blanchard represents one of the 16 partner groups that comprise the Onslow Bight Conservation Forum (OBCF), which has been working since 2003 to protect and restore one of North Carolina’s most treasured landscapes—and the longleaf pine trees from which the words “tar heel” in the state nickname are derived.

The members of the OBCF own or manage approximately 500,000 acres of land, much of it suitable for longleaf restoration. “The partnership gives us the opportunity to create a core area of high-quality restored longleaf that we can expand off of,” says Blanchard.

**“The goal is to have a large, contiguous landscape—a corridor parallel to the coast, basically—that allows insects, birds, bears, whatever to move around without having to cross highways or farms.”**

The OBCF’s conservation plan sets forth the goal of connecting large core areas that are centered primarily in and around Croatan National Forest, Marine Corps Base Camp Lejeune and Holly Shelter Game Land.

While each of the partners oversees its own stewardship and land management, Blanchard says cooperation is essential to individual success. “It just makes sense,” he says. “Whether it’s pooling our knowledge to plan management or sharing resources when it comes to prescribed fire, we can make more progress working together than alone.”



A UH-1N Huey soars above the forests of Camp Lejeune. © Marine Corps Air Station Cherry Point, N.C./Flickr Creative Commons



Croatan Forest near Havelock, NC. © James Hardy/ Flickr Creative Commons

# North Carolina



Burning in the Sandhills. © George Sagar

The North Carolina Sandhills Conservation Partnership focuses on a range of 1.1 million acres. Much of the region's existing longleaf—and consequently many of the proposed restoration sites—are on or adjacent to Fort Bragg. Protecting nearby longleaf buffer sites containing habitat for the red-cockaded woodpecker and gopher frog allows the U.S. Army to maximize its training capacity on this critical post while improving the odds of survival for endangered species throughout the region.

## Partners

- The Nature Conservancy
- North Carolina Department of Environment and Natural Resources
- North Carolina Division of Parks and Recreation
- North Carolina Forest Service
- North Carolina Wildlife Resources Commission
- Sandhills Area Land Trust
- Sandhills Ecological Institute
- U.S. Army Environmental Command
- U.S. Army: Fort Bragg
- U.S. Fish and Wildlife Service

## Conservation & Restoration Benefits



Military Readiness



Public Recreation



Wildlife Protection



Wildfire Control



Heritage Landscapes



Water Quality



Working Forests



# North Carolina Sandhills Conservation Partnership

Some of America's top soldiers train on Fort Bragg in North Carolina, including the U.S. Army's Special Forces. Those brave men and women share the installation's forests—and the skies above them—with an unusual ally: the red-cockaded woodpecker.

Fort Bragg's 170,000 acres of longleaf and mixed pine forests have long been a cornerstone of habitat for the species, which was federally listed as endangered in 1970. Military training on base was severely restricted in 1990, when the U.S. Fish and Wildlife Service determined that operations were jeopardizing the survival of the species.

In response, the military entered into a unique partnership with The Nature Conservancy and other organizations to help the species recover and remove the training restrictions on Fort Bragg by creating a buffer zone of protected longleaf around the base.

"We needed to connect with the community off base," says Mike Lynch, who until his recent retirement served as the civilian liaison to the military.

**"It took outreach, and not the kind where you go stand up in front of the local Kiwanis Club or Chamber of Commerce every six months. It took engaging and planning every day and making a real connection to the community."**

Lynch and the military received help through the North Carolina Sandhills Conservation Partnership (NCSCP), which was formed in 2000 by The Nature Conservancy, the U.S. Army's Environmental Command, the U.S. Fish and Wildlife Service and representatives from seven other state agencies and NGOs.

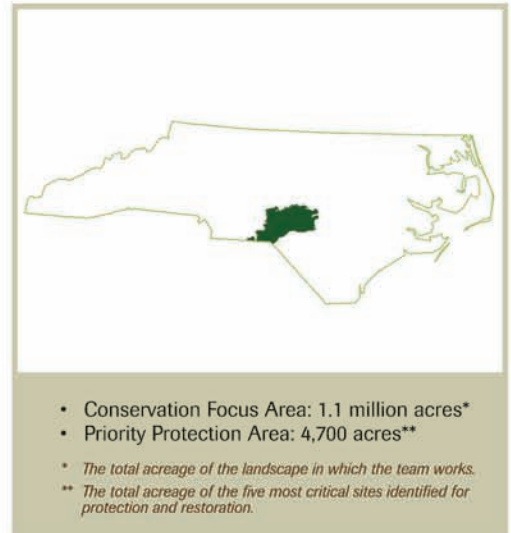
In addition to outreach, the NCSCP's activities include controlled burning, seedling planting, invasive species removal and both mechanical and herbicidal treatment of under- and mid-story vegetation on base and on participating private lands.

The partnership has already helped protect nearly 25,000 acres of property in and around the base, including a new state park and green space for public recreation.

Though the red-cockaded woodpecker recovered sufficiently for training restrictions to be lifted from the base in 2009, Lynch and others knew the program was far from over.

"We started out with a single species focus," he says. "But we soon realized that if we weren't looking at the horizon for the other 26 species of conservation concern, we'd wind up right back where we started."

"We don't know what kind of military training capacity we'll need 10 years from now," Lynch says. "But if we can be smart about protecting our forests and the species they provide for, we'll have more flexibility to meet whatever our future needs might be."



Fall in the Sandhills. © John Warner



Replanting in the Sandhills. © Debbie Crane/TNC

# North Carolina/South Carolina



Green Swamp Preserve. © Skip Pudney

While the Cape Fear Arch Conservation Collaboration's 4.1-million-acre range is expansive, it contains some of the state's most iconic lands, including longleaf sites that protect human communities from wildfires, improve water quality and contribute greatly to the region's timber industry.

## Partners

- ▣ Audubon North Carolina
- ▣ Bald Head Island Conservancy
- ▣ Brunswick County Soil and Water Conservation District
- ▣ Cape Fear Resource Conservation & Development Inc.
- ▣ Cape Fear Museum
- ▣ Cape Fear River Watch
- ▣ City of Wilmington
- ▣ Coastal Water Watch
- ▣ Columbus County Soil and Water Conservation District
- ▣ Conservation Trust for North Carolina
- ▣ Natural Resources Conservation Service
- ▣ The Nature Conservancy
- ▣ New Hanover Soil and Water Conservation District
- ▣ New Hanover County Board of Commissioners
- ▣ North Carolina Coastal Federation
- ▣ North Carolina Coastal Land Trust
- ▣ North Carolina Cooperative Extension
- ▣ North Carolina Department of Environment & Natural Resources
- ▣ North Carolina Department of Agriculture
- ▣ Plant Industry Division – Plant Conservation Program
- ▣ North Carolina Wildlife Resource Commission
- ▣ Resource Management Service LLC
- ▣ South Carolina Coastal Conservation League
- ▣ Southeast Community College
- ▣ Southern Environmental Law Center
- ▣ Town of Kure Beach
- ▣ U.S. Fish and Wildlife Service
- ▣ Winyah Rivers Foundation

## Conservation & Restoration Benefits

-  **Heritage Landscapes**
-  **Wildfire Control**
-  **Working Forests**
-  **Water Quality**
-  **Wildlife Protection**
-  **Public Recreation**
-  **Military Readiness**

# Cape Fear Arch Conservation Collaboration



Tony Doster

Tony Doster understands forests.

As the North Carolina Region Manager for Resource Management Service (RMS), Doster oversees the privately held company's forestry operations in the Tar Heel State, including work in the Cape Fear Arch.

A vast region covering parts of North and South Carolina, the Arch is distinguished by unusual geology and the highest concentration of biological diversity along the Atlantic Coast north of Florida.

Because it sits at a higher elevation than neighboring coastal areas, Cape Fear Arch is home to a combination of arid and wet habitats that have given rise to unique natural communities and an impressive diversity of plants and animals.

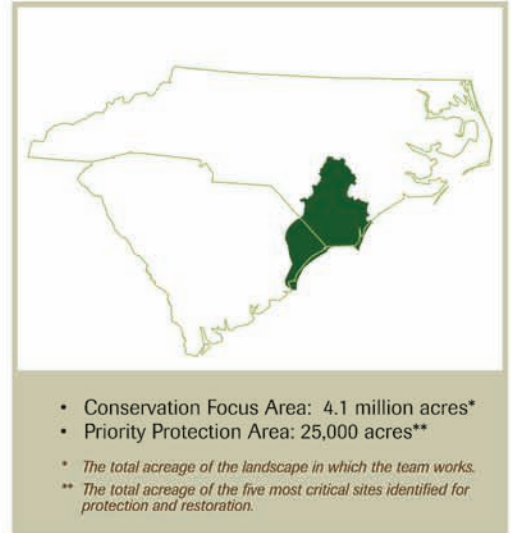
That combination of natural beauty and abundant life has made the Arch an increasingly popular retirement destination and put extreme development pressure on the region.

At particular risk are the Arch's remaining longleaf forests, which, when healthy and properly managed, provide critical habitat for wildlife and protect human communities from dangerous wildfires. Those forests also serve as the backbone of a timber industry that helps fuel the region's economy.

The Cape Fear Arch Conservation Collaboration, which includes the Conservancy, RMS and 26 partners, works throughout North Carolina to protect and restore longleaf and other at-risk natural systems.

**"It's an alliance," says Doster. "It's a way for folks who share an interest in conservation in this region to meet and develop a common vision, to share ideas and to cooperate on forestry management projects."**

At the heart of that common vision is longleaf pine. "Forestry interests and conservation interests haven't always aligned," Doster says. "But I felt like there was a lot of room for us to work together. Forestry is a huge part of the economy here. We don't succeed as a business unless we can manage the forest sustainably. And in order for our forests to be environmentally or socially sustainable, they must also be sustainable economically."



Venus Flytrap. © Skip Pudney



Green Swamp Preserve. © Skip Pudney

# South Carolina



Sandhills longleaf trees. @ Wayne Harris

There are more than 1 million acres in South Carolina's Sandhills Longleaf Pine Conservation Partnership operating area, including working forests that contribute heavily to the region's economy and lands that provide habitat for rare and endangered species.

## Partners

- Chesterfield Soil and Water Conservation District
- Natural Resources Conservation Service
- Pee Dee Land Trust
- South Carolina Department of Natural Resources
- South Carolina Department of Parks, Recreation and Tourism
- South Carolina Forestry Commission
- U.S. Fish and Wildlife Service

## Conservation & Restoration Benefits



Working Forests



Water Quality



Heritage Landscapes



Wildfire Control



Wildlife Protection



Public Recreation



Military Readiness

# Sandhills Longleaf Pine Conservation Partnership



Kim Easterling, Wayne Harris and Charles Babb

There's a lot of conservation might among the seven members of the Sandhills Longleaf Pine Conservation Partnership, which includes influential federal and state organizations like the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, and the South Carolina Department of Natural Resources.

But for all their experience and know-how, the group's mission of restoring longleaf pine would be hard to pull off without help from another powerful group: South Carolina's private landowners.

While conservation and restoration in the region are anchored around more than 100,000 acres of longleaf pine within Carolina Sandhills National Wildlife Refuge, Sand Hills State Forest and Cheraw State Park, nearly all of the remaining land suitable for replanting lies in private ownership.

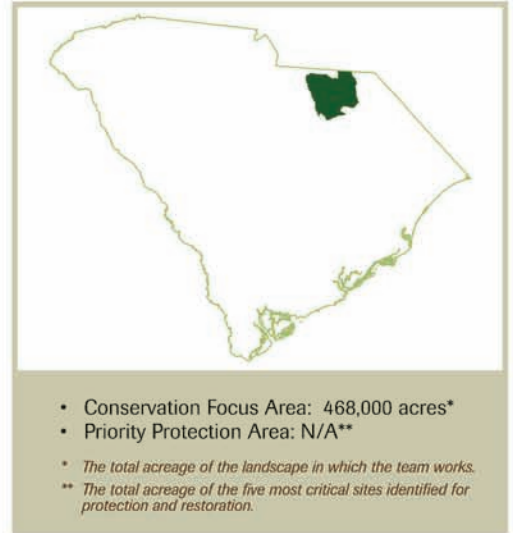
Much of that private land was converted from longleaf forest to loblolly plantations or agriculture in the past century. Over the last three years, the S.C. Sandhills LIT has converted 6,000 acres of private land back into longleaf pine. Within the next five years, the team hopes to convert another 10,000 acres.

Doing so will require help from men like Kim Easterling, whose 100-acre family farm outside Hartsville dates back four generations. Although it had sentimental value, the land hadn't been properly managed and was in ecological disrepair.

"It was a wasteland of low-grade pine and scrub oak," Easterling says. Enter Wayne Harris of the U.S. Fish and Wildlife Service and Charles Babb of the NRCS, who visited Easterling's property and saw the land's potential for longleaf pine.

"Wayne was involved in drawing up a restoration site map and helped pull together a grant request to pay for a portion of the restoration," says Easterling. "They were really good at guiding me through the whole process, from site prep to dozing fire lanes to planting seedlings—all 44,000 of them."

Even though the seedlings are in the ground, Easterling continues to rely on guidance from Harris and other members of the coalition for management. "I just want it to grow," he says simply. "It's a pleasure to be creating something out of nothing. But I know it will take 30 to 40 years for the forest to mature, so I probably won't be around to enjoy it," he says. "But my kids will. And that's enough."



Yellow rye grass sprouts after a controlled burn. © Colette Degarady/TNC



Members of the Sandhills Longleaf Pine Conservation Partnership. © Colette DeGarady

# South Carolina



Surveying a reforestation site. © Steve Moore

The Sewee Longleaf Conservation Cooperative operates throughout 960,000 acres between Charleston and Georgetown. The 260,000-acre Francis Marion National Forest comprises more than 30 percent of the land within the range, making the forest—and the wildlife, public recreation, and ecological benefits it supports—critical to the team’s mission.

## Partners

- Clemson University Cooperative Extension
- Doe Hall Creek Timber Company
- Joseph Jones Ecological Restoration Center
- Natural Resources Conservation Service
- The Nature Conservancy
- Sabine & Waters Inc.
- South Carolina Department of Natural Resources
- South Carolina Forestry Commission
- South Carolina Wildlife Federation
- U.S. Fish and Wildlife Service
- U.S. Forest Service: Francis Marion National Forest
- White Oak Forestry

## Conservation & Restoration Benefits



Wildlife Protection



Working Forests



Public Recreation



Wildfire Control



Heritage Landscapes



Military Readiness



Water Quality

# Sewee Longleaf Conservation Cooperative

South Carolina's Sewee Longleaf Conservation Cooperative (SLCC) works throughout a region that has survived some of the most devastating events wrought by man and nature.

The centerpiece of the range is the Francis Marion National Forest, which was formed in the 1930s through the accumulation of clearcut lands owned by timber companies struggling through the Great Depression. The lands were replanted, and within a half-century, a new generation of longleaf pine forests stood tall. But in 1989, Hurricane Hugo swept through South Carolina leaving much of the state—and its longleaf—in tatters.

While the region has suffered, there remains the tremendous potential for regrowth. That opportunity drives each of the SLCC partners.

**“We recognize that there’s a greater good concept associated with the practice of forest conservation,” says Mike Prevost, president of White Oak Forestry, a privately held timber company that’s part of the team.**

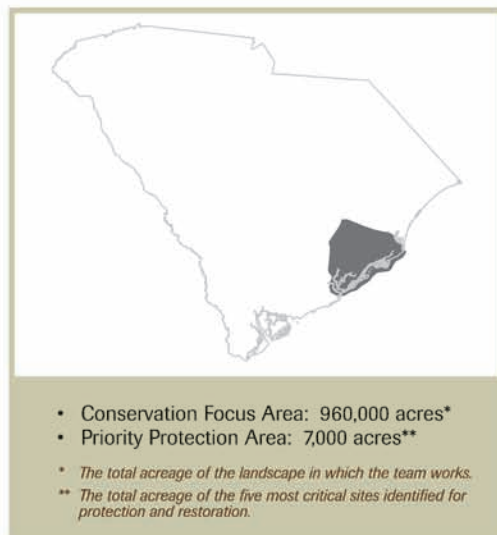
That commitment puts White Oak slightly at odds with other timber companies, which have historically favored faster-growing species like loblolly and slash pine, even if they’re not the optimum tree for the land where they’re planted.

“With longleaf, we look at our 17,000-acre portfolio from an ecological, financial and philosophical perspective,” Prevost says. “We believe that from a business standpoint, it’s beneficial to remain diversified in our forest management philosophy. And there are plenty of sites that are ecologically more suited to longleaf pine than other species.”

White Oak Forestry’s holdings are representative of much of the forestland in the region, little of which was ever converted for agriculture. In addition, tracts of land containing planted loblolly have proved to be prime candidates for successful longleaf conversion. They’re also home to an impressive suite of endangered or important species, including the red-cockaded woodpecker, flatwoods salamander, Bachman’s sparrow, gopher frog and bobwhite quail.

The SLCC team is currently restoring longleaf on 4,000 acres on and around the National Forest, as well as facilitating controlled burns on an additional 20,000 acres to set the stage for future restoration. In addition, the team received a recent grant to restore and improve 5,000 acres of longleaf on private lands and to conduct open workshops to encourage regional landowners to plant and manage longleaf on their own property.

“It’s a very coordinated, open system of communication and collaboration,” Prevost says. “It’s a mutually beneficial partnership, and we’re excited to continue.”



Young longleaf pines within the SLCC. © TNC



A controlled burn within the SLCC operating area. © TNC

# South Carolina



Carolina jessamine growing on longleaf pine. © Skip Pudney

The SoLo ACE Longleaf Partnership works to protect an estimated 200,000 acres of longleaf throughout South Carolina in a region framed by the Savannah River and the north fork of the Edisto River. These lands are home to forests that provide recreational opportunities for millions of hunters, anglers and hikers each year, provide habitat for rare and endangered species, and help sustain the region's timber industry.

## Partners

- Clemson University
- Ducks Unlimited
- The Longleaf Alliance
- National Wild Turkey Federation
- Natural Resources Conservation Service
- The Nature Conservancy
- Nemours Wildlife Foundation
- Open Land Trust
- South Carolina Department of Natural Resources
- South Carolina Forestry Commission
- U.S. Fish and Wildlife Service
- U.S. Forest Service: Savannah River Forest Station

## Conservation & Restoration Benefits



Working Forests



Water Quality



Public Recreation



Wildfire Control



Wildlife Protection



Military Readiness



Heritage Landscapes



## SoLo ACE Longleaf Partnership

South Carolina's Hitchcock Woods blankets 2,100 acres in the SoLo-ACE region, making it one of the largest urban forests in the United States. Owned and operated by the Hitchcock Woods Foundation, the property contains old-growth longleaf pine and more than 70 miles of trails, making it one of the most popular recreation spots for visitors and residents of Aiken.

Like countless other area children, Bennett Tucker grew up roaming Hitchcock Woods, which has been open to the public every day from sunup to sunset at no charge since 1939. "I grew up here," Tucker says. "These forests were my backyard."

Now, as woods superintendent, Tucker is in charge of maintaining the health of the very woods he roamed as a child, employing a spectrum of tools including controlled burning, mechanical thinning and herbicide treatments to manage and conserve the longleaf pine ecosystem.

It's a particularly challenging regimen for an urban forest bordered on all sides by developed neighborhoods. Yet, as Tucker explains, those proximate communities are part of the reason forest stewardship is so vital.

"This has always been a special place with magnificent trees," he says. "People move to Aiken because of Hitchcock Woods. It's a true gem."

**"But it wasn't always managed for stewardship. There was a tremendous buildup of heavy fuel loads—the kinds of dense, shrubby trees and bushes that create catastrophic wildfires. The prescribed burning we're doing not only removes those dangers but promotes healthier longleaf."**

Forest stewardship at Hitchcock Woods dovetails with the efforts of the new SoLo-Ace Longleaf Partnership, which works in a region comprising state, federal and large private land holdings primed for longleaf restoration.

That restoration will be a boon for wildlife, as well as the region's timber industry.

But more importantly, those restored forests will help South Carolina reclaim some of its lost glory and give new generations of children the chance to engage in that simplest, most fulfilling pastime: playing in the woods.



- Conservation Focus Area: 4 million acres\*
- Priority Protection Area: N/A\*\*

\* The total acreage of the landscape in which the team works.  
\*\* The total acreage of the five most critical sites identified for protection and restoration.



A young American alligator in the wetlands of South Carolina's ACE Basin. © Joe Hamilton/TNC



Longleaf pine site preparation. © The Longleaf Alliance

# Georgia



Gopher tortoise. © Marc Del Santro

Spanning nearly 5 million acres in southeast Georgia, the range of the Fort Stewart/Altamaha Longleaf Restoration Partnership contains more than 175,000 acres of high-priority longleaf pine habitat. It's a species-rich landscape dominated by the Altamaha River and its massive watershed, as well as the U.S. Army's 280,000-acre Fort Stewart.

## Partners

- The Conservation Fund
- Georgia Department of Natural Resources
- Georgia Forestry Commission
- The Georgia Land Trust
- Georgia Power Company
- International Forest Company
- The Longleaf Alliance
- Marine Corps: Air Station Beaufort
- Natural Resources Conservation Service
- The Nature Conservancy
- U.S. Army: Fort Stewart/Hunter Airfield
- U.S. Fish and Wildlife Service

## Conservation & Restoration Benefits



Wildlife Protection



Water Quality



Military Readiness



Working Forests



Heritage Landscapes



Wildfire Control



Public Recreation

# Fort Stewart/Altamaha Longleaf Restoration Partnership

“You can do a lot of things, but you can’t fool Mother Nature,” says landowner Fred Warnell, who ought to know. Warnell is a third-generation Georgia forester who has spent years experimenting with different species of pine on his family property outside Savannah, including 150 acres of longleaf planted within the past year.

“Everything above the dirt is directly related to everything below the dirt,” Warnell says. “You can’t expect any more out of what you plant than what nature puts there. If it’s not right for longleaf or you don’t make it right, it just won’t grow.”

Warnell’s longleaf reforestation work is part of the larger efforts of the Fort Stewart/Altamaha Longleaf Restoration Partnership, which works in a 5 million-acre range in southeast Georgia.

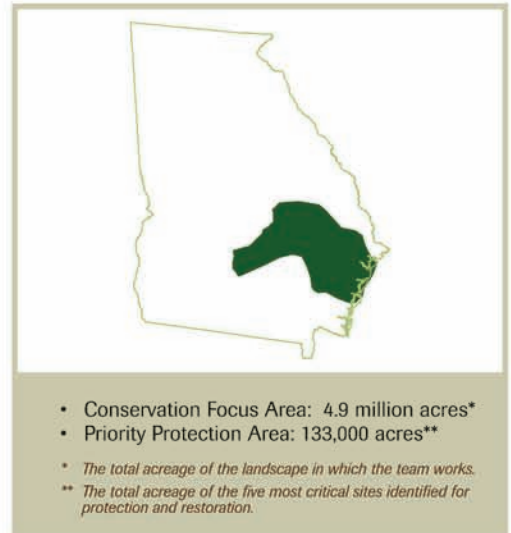
It’s a diverse landscape of sandy soils and deep wetlands sluiced by the mighty Altamaha River, which gives shape to the third-largest watershed on the East Coast. Within its boundaries are a wide array of rare and endangered species, including the gopher tortoise, indigo snake, frosted flatwoods salamander, red-cockaded woodpecker and Bachman’s sparrow.

It’s also home to more than 133,000 acres of high-priority longleaf habitat primed for protection and restoration.

Recent changes to forestry economics have spurred timber companies to divest their holdings, creating opportunities to protect huge swaths of unbroken land that would leverage existing Wildlife Management Areas and other protected lands within the Altamaha River Watershed.

In addition to the acres of new longleaf Warnell is creating, he’s also developing hard-earned wisdom to share. “I’ve been doing this for 43 years,” he says. “And when it comes to successfully planting longleaf pine, people will tell you, ‘Everything is written down. Just follow the plan.’ Well, it doesn’t always work that way. There’s no hard and fast blueprint—it depends case to case.”

“I’ve got two daughters and two grandsons and I keep ledgers for them of what works and what doesn’t,” he says. “I don’t know if they’re planning on continuing in forestry. I hope they do. And if they decide to, I believe they’ll be able to wing it pretty good. I think they can get by just fine.”



Longleaf pine trees on Moody Forest Natural Area. © Karine Aigner



Fire workers at Moody Forest Natural Area in Georgia. © Rich Reid

# Georgia/Alabama



Soldiers train amid Fort Benning's longleaf forests. © U.S. Army

There are 1.9 million acres within the operating range of the Chattahoochee Fall Line Conservation Partnership in Georgia and Alabama. Much of the remaining longleaf being protected by the CFLCP is found on Fort Benning, and the military and the conservation community have decades of history of partnership and cooperation protecting the longleaf pine ecosystem.

## Partners

- Chattahoochee Valley Land Trust
- City of Columbus
- Coalition for Sound Growth
- Columbus State University
- The Conservation Fund
- Georgia Department of Natural Resources
- Georgia Forestry Commission
- Jones Ecological Research Center
- The Longleaf Alliance
- MeadWestvaco Foundation
- National Fish and Wildlife Foundation
- National Wild Turkey Federation
- Natural Resources Conservation Service
- The Nature Conservancy
- Oxbow Meadows Environmental Center
- Private Landowners
- Southern Company
- Trees Columbus
- The Trust for Public Land
- U.S. Army: Fort Benning
- U.S. Fish and Wildlife Service

## Conservation & Restoration Benefits

-  Military Readiness
-  Wildlife Protection
-  Working Forests
-  Public Recreation
-  Water Quality
-  Heritage Landscapes
-  Wildfire Control

# Chattahoochee Fall Line Conservation Partnership



Wade Harrison

The Chattahoochee Fall Line is a place where people proudly live off the land and actively manage their farms and forests to protect the natural resources that have sustained families for generations. It's also home to Fort Benning, which has long been one of the nation's most active infantry training facilities.

A 2010 Congressional decision to relocate the Army's armored training to the post increased pressure on the facility's natural resources, especially 80,000 acres of longleaf pine habitat

which are home to red-cockaded woodpeckers, gopher tortoises and other species of conservation concern.

The Chattahoochee Fall Line Conservation Partnership (CFLCP) was developed in part to help the military collaborate with the conservation community and private landowners near Fort Benning, and more broadly to help protect and restore longleaf across the Fall Line region.

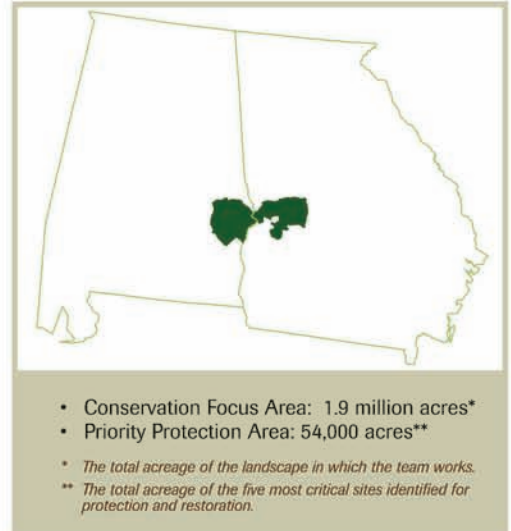
"A lot of the habitat the military was doing a great job of managing and restoring was now at risk because of the expanded armored training," explained Wade Harrison, The Nature Conservancy's Director of Land Protection in Georgia. "It's challenging enough to recover an endangered species anywhere, let alone on land with those kinds of impacts. So the Army got proactive, and asked The Nature Conservancy and others to work with landowners to secure, protect and restore habitat outside their borders, adding to what the Army will continue to manage on the base."

And, while conservation offered a possible solution to the military's problems, it also provided a greater opportunity to improve the quality of life for all residents of the Chattahoochee Fall Line region.

**"We realized we had the opportunity to do something that would benefit more than just the Army," Harrison says. "We could get the whole community invested. We could protect and restore our natural heritage. We could create more public access to protected lands for hunting and other recreation. We could stop commercial forestland from vanishing and safeguard a critical part of the local economy."**

At 21 partners and growing, the members of the CFLCP own or manage nearly 113,000 acres that either contain longleaf pine or are historic longleaf sites suitable for restoration. Partners include private landowners, non-profits, public agencies, local government officials, and universities.

The CFLCP hopes to protect, restore and manage up to 40,000 acres of land around Fort Benning by the year 2020. This conservation corridor will provide a buffer of natural lands between active military training and daily life outside Fort Benning while protecting the very unique natural heritage of the region.



Chattahoochee Fall Line. © Erika Nortemann/TNC



Fort Benning training. © U.S. Army

# Georgia/Florida



The massive Georgia Bay Complex wildfire of 2007. © Jen Kolb

The 1.2 million acre Okefenokee/Osceola LIT (O2) range is high-quality longleaf restoration land—more than 600,000 acres by some estimates. It's a large, wild landscape of working forests, prehistoric swamps and rare wildlife that the 17 team members have spent years working to protect.

## Partners

- The Conservation Fund
- Florida Forest Service
- Georgia Department of Natural Resources, Wildlife Resources Division
- Georgia Forestry Commission
- Greater Okefenokee Association of Landowners (GOAL)
- The Langdale Company
- National Wild Turkey Federation
- National Wildlife Federation
- Natural Resources Conservation Service
- The Nature Conservancy
- Okefenokee Adventures
- Rayonier
- Superior Pine Products
- Toledo Manufacturing/ Gowen Timber Company
- U.S. Fish and Wildlife Service: Okefenokee National Wildlife Refuge
- U.S. Forest Service: Osceola National Forest

## Conservation & Restoration Benefits



**Working Forests**



**Public Recreation**



**Wildfire Control**



**Military Readiness**



**Water Quality**



**Wildlife Protection**



**Heritage Landscapes**



Chip and Joy Campbell

Chip Campbell has seen just about every inch of Okefenokee Swamp.

He first laid eyes on the park decades ago as a 12-year-old Boy Scout, and the experience turned out to be transformative. Now, Campbell and his wife, Joy, run Okefenokee Adventures, the sole visitor services contractor for the 400,000-acre Okefenokee National Wildlife Refuge.

“Swamps are kind of our thing,” Campbell confesses. But as much as he loves the thrill of leading interpretive paddling tours through unspoiled primordial marshes, he also appreciates the value of the upland pine forests ringing the swamp.

“This is a really sweet wild area, one of the last ones remaining in the eastern U.S.,” Campbell says. “But you can’t just draw a line between the wet and the dry. From alligator to woodpecker, it’s all part of a single ecosystem.”

Okefenokee Adventures is part of the Okefenokee/Osceola Longleaf Implementation Team (O2LIT), an affiliation of 17 partners dedicated to conservation and restoration of longleaf pine within a 1.2-million-acre range throughout Florida and Georgia.

In addition to Okefenokee National Wildlife Refuge, the team’s focus area also includes Osceola National Forest, John Bethea Forest and Dixon State Forest, as well as large tracts of forested private land holdings.

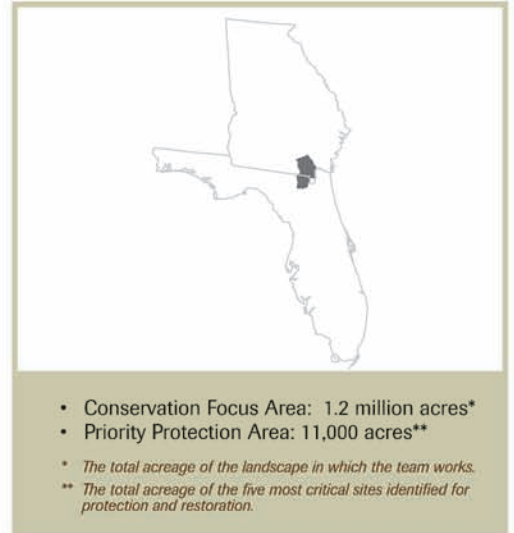
In total, there are nearly 1 million acres of contiguous forestland within the region, offering a rare chance for scale-level conservation and forest restoration. Much of the landscape is comprised of working forests that provide thousands of jobs and contribute billions of dollars to the region’s economy. They also sustain an incredible array of wildlife, including endangered red-cockaded woodpeckers and gopher tortoises.

The region contains the largest intact freshwater wetland in the nation, as well as freshwater resources that supply water for the Floridian Aquifer and that are used for agriculture, industry and human consumption.

The O2LIT’s immediate goals are to restore 2,900 acres of longleaf and to enhance conditions on an additional 30,000 acres through prescribed fire.

Meeting those goals will require everything from nuanced political lobbying to carefully modeled sustainable forestry.

But Campbell’s role is as straightforward as the paddle in his hand. “I’m building constituents for conservation,” he says. “That’s how you move forward. You get people out there so it stops becoming just an intellectual thing. Let them see the sweep of the landscape. Let them see the gators sliding by. Give them a sense of being in the wild. That’s where I come from. That’s where I live.”



- Conservation Focus Area: 1.2 million acres\*
- Priority Protection Area: 11,000 acres\*\*

\* The total acreage of the landscape in which the team works.  
\*\* The total acreage of the five most critical sites identified for protection and restoration.



Male longleaf cones. © David Printiss



Saw palmetto and longleaf pine at Osceola National Forest.  
© Geoff Gallice/Flickr Creative Commons



Black bears in Florida. © Pam Anderson

Florida's Ocala Longleaf Implementation Team works to protect and restore longleaf pine in a region spanning nearly 5 million acres of the Sunshine State. With more than 222,000 acres considered high priority, it's a vast amount of land to consider. Fortunately, much of the remaining longleaf—and much of the best habitat for restoration—can be found on Ocala National Forest, where decades of conservation efforts are already paying off.

## Partners

- Alachua Conservation Trust
- Alachua County Environmental Protection Department
- Florida Forest Service
- The Nature Conservancy
- Putnam Land Conservancy
- U.S. Forest Service
- University of Florida/Ordway-Swisher Biological Station

## Conservation & Restoration Benefits



Public Recreation



Heritage Landscapes



Water Quality



Wildfire Control



Wildlife Protection



Military Readiness



Working Forests



# Ocala Longleaf Implementation Team

While Florida's Ocala Longleaf Implementation Team (OLIT) might be one of the newest working groups in the region, it's the evolution of decades of cooperative conservation work between state and federal agencies, private landowners and the conservation community.

The conservation region is anchored by the 385,000-acre Ocala National Forest. Established in 1908 by Teddy Roosevelt, the forest is part of a network of public lands that provide fishing, hunting and other recreational opportunities for an estimated 6 million people each year. Those activities contribute more than \$61 billion—or 25 percent—of all sales tax revenue annually in the state.

Maintaining the health of Ocala's trees falls largely on the shoulders of Janet Hinchee, a silviculturist with the U.S. Forest Service. "We have some longleaf," she says. The rest is slash and sand pine scrub and a lot of it is suitable for conversion back to longleaf."

Hinchee explains that longleaf management targets three components: overstory, midstory and groundcover, which must be in balance for the system to thrive.

"In a healthy system, the overstory is actual longleaf trees. The midstory is a low-density mix of trees like turkey oaks or live oaks, while the groundcover is a blend of native, pyrogenic grasses."

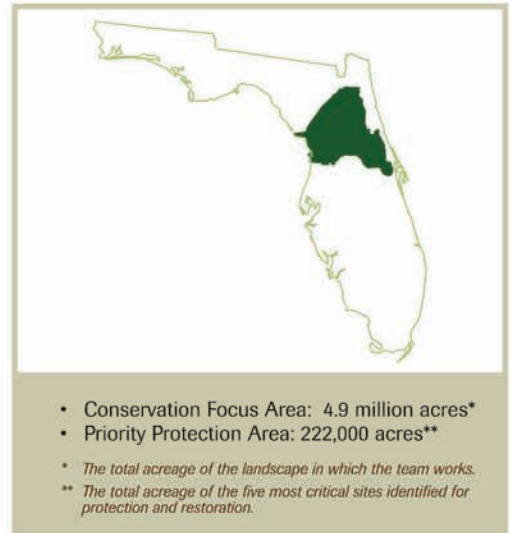
Hinchee says that longleaf sites are graded on those three components and those grades help inform management priorities.

"Under our ecological condition model, moving an area from 'fair' to 'good' is a lot cheaper than moving something that's in poor condition up," she says. "For example, a 'poor' area might have no remaining longleaf, thin groundcover and a dense midstory. In that case, we'd be starting out nearly from scratch. We can affect a bigger change at a fraction of the cost by keeping areas from sliding into such conditions and by working in areas graded 'fair' or better."

Hinchee's work in Ocala is just part of the LIT's larger efforts under way to restore longleaf forests within the system.

The sharp increase in red-cockaded woodpecker populations is proof that work is already paying tangible ecological dividends. But Hinchee's motivation to restore Florida's lost longleaf forests are decidedly less technical.

"These forests are gorgeous," she says. "We have to work together as a team because these are places we don't want to lose."



A pinewoods treefrog in Ocala National Forest.  
© soulsurvivor08/Flickr Creative Commons



Florida scrub-jay. © David Moynahan

# Florida/Georgia/Alabama



Banded and released red-cockaded woodpecker in Florida. © Carlton Ward Jr.

The Apalachicola Regional Stewardship Alliance (ARSA) is a 10-partner team working throughout a vast range in northern Florida and southern Georgia. The group works on more than 6.6 million acres spanning 13 counties of northern Florida and southern Georgia, including a nearly contiguous span of 650,000 acres on Apalachicola National Forest and St. Marks National Wildlife Refuge.

## Partners

- Florida Department of Environmental Protection
- Florida Fish and Wildlife Conservation Commission
- Florida Forest Service
- National Interagency Prescribed Fire Training Center
- The Nature Conservancy
- Northwest Florida Water Management District
- U.S. Air Force: Tyndall Air Force Base
- U.S. Bureau of Land Management
- U.S. Fish and Wildlife Service: St. Marks National Wildlife Refuge
- U.S. Forest Service: Apalachicola National Forest

## Conservation & Restoration Benefits



Working Forests



Public Recreation



Water Quality



Wildlife Protection



Military Readiness



Wildfire Control



Heritage Landscapes

# Apalachicola Regional Stewardship Alliance

Florida's old-growth longleaf pines are impressive, stately trees, yet they're just one part of a complex system developed in harmony over time. Remove any one component—the understory, the wildlife, or even the regular cleansing of fire—and the whole system will collapse.

The plight of longleaf in the Apalachicola region is familiar: The trees once blanketed the landscape but were heavily logged for lumber. In their place, pine species like slash, sand pine and loblolly were planted.

While those species grew quickly, they were ill-suited to withstand the regular wildfires that spread through the area. "Florida has the highest percentage of lightning strikes in the northern hemisphere," explains Brian Pelc, a restoration specialist with The Nature Conservancy's Florida program.

In a healthy longleaf forest, those fires spread across the dry ground, consuming fine fuels like wiregrass and creating a unique environment the trees thrive on. But slash and loblolly aren't fire adapted and will burn like dry tinder. So plantation owners were forced to suppress naturally occurring fires that were integral to the system.

"Once fire was taken away, the whole natural community became decoupled," Pelc says.

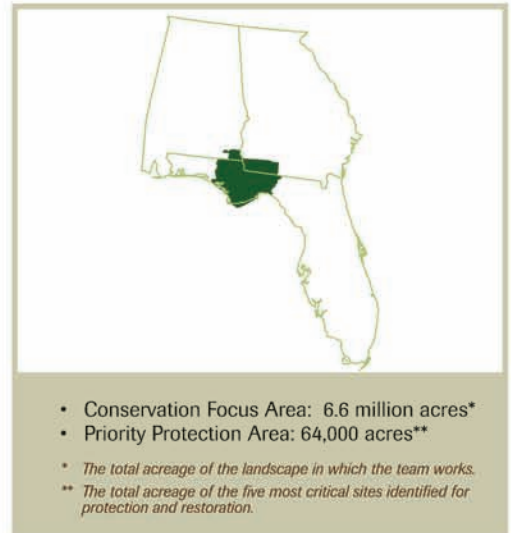
The Apalachicola Regional Stewardship Alliance (ARSA) was formed in 2003 to address those imbalances to Florida's remaining longleaf pine forests and to restore longleaf on historic sites throughout the region.

The group works on more than 1 million acres of publicly owned conservation lands spanning 13 counties of northern Florida and Southern Georgia, including a nearly contiguous span of 650,000 acres on Apalachicola National Forest and St. Marks National Wildlife Refuge.

The 10 partners, including the U.S. Forest Service, the Bureau of Land Management, the Florida Forest Service and The Nature Conservancy, share resources and best-practices to bring longleaf stewardship to the 2.5 million acres of private forested lands in the area. In addition to prescribed fire, the group focuses on other critical management techniques such as invasive species control, longleaf replanting and groundcover restoration.

The ARSA has received funding through the National Fish and Wildlife Foundation to assist with longleaf restoration on four public land sites within the next two years. Those projects will improve wildlife habitat and the overall health of the ecosystem, while also creating forests that will be safer from wildfires and less expensive to manage.

**"It's a rich and diverse system and a beautiful story," Pelc says. "And it's ours to tell."**



Lush wiregrass plugs in a nursery. © David Printiss



Wiregrass plug. © David Printiss

# Florida/Alabama



Student Alex Pit in the field. © Debbie Miller

The Gulf Coastal Plain Ecosystem Partnership works across a range spanning more than 6.6 million acres throughout northern Florida and southern Alabama. Within that landscape, slightly less than 200,000 acres have been identified as high-priority for additional longleaf conservation and restoration. Much of the region's remaining longleaf pine forests are found on public lands or military installations, making cross-discipline partnerships essential to conservation success.

## Partners

- Florida Department of Environmental Protection
- Florida Fish and Wildlife Conservation Commission
- Florida Forest Service
- Gulf Power Company
- The Longleaf Alliance
- National Park Service: Gulf Islands National Seashore
- The Nature Conservancy
- Northwest Florida Water Management District
- Nokuse Plantation
- U.S. Air Force: Eglin Air Force Base
- U.S. Forest Service: Conecuh National Forest
- U.S. Navy: Naval Air Stations Pensacola/Whiting Field
- Westervelt Ecological Services

## Conservation & Restoration Benefits



Public Recreation



Water Quality



Military Readiness



Wildlife Protection



Working Forests



Wildfire Control



Heritage Landscapes

# Gulf Coastal Plain Ecosystem Partnership

A restored longleaf system can take upward of 30 years to reach full health, meaning entirely different waves of conservation professionals are likely to help out along the way from site prep to mature trees. Effectively restoring and protecting longleaf requires a steady influx of passionate and talented conservationists willing to step up and carry on work already under way.

At the University of Florida's West Florida Research & Education Center, Debbie Miller is training those future conservationists 40 at a time through undergraduate classes on longleaf ecosystem restoration. "It's part of a natural resource conservation degree," Miller explains. "It combines wildlife, forestry, restoration—pretty much everything required to do land management." Each year, between 10 and 15 students graduate from the two-year program, and nearly all of them find jobs in the region's conservation community.

Miller attributes the program's success to an emphasis on field work. In addition to classroom work, her students do intensive field studies and intern with state agencies and private landowners to get on-the-ground restoration experience.

Miller is always looking for new ways for students to gain valuable experience through field work. "That's why we're here, to give kids that hands-on training," she says.

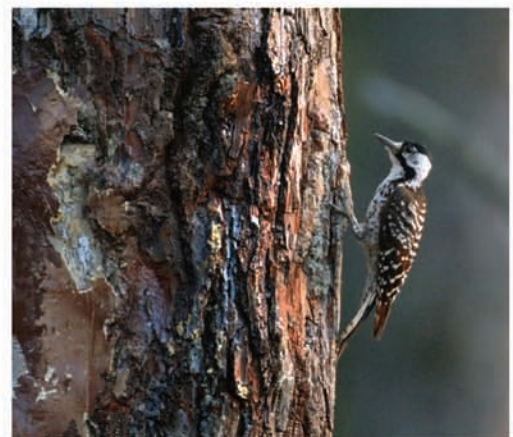
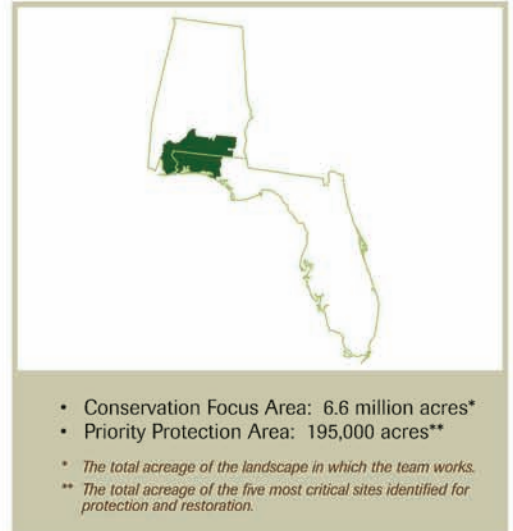
"I'd love to have them on site spending weeks at a time outside. It would be like the old-fashioned study camps that we used to have."

Much of that field work is arranged through the Gulf Coastal Plain Ecosystem Partnership (GCPEP), a 12-partner affiliation that has been working for nearly two decades in the region.

It's a unique and varied landscape, home to a tremendous amount of longleaf pine found on protected lands stretching contiguously from the Choctawhatchee River west to Eglin Air Force Base and then north through the Blackwater River State Forest to Conecuh National Forest.

These lands provide some of the most popular recreation opportunities in the region, and they are key contributors to state and local economies. In addition, their upland forests help keep the many watersheds within the landscape healthy.

In addition to helping train future conservationists, the GCPEP works together on multiple sites to achieve restoration and management goals through the use of controlled burning, invasive species control, rare species recovery and the protection of native groundcover.



Red-cockaded woodpecker. © Carlton Ward Jr.



Open Pond in Conecuh National Forest. © Will Thomas/Flickr Creative Commons

# Alabama/Georgia



Longleaf pine in Bibb County's Ketona Dolomite Glades. © TNC

The Talladega-Mountain Longleaf Pine Conservation Partnership covers a lot of ground—more than 7 million acres in Alabama and Georgia. However, most of the 11-member team's efforts are focused on a unique mountain landscape that contains the last and best remnants of the region's longleaf pine forests.

## Partners

- Alabama Department of Conservation and Natural Resources
- Alabama Forestry Commission
- Alabama Wildlife Federation
- Berry College
- Georgia Department of Natural Resources
- Jacksonville State University
- Munford School, Longleaf Alliance
- National Wild Turkey Federation
- The Nature Conservancy
- U.S. Fish and Wildlife Service: Mountain Longleaf National Wildlife Refuge
- U.S. Forest Service: Talladega National Forest

## Conservation & Restoration Benefits



Working Forests



Wildlife Protection



Water Quality



Wildfire Control



Public Recreation



Military Readiness



Heritage Landscapes

# Talladega-Mountain Longleaf Pine Conservation Partnership



Bill Garland

Most of the longleaf pine found within the operating range of the Talladega-Mountain Longleaf Pine Conservation Partnership doesn't look like much compared to the trees found along the coastal plains. Mountain longleaf grows on elevations with thin soil, and the trees tend to be undersized as a result.

"They're scrawny," surmises Bill Garland, a retired U.S. Fish and Wildlife Service biologist who serves as the longleaf coordinator for Jacksonville State University's Environmental Policy and Information Center.

But that wasn't always the case. "That's just what's left," says Garland. "In the 1800s, the river valleys of Alabama and Georgia were covered with huge, magnificent forests of longleaf, some of the highest quality trees found anywhere. When that was timbered, all that was left were the trees on the slopes."

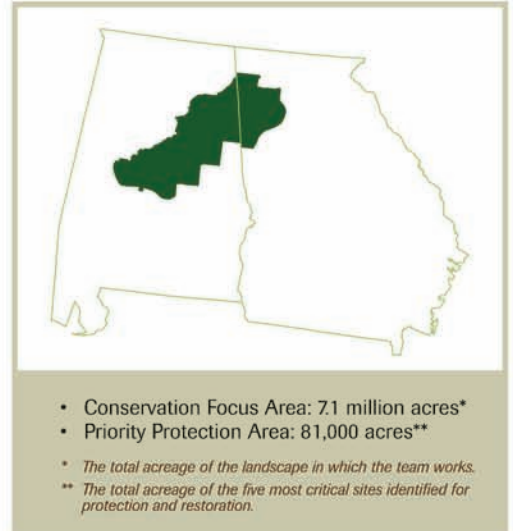
So while the mountain longleaf trees may be undersized, they're something more important: resilient. They're also the last, best chance for restoration within the region.

Unfortunately, urban and agricultural development have rendered the once-fertile river valleys unsuitable for longleaf restoration. "Longleaf requires a large, uninterrupted landscape," Garland says. "Only then can the forest support a greater and more diverse community of species."

**"Our approach is to focus on areas that already have long-term protection in place and then build out larger blocks of contiguous habitat,"** Garland says. **"And those core areas are in the mountains."**

The Talladega-Mountain Longleaf Pine Conservation Partnership is piggybacking on conservation and restoration work already under way at two important sites—Talladega National Forest and the Mountain Longleaf National Wildlife Refuge—and working to create a massive, uninterrupted longleaf corridor through work on private property and other state forests lands.

Having spent decades studying and working to restore longleaf in the region, Garland is excited about the strategy. "It has tremendous potential," he offers. "It's large-scale work, but that's what it takes. Longleaf isn't just a tree or even a forest. It's an ecosystem."



Sunrise in Talladega National Forest. © Chris Hartman/Flickr Creative Commons



Young longleaf pine. © Chris Oberholster/TNC

# Mississippi



Mississippi longleaf pine forests. © TNC

The De Soto-Camp Shelby Longleaf Implementation Team's working area is the second-largest in the nation, covering nearly 6 million acres of land in Mississippi. At its heart lie two major blocks of intact longleaf on publically held land: De Soto National Forest and the state-owned Camp Shelby military facility. There and on surrounding forests, the De Soto-Camp Shelby LIT forges partnerships to protect longleaf pine and the people who rely on them.

## Partners

- Land Trust for the Mississippi Coastal Plain
- Longleaf Alliance
- Mississippi Dept. of Wildlife, Fisheries and Parks
- Mississippi Forestry Commission
- Mississippi National Guard
- Mississippi State University
- National Wild Turkey Federation
- Natural Resources Conservation Service
- The Nature Conservancy
- U.S. Fish and Wildlife Service
- U.S. Forest Service: DeSoto National Forest
- University of Southern Mississippi
- Wildlife Mississippi

## Conservation & Restoration Benefits



Wildlife Protection



Water Quality



Working Forests



Wildfire Control



Military Readiness



Public Recreation



Heritage Landscapes



## De Soto-Camp Shelby LIT

If Kenneth Bradley's description of longleaf conservation as "center mass of what we do here" has a distinctly martial tenor, there's a good reason. Bradley's a major in the United States Army National Guard, and "here" is Camp Shelby, one of the largest military training facilities in the nation. In addition to the many soldiers and support staff members, the post is also home to nearly 100,000 acres of longleaf pine through a special partnership with the De Soto National Forest, making it the cornerstone of the De Soto-Camp Shelby LIT's focus area.

The 13-partner team, which includes representatives from the Army, the U.S. Forest Service, U.S. Fish and Wildlife Service, The Nature Conservancy and the Longleaf Alliance, works in a region spanning 16 counties containing the best examples of intact and restorable longleaf habitat in Mississippi.

Those forests also contain large populations of popular game species like white-tailed deer and bobwhite quail, as well as endangered species like red-cockaded woodpecker, dusky gopher frog and sandhill crane.

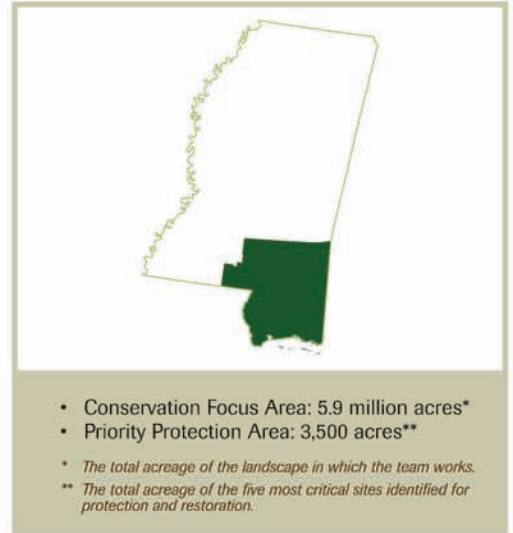
A significant percentage of the region's target areas for conservation and reforestation areas are found on private property, including tree farms, family holdings and, in some cases, large-parcel industrial timber lands. The team works with these landowners to ensure that their forests continue to provide economically.

While habitat protection and military training might seem like diametrically opposed pursuits, Major Bradley disagrees.

**"Longleaf restoration dovetails perfectly with our military mission," he says. "We've been partnering with the conservation community for nearly 40 years. Those relationships have developed and matured over time. We're comfortable working with outside agencies and private landowners and can clearly see the benefits. The more people doing habitat restoration and management, the better off we all are."**

Bradley explains that working to establish new longleaf areas off site improves the overall resiliency of the landscape. This in turn aids in relieving the pressure of habitat fragmentation for endangered species on Camp Shelby. Ultimately, this allows the military more freedom on base to conduct critical training operations. While Camp Shelby personnel actively manage the existing longleaf, Major Bradley points out that additional acreage of longleaf pine continues to be restored since 2007 in cooperation with the members of the implementation team.

In addition to active restoration and management, the team conducts education and outreach through field days and stewardship workshops and provides technical assistance to interested landowners.



A dusky gopher frog on De Soto National Forest.  
© John A. Tupy



Soldiers train on Camp Shelby in Mississippi. © U.S. Navy

# Louisiana



A healthy longleaf pine understory. © TNC

The West-Central Louisiana Ecosystem Partnership works throughout a nearly 2 million-acre range containing core expanses of public lands and a number of high-priority restoration sites on privately owned property. The region's remaining longleaf forests are a haven for rare and endangered species, including the red-cockaded woodpecker, and are key economic engines for the state's tourism and public recreation industries.

## Partners

- Association of Consulting Foresters-Louisiana
- Louisiana Department of Agriculture & Forestry
- Louisiana Department of Wildlife & Fisheries
- Louisiana Forestry Association
- Louisiana Society of American Foresters
- Louisiana State University AgCenter
- National Wild Turkey Federation
- Natural Resources Conservation Service
- The Nature Conservancy
- The Trust for Public Land
- U.S. Army: JRTC/Fort Polk
- U.S. Fish and Wildlife Service
- U.S. Forest Service: Southern Research Station /Kisatchie National Forest
- U.S.D.A. Farm Service Agency

## Conservation & Restoration Benefits



Military Readiness



Heritage Landscapes



Wildlife Protection



Wildfire Control



Public Recreation



Water Quality



Working Forests

# West-Central Louisiana Ecosystem Partnership



David Daigle

Although western Louisiana's longleaf pine forests were heavily timbered during the lumber boom of the early 1900s, relic stands of longleaf survive on public and private lands throughout the area, providing prime opportunities for regional and cooperative conservation efforts.

Much of the 260,000 acres of surviving longleaf is on Fort Polk and the adjacent Kisatchie National Forest, but a large portion can be found on private lands throughout the region.

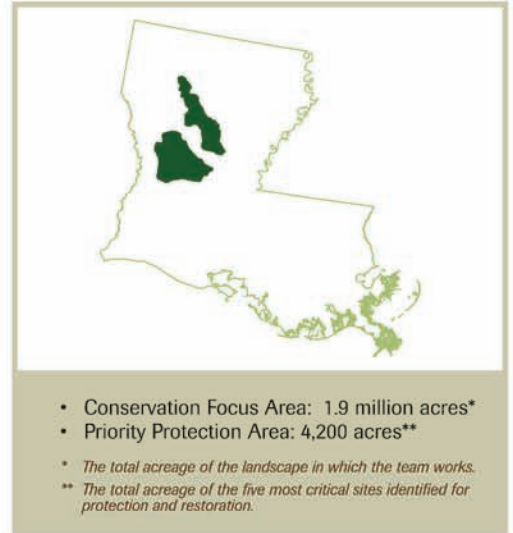
David Daigle bought his first property in Beauregard Parish in 1983 and today owns more than 1,300 acres of longleaf pine. "It's six different properties," he says. "A couple are contiguous, but mostly they're scattered here, there and yonder."

Daigle is a member of the West-Central Louisiana Ecosystem Partnership, which works to protect and restore longleaf throughout nearly 2 million acres in the state. He's been working closely with The Nature Conservancy and the NRCS for nearly two decades to restore pine on his lands.

"Longleaf is just special," Daigle says. "A longleaf system that's healthy—one that's burned and managed—just has more value for man's use than any other system. You get better lumber, good grazing for cattle. White-tailed deer and turkey do better. And it's just aesthetically pleasing. Sunlight hits the ground, wildflowers grow. You're not just putting all your energy into the growth of wood."

Daigle sees his tracts as a scale model for the benefits of longleaf. "Relatively speaking, my sites are small," he says. "But if you stretch them out to 5,000 or even 10,000 contiguous acres, that's when you'd really see the benefits of the ecosystem and what it provides for man."

While Daigle's vision is bold, the WLEP is actively working to restore longleaf on public and privately owned land to augment existing core longleaf forests, provide ecological connectivity among important conservation areas and buffer military lands to enhance training and readiness.



Longleaf pine in its grass stage in Kisatchie National Forest. © Chris M. Morris/Flickr Creative Commons



Liatris blooms in a longleaf savanna. © TNC



A Louisiana pine snake. © Craig Rudolph

A small percentage of the Texas Longleaf Implementation Team's 1.2 million-acre range in East Texas and western Louisiana includes high-priority longleaf restoration lands. The team is built on a core of partnerships between the conservation community, the timber industry and private landowners.

## Partners

- ▣ The Campbell Group
- ▣ The Conservation Fund
- ▣ Lower Mississippi Valley Joint Venture
- ▣ National Wild Turkey Federation
- ▣ Natural Resources Conservation Service
- ▣ The Nature Conservancy
- ▣ Texas A&M Forest Service
- ▣ Texas A&M Institute of Renewable Natural Resources
- ▣ Texas Forestry Association
- ▣ Texas Parks and Wildlife Department
- ▣ U.S. Fish and Wildlife Service
- ▣ U.S. Forest Service: Angelina National Forest/Sabine National Forest

## Conservation & Restoration Benefits



Working Forests



Wildfire Control



Wildlife Protection



Water Quality



Heritage Landscapes

# The Texas Longleaf Implementation Team

Brian Gowin has a very specific idea of what it takes to successfully restore longleaf pine. As the Conservation and Sustainable Forestry Initiative Manager for the Campbell Group, a global timberland and natural resource investment management, Gowin manages the company's forest stewardship and wildlife programs throughout Texas and Louisiana.

**"I've spent 20 years doing this," Gowin explains, "and there's no such thing as success without partnerships. Whether you're a private landowner or a big company, having partners to share the cost and burden of establishing and managing longleaf is essential."**

Cooperation was the impetus behind the creation of the Texas Longleaf Implementation Team, an affiliation of public, private and nonprofit organizations working throughout 1.3 million acres in Texas and Louisiana—a region that includes the westernmost border of longleaf pine's historic range.

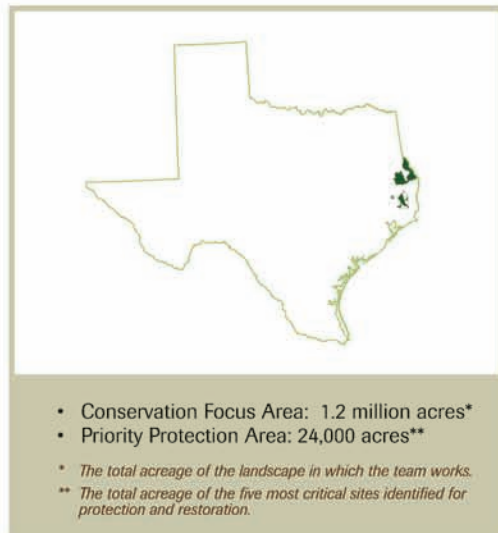
Most of Texas' longleaf pine was logged over a 50-year period beginning in the 1880s. Loblolly and slash pine—a species not native to the state—were planted in its place. These monoculture forests were grown and cut in short rotation, making it difficult for an understory of forbs and grasses to take hold.

Because of the density of the forest and the lack of a balanced under- and mid-story, fire suppression became necessary, creating public opinions about fire that the implementation team still wrestles with today.

"That's a real challenge," Gowin says. "It's been nearly 100 years of fire suppression in some places."

The team's goals include sustaining private land working forests and establishing longleaf throughout the region to prove the economic and ecological benefits of a healthy longleaf system. Finding common cause is essential, especially for a team with such a wide spectrum of partners.

"Each one of us is going to do it for different reasons," Gowin says. "The smaller landowners growing longleaf generally aren't interested in third-party forest certifications like SFI or SFC. The ones I know are driven by a pure love of longleaf. They grew up with it, they know it's rare and they embrace the concept of it."



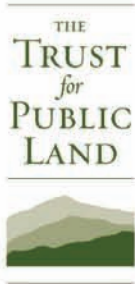
Longleaf team members at the NRCS East Texas Native Plant Materials Center in Nacogdoches, Texas. © W.J. Ledbetter



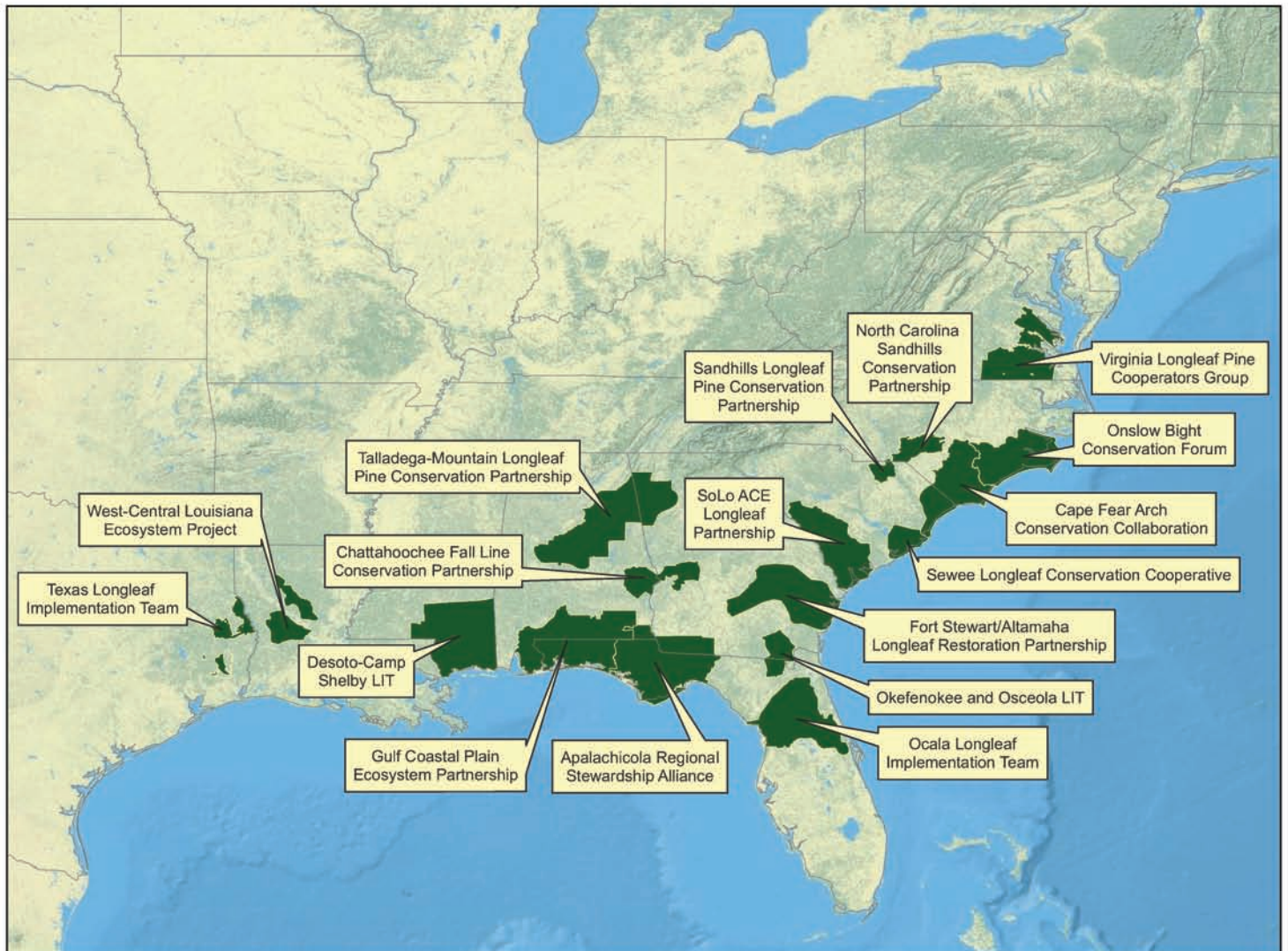
Longleaf pine at Sandylands Sanctuary near Hardin, Texas. © Rich Kostেকে

# Regional Longleaf Pine Partnership Council

The members of the Regional Longleaf Pine Partnership Council collaborate to restore and conserve longleaf pine across the southeastern United States. A part of the America's Longleaf Restoration Initiative, the council has endorsed the formation and use of Local Implementation Teams (LITs) to deliver longleaf restoration on public and private lands and to identify top protection targets throughout longleaf pine's historic range.



# America's Longleaf Pine Implementation Teams



This report was collaboratively developed by The Nature Conservancy and longleaf pine conservation and restoration partners. © May 2014

It can be found online at [nature.org/longleaf](http://nature.org/longleaf).

Production credits: This report was written, edited and produced by Clay Carrington, Analie Barnett, Troy Ettel, and Sherry Crawley of The Nature Conservancy and designed by Astrid Lyons of Dos Diablos Designs. Research partners included project leads for each of the 17 Longleaf Implementation Teams.



---

**Worldwide Office**

4245 N. Fairfax Drive, Suite 100  
Arlington, Virginia 22203-1606

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

