



# Restoring Longleaf

A diverse set of partners have developed a conservation plan to renew one of the South's most significant ecosystems



Written by Bill Ross  
Photographed by Todd Pusser

In presettlement times, the wide expanse of North Carolina's Coastal Plain was comprised of longleaf pine forests, swamps and pocosins. Early travelers up the Cape Fear River described the landscape as an ocean of trees. The vastness of the longleaf pine ecosystem stretched from the lower part of Virginia to the eastern plains of Texas. Before Europeans settled in North America, the ecosystem totaled more than 90 million acres. Today, the longleaf pine covers only a fraction of that acreage. The U.S. Forest Service estimates that only 3.4 million acres of longleaf forests remain today.

Recognizing the devastating loss of much of the range of the longleaf pine forests, a group of unlikely partners developed a conservation plan aimed at restoring this ecosystem. The implementation of the Range-Wide Conservation Plan for Longleaf Pine already resulted in actions at the local, state and federal levels. Little by little, piece by piece, these actions are ensuring that this once-great forestland will rise again.

Readers of this magazine may recall previous stories detailing the ecological, cultural and economic importance of the longleaf pine ecosystem, which culminated in Larry Earley's captivating book "Looking for Longleaf: The Fall and Rise of an American Forest." Earley's writing captures the prominent historical importance the longleaf forest has in the economic and social fabric of eastern North Carolina.

Earley had originally intended to title the book with an emphasis on the fall of the forests. However, restoration efforts and the emergence of the plan encouraged him to acknowledge the very real possibility that this once-great ecosystem could be returned, at least in part, to its former glory.

### *The Power of a Plan*

In much the same way the decline and devastation of the longleaf pine forests must be attributed to a number of sources, the renewal of this majestic ecosystem is dependent upon cooperation and coordination among an array of organizations, all with a strong interest in reviving and restoring longleaf pine to the landscape.

In 2005 a group of conservationists called for a focused effort for restoration of the longleaf ecosystem. As work was under way on this effort, a partnership of Southeastern states and military agencies known as the Southeast Regional Partnership for Planning and Sustainability was working on natural resource issues, one of which included restoration of longleaf pines. Seizing on the potential for collaboration, the

conservationists, state leaders and armed services joined forces with the singular goal of working together to restore the longleaf pine ecosystem.

The outgrowth of this collaboration was a working group intent on developing a detailed conservation plan. A diverse set of partners joined together in 2007 to develop the America's Longleaf initiative, a working group comprised of more than 20 organizations. Participants included federal agencies such as the U.S. Forest Service and Department of Defense, forestry groups such as the American Forest Foundation, and non-profit environmental organizations including the National Wildlife Federation and The Nature Conservancy. These organizations hoped to build on the momentum of the Longleaf Alliance, a nonprofit dedicated to restoring longleaf forests for their environmental and economic benefits.

Each of these groups stood to benefit and further its own interests from a successful restoration effort. The military service branches saw great potential to help prevent encroachment and protect critical training requirements, and other organizations viewed the work as having important wildlife and environmental benefits.

The potential wildlife benefits noted in the plan are numerous. The longleaf forest can sustain a variety of wildlife, including several species listed as endangered or threatened. A couple of these, the red-cockaded woodpecker and the gopher tortoise, are closely linked in the public's mind to the unique habitat of the longleaf. Though the plight of the red-cockaded woodpecker has been much publicized in recent years, the gopher tortoise found throughout Florida provides evidence that the significance of longleaf extends beyond ecology to history and culture. Gopher tortoise meat was a staple in the diet of many families during the Depression era of the 1920s and '30s and was often referred to as "Hoover chicken."

According to the N.C. Wildlife Resources Commission, actions to maintain longleaf pine forests through management practices such as thinning and burning can also benefit wildlife not directly dependent on longleaf pine habitat, such as turkeys, white-tailed deer and mourning doves. Mallory Martin, chief deputy director of the Wildlife Commission, cites the importance of the longleaf habitat and the unique assemblages of plant and animal species found in this ecosystem as the reason the agency has begun the process of restoring much of the considerable amount of land in its ownership in eastern North Carolina to longleaf pine.

Wildlife interests, climate change issues and many other topical areas were woven into the plan

as editors labored to shape the draft for a formal review. In early summer 2008 an initial draft of the plan was completed and circulated among the partnership organizations. Reviewers submitted dozens of detailed comments, which resulted in significant changes to the early version of the draft. All of the work and revisions to the original draft culminated in the release of the Range-Wide Conservation Plan for Longleaf Pine in March 2009.

### *The Plan in Focus*

Right up front, the number jumps out: 8 million acres. The plan sets this ambitious goal of increasing the acreage of longleaf from 3.4 to 8 million acres in 15 years. Lark Hayes, coordinator of America's Longleaf and one of the primary drafters of the plan, states with no reservations that the effort to restore 8 million acres "is admittedly a bold and ambitious goal."

The coalition of partners behind the plan are acutely aware of the potential pitfalls of setting a goal so lofty, because falling short can be equated with failure. While the partners work toward the goal, they are also counting the successes along the way, such as increased collaboration among agencies and the growing public awareness of the longleaf restoration efforts. The goal of restoring 8 million acres, while a significant achievement, would still be less than 1/10 of the longleaf acreage at its pinnacle of coverage. Hayes, for her part, chooses to stay focused on the restoration efforts one step at a time and believes the long-term goal will take care of itself because the "enthusiasm is there to support the plan."

The core of the plan relies on strategies that will be carried out by maintaining existing longleaf ecosystems in good condition, improving acreage with longleaf already present in some form and restoring longleaf pines to suitable sites.

The plan identifies 16 "significant geographic areas" where existing resources and partners can maximize restoration efforts. The factors used to identify these significant landscapes included an



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Public land such as Croatan National Forest (above) and Holly Shelter Game Land is the focus of the Longleaf Alliance's efforts to restore habitat for animals such as the little grass frog.



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area greater than 100,000 acres and management of a core of the acreage by a landowner with a long-term commitment to conservation. All 16 areas targeted for special attention have federal land that is being managed for longleaf pine. The areas identified as significant in North Carolina include the Onslow Bight area, the Sandhills and the Bladen Lakes region in the Cape Fear River basin.

Despite the focus on federally managed lands, supporters of the plan are quick to acknowledge that the effort must include substantial involvement from private landowners. Finding the right mix of incentive programs and landowner assistance programs to attract private landowners to support the restoration work is paramount. One such program is already being implemented by the Wildlife Commission through the Landowner Incentive Program, with the goal being to work with landowners to implement management plans to restore wildlife habitat for at-risk species.

From public to private lands, the plan calls for actions with a particular emphasis on new opportunities that might arise from the development of carbon markets and other economic opportunities that would benefit private landowners. For example, the plan recognizes the intersection between mitigation efforts to address climate change and longleaf restoration.

Longleaf planners hope to duplicate similar efforts in the Southeast, such as the recent announcement by Duke Energy that it plans to reforest up to 1 million acres in the Mississippi

Alluvial Valley in hardwoods to capture large quantities of carbon dioxide, create wildlife habitat and maximize benefits for landowners.

### *The Plan in Action*

In “Looking for Longleaf,” Earley writes that “one decision at a time, it is surely the only way that longleaf will ever become a significant presence on the land once again.” One of these decisions and an example of the plan being implemented on the ground can be found in the Sandhills of North Carolina in one of the state’s fastest-growing counties. Hoke County, in partnership with The Conservation Fund, is working to establish the state’s first community forest, which will protect wildlife habitat and riparian buffers and restore the longleaf pine ecosystem. The community forest, located on a 532-acre tract, will also have the potential to generate economic activity for the county through pine straw raking and timber harvesting. Hoke County commissioner Bobby Wright, a supporter of the project, believes that all parties involved benefit. In particular, he notes the lack of parks in Hoke County and cites the trails in the community forest as a place for the county’s citizens to hike and recreate.

The recreation and wildlife benefits are complemented by the potential economic prospects. Despite rapid population growth — 40,000 new residents are expected over the next four years — the county is still dealing with economic struggles from the loss of jobs in the agricultural and manufacturing sectors. The community forestry concept is based on the premise of generating income while at the same time meeting conservation goals. Hoke County retains control of the property and benefits from recreational activities, water quality protection and income generation.

The project in Hoke County has the added benefit of providing a buffer around Fort Bragg. As a result the land will remain undeveloped, thereby ensuring that the army’s training requirements can proceed without the potential problems presented by encroachment.

The ability to duplicate projects like the Hoke County Community Forest is increasingly likely as funding is targeted for longleaf pine restoration efforts. Five states in the Southeast received a \$9 million award from the American Recovery and Reinvestment Act for the purposes of a longleaf



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The return of vast expanses of classic longleaf pine savanna could increase populations of creatures such as the Pine Barrens tree frog and the American kestrel, and plants such as lupine.

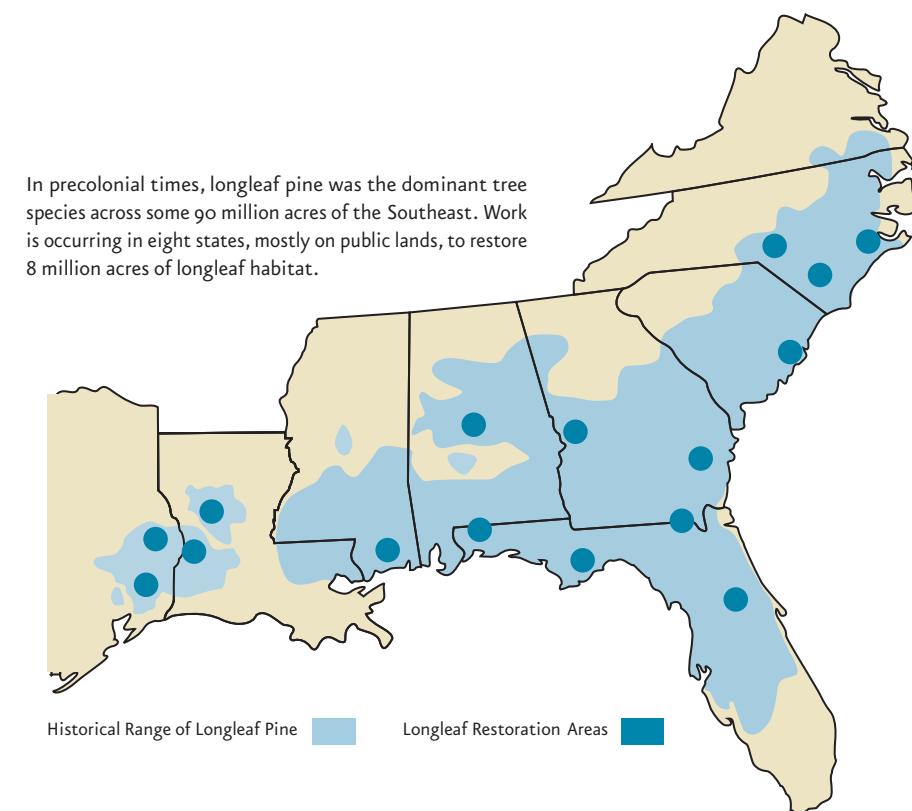
## Longleaf Rising

### Estimates of Existing Acres of Longleaf Forest

Alabama	716,824
Florida	927,413
Georgia	460,109
Louisiana	240,845
Mississippi	383,784
North Carolina	220,338
South Carolina	401,980
Texas	52,800
<b>Total</b>	<b>3,404,143</b>

The full Range-Wide Conservation Plan for Longleaf Pine can be found at [www.americaslongleaf.org](http://www.americaslongleaf.org).

MAP BY MARSHA TILLET  
Source: America's Longleaf Conservation Plan



In precolonial times, longleaf pine was the dominant tree species across some 90 million acres of the Southeast. Work is occurring in eight states, mostly on public lands, to restore 8 million acres of longleaf habitat.

Historical Range of Longleaf Pine Longleaf Restoration Areas

restoration initiative. The funding is being managed by the U.S. Forest Service and will be distributed to North Carolina, South Carolina, Georgia, Florida and Alabama.

North Carolina, which received close to \$1.7 million of the award, plans to use the bulk of its share for plant materials capacity. This activity is focused on increasing the availability of longleaf pine seed, seedlings and associated understory plant materials for use in restoration work. In addition, a portion of North Carolina’s share of the money has been set aside for education and public outreach, including the development of educational materials as well as outreach through mass media to raise public awareness. The N.C. Division of Forest Resources outlined its plans for expending the funds to the General Assembly’s Joint Select Committee on Economic Recovery during the 2009 legislative session.

### *The Future of the Plan*

The federal dollars flowing to North Carolina for restoration actions, the partnerships between federal agencies and environmental organizations, and the increased attention to this effort from the public and state policymakers are all indications that the longleaf pine ecosystem restoration effort is gaining momentum. This momentum is illustrated by North Carolina governor Bev Perdue’s letter to President Obama in September 2009 in support of future funding for longleaf

restoration, in which she writes, “Successful implementation of the America’s Longleaf plan will meet national needs for economic recovery, environmental protection and defense readiness.” This focused attention by state and national leaders on longleaf restoration efforts makes Earley’s decision to focus his book on the “rise” of the longleaf forest look prophetic in many ways.

The North Carolina toast reflects the value our state has historically placed on the longleaf pine forest as a symbol of our heritage. Although the vastness of the longleaf forests that once ruled the landscape in North Carolina may be lost to the ages, hope remains that some semblance of that dominance can be restored.

*Here’s to the land of the longleaf pine, The summer land where the sun doth shine, Where the weak grow strong and the strong grow great, Here’s to “Down Home,” the Old North State!*

—the official state toast of North Carolina

Nevertheless, the task of reaching the plan’s goal of restoring 8 million acres over the next 15 years remains a significant challenge. At the very least, the plan has provided a rallying point for restoration efforts and enhanced partnerships. At its best, the plan has outlined a detailed road map that points the way to the renewal of the longleaf forests that will hearken back to days gone by. ♡

*Bill Ross served as secretary of the N.C. Department of Environment and Natural Resources from 2001–2009. Currently he is a natural resources consultant for Booz Allen Hamilton and a visiting scholar at Duke University.*