Longleaf Pine Range-wide Conservation Initiative

October 2009





The Longleaf Pine Ecosystems

Longleaf forests once covered over 90 million acres from the South Atlantic Coastal Plain of southern Virginia to the West Gulf Coastal Plain of Texas. Today, less than three percent remain. The longleaf pine ecosystem is one of the most ecologically diverse in the world, with more than 900 plant species that are found nowhere else in the world. It is home to 30 federally listed threatened or endangered species, 10 designated candidate species, hundreds of species of migratory birds and species of conservation interest or concern.

These forests represent an extraordinary diversity of cultural and socio-economic values and have always been "working forests." The tree itself sustained the growth of America with an abundant source of timber and naval stores; building homes, bridges, ships, railroads, and symbolizing the bounty of natural resources that made the nation prosperous. Long before European colonization, Native Americans sustained themselves with the natural and spiritual riches these lands offered – lands which they revered through their customs, rituals, and art.

The driving force behind this ecosystem is fire, "fire in the longleaf forest is like rain in the rainforest." Longleaf systems require prescribed periodic burning, either natural or managed.

The America's Longleaf Restoration Initiative

In 2005 the longleaf conservation community and grassroots leaders recognized a more focused strategic range-wide restoration approach was needed. In 2007, a convergence of interests led to the formation of the *America's Longleaf Restoration Initiative* (the *Initiative*) as an umbrella for the collaborative efforts of more than 20 state and federal agencies, stakeholders and organizations.

Partners:

American Forest Foundation

Cooperative Extension Service, Southern Region

U.S. Department of Defense

East Gulf Coastal Plain Joint Venture

Environmental Defense

U.S. Environmental Protection Agency

J.W. Jones Ecological Research Center

Longleaf Alliance

National Wild Turkey Federation

National Wildlife Federation

NatureServe

Southeastern Association of Fish and Wildlife Agencies (States)

Southeast Regional Partnership for Planning and Sustainability

Southern Environmental Law Center

Southern Group of State Foresters

The Conservation Fund

The Nature Conservancy

U.S. Fish and Wildlife Service

USDA, Forest Service

USDA, Natural Resources Conservation Service

U.S. Geological Survey Wildlife Mississippi

In early 2009, after the input of more than 120 longleaf scientists, professionals, and related practitioners, the *Initiative* released the first ever "Range-Wide Conservation Plan for Longleaf Pine" (Plan) outlining range-wide restoration goals, strategies for addressing needed actions and cross-cutting approaches to focus strategic onthe-ground implementation in significant geographic areas.





all photos: USFWS/Jack Culpepper

The 15-year goal for the Plan is an increase in longleaf acreage from 3.4 to 8.0 million acres, with more than half of this acreage targeted in range-wide "Significant Geographic Areas" in ways that support a majority of ecological and species needs.

Maintaining and increasing this biodiversity will not be accomplished through hands-off protection efforts. In fact, quite the opposite is needed.

U.S. Fish & Wildlife Service

Intact longleaf systems require coordinated effort to restore, and are only maintained through periodic natural or prescribed fire. The result is a unique situation where timber production, game management and biodiversity conservation can not only be compatible, but mutually beneficial.

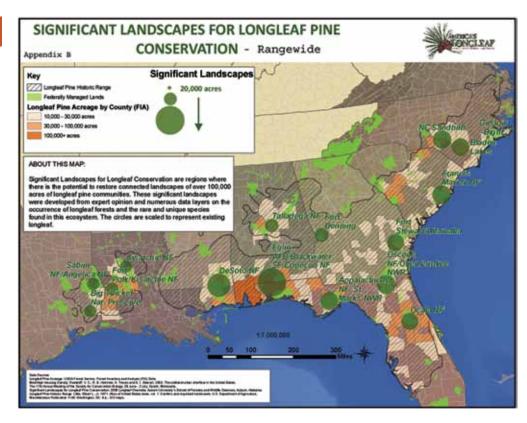
Our Role in Strategic Longleaf Habitat Conservation

Going forward, the Forest Service and the Service have agreed to provide joint leadership for implementation of the Plan with the strong support of southeastern states and the Southeast Regional Partnership for Planning and Sustainability (SERPPAS), which is led by the Department of Defense and has provided substantial funding for this *Initiative* along with the Forest Service and other partners.

Specifically, the Service intends to bring a strategic habitat conservation framework and climate change focus to the restoration initiative and to lead with our partners the development of needed decision-support tools and products to address the goal of range-wide ecological, social, and economic sustainability within these place-based working landscapes.

The range of the longleaf systems falls predominantly within the geography of the vet-to-be established South Atlantic and Gulf Coast Plains and Ozarks Landscape Conservation Cooperatives. Biological planning and conservation design products developed through those cooperatives will be utilized by the *Initiative*. To date, much of the best science and spatially explicit habitat tools available to the *Initiative* such as the open-pine decision support tool are being developed by USGS scientists and established joint ventures across this range. These products, and others, help identify the most strategic and potentially successful areas for ecological restoration projects to address specific species population and biodiversity objectives. More products are needed, particularly the development of species models and remote sensing technologies for nonavian focal species, the integration and identification of habitat criteria and sites for addressing recovery goals and objectives for listed species, and the development of an outcome based monitoring and standardized inventory program for determining and tracking range-wide restoration progress.

Many partners in this *Initiative* are investing in planning and project delivery



under this long-term conservation plan including the the Longleaf Alliance, the National Wild Turkey Federation, Southern Group of State Foresters, and TNC. On-the-ground habitat conservation delivery is the ultimate goal of the *Initiative*'s activities within these longleaf systems. The Service's Partners for Fish and Wildlife Program allocates approximately \$600,000 annually delivering around 30,000 acres a year of longleaf habitat improvements on private lands in collaboration with our state, federal and private partners in every state within the range. In addition, the Partners for Fish and Wildlife Program obligated an additional \$700,000 in Recovery Act funding to provide longleaf restoration on private lands in priority focus areas in Georgia, Florida, and Alabama. The U.S. Forest Service provided \$9 million in recovery funding for investment in federal, state and local projects, and the expansion of local nurseries and support industries. Farm Bill programs also play a major role. However, in order to deliver the restoration objectives of the range-wide Plan, a focused and aggressive schedule is needed.

In addition to Forest Service and Department of Defense lands, DoI lands also contribute to the public conservation estate with almost 100,000 acres of National Wildlife Refuge property and additional National Park Service properties within the range. A full inventory and survey of our DoI properties is currently identified as a priority need, as well as development of desired habitat conditions and management objectives and staff to meet the desired habitat restoration goals.

Adaptation Benefits

The *Initiative* is currently working to identify the available and needed climate change research to provide information and step-down models for longleaf associated species, to determine species vulnerability and provide adaptation benefits. Spatial planning to date has identified cores of protected lands, "Significant Landscapes" we want to manage and effectively connect. A fine-tuned analysis is needed to identify priority habitats, provide species specific migration routes and address biodiversity and ecosystem resilience to accomplish those connections. In addition, the longleaf ecosystem is one of the potential priority landscapes for carbon sequestration due to the large root structure of the tree and herbaceous understory, and there is evidence that healthy native longleaf forests are much less susceptible to climate change effects such as hurricanes, droughts, and pests.

For More Information

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