



AMERICA'S
LONGLEAF

2024 RANGE-WIDE ACCOMPLISHMENTS

NOTES FROM THE CHAIR



Jason Dockery, Alabama Forestry Commission
2024 Longleaf Partnership Council Chair

The year 2024 marked 15 years of collaborative conservation efforts for America’s Longleaf Restoration Initiative and the Longleaf Partnership Council. We are also thrilled to report two momentous achievements this year – two million acres of longleaf pine gained through planting and silvicultural practices and 20 million acres of prescribed fire in longleaf stands since 2010! These milestones not only honor our collective successes but also reinforce our commitment to the next 15 years of partnership among natural resource agencies, non-governmental organizations, academic institutions, forest industry, and private landowners.

As we transitioned into the next phase of America’s Longleaf, 2024 was a year of planning and preparation. The Longleaf Partnership Council created a 5-Year Strategic Priorities and Actions (SPA) Plan for 2025–2029 in support of the new Range-wide Conservation Plan for Longleaf Pine (2025–2040) which serves as the guiding framework for the initiative’s work. We view the SPA Plan as an essential tool for implementing the Conservation Plan effectively and efficiently.

Over the past decade and a half, longleaf pine forests have delivered lasting benefits to communities across the Southeast. The 2024 Accomplishment Report demonstrates how these forests contribute to clean air and water, wide-ranging recreational opportunities, critical wildlife habitat, and strong economic investments. Additionally, longleaf forests help buffer military installations from encroaching development and reduce conflicts with training activities.

This report summarizes America’s Longleaf accomplishments for Fiscal Year 2024 (October 1, 2023 – September 30, 2024), based on data compiled from partners across the longleaf range. Annual reporting is a critical way to assess the scale and impact of on-the-ground efforts and track our progress toward longleaf restoration goals. The 2024 data reflect the strong, coordinated efforts of public and private partners working together to restore this iconic forest system. These accomplishments continue to provide environmental, economic, and community benefits throughout the Southeastern U.S., demonstrating the enduring value and success of America’s Longleaf.

LANDSCAPE SCALE CONSERVATION SINCE 2010

In Fiscal Year 2024, America's Longleaf reached two significant milestones for longleaf pine restoration since accomplishment reporting began in 2010. Efforts from public and private partners have resulted in more than 2 million acres of longleaf pine gained and more than 20 million acres of prescribed fire across the Southeast.



2,030,799 ACRES
OF LONGLEAF
GAINED



21,159,936 ACRES
OF PRESCRIBED
BURNS



422,898 ACRES
OF LAND
PROTECTED

**multiple treatments applied to some acres*

AMERICA'S LONGLEAF RESTORATION IMPACTS

Longleaf pine management translates to positive outcomes for ecological, economic, and social values.



BENEFITS FOR PEOPLE – Longleaf forests provide clean air and water, support regional and rural economies, and create recreational opportunities.



RISK REDUCTION – Longleaf trees are better adapted to high winds, more tolerant of drought and fire, and less susceptible to pine beetles and other pests.



MILITARY READINESS – Longleaf forests buffer military facilities against incompatible development and potential conflicts with training exercises.

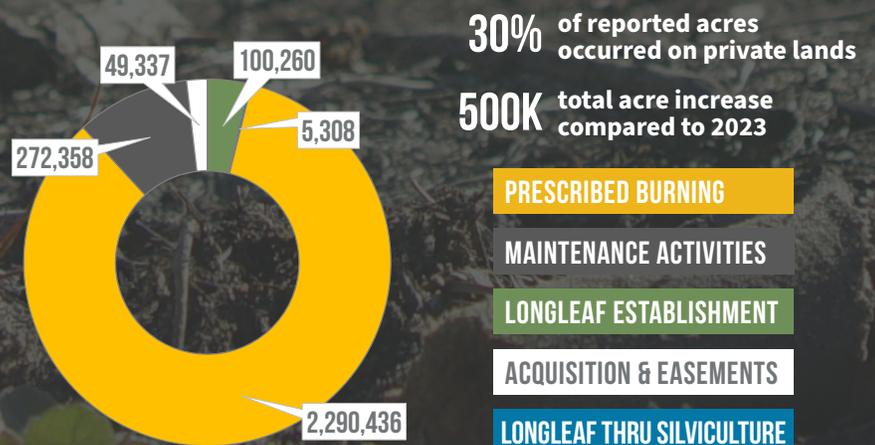


ECONOMIC VALUE – Longleaf forests produce high-quality timber, providing revenue streams through both traditional and emerging markets.



ECOLOGICAL IMPORTANCE – Open longleaf pine timber and robust native groundcover plants maintained by frequent fire support unique wildlife.

America's Longleaf partners recorded 2.7 million acres of longleaf management activities in Fiscal Year 2024.



BENEFITS FOR PEOPLE

LONGLEAF FORESTS PROVIDE CLEAN AIR AND WATER, SUPPORT REGIONAL AND RURAL ECONOMIES, AND CREATE RECREATIONAL OPPORTUNITIES.

Healthy, well-managed forests are nature's best water filters offering the cleanest water of any land use and helping to keep drinking water safe, reliable, and affordable. Clean water benefits local economies and communities while also providing wildlife habitat, recreational opportunities, scenic vistas, and support to public health, food systems, and industry.

Longleaf pine natural areas can have even greater benefits for water quality and water yield in comparison to forests with intensive management strategies. Management practices such as prescribed fire and thinning can reduce water demand, increase water yield, and improve water quality over time by retaining nutrients and preventing soil loss. That is why efforts are currently underway to return longleaf pine to Shaws Creek Preserve in Aiken County, South Carolina.

The 2,658 acre property, owned by the City of Aiken, makes up 5% of the Shaws Creek watershed. The 92-acre lake on the property is the source of water for over 25% of the area's residents and sits on overlapping recharge zones for four regional aquifers. In 2024, conservation partners came together in collaboration with the City of Aiken to conserve the property through a conservation easement with Aiken Land Conservancy and took the first steps toward restoring longleaf on the property through planting and burning.



Dense, planted loblolly pine once occupied this clearcut at Shaws Creek Preserve but has since been planted with longleaf pine. [Jennie Haskell]

Longleaf Management Promotes Healthy Forests and Communities

Forest management practices such as tree planting, thinning, prescribed fire, native groundcover planting, and invasive species treatments promote resilient forests that support local economies, rare species, recreation, clean air, and drinking water while reducing risk from wildfire and severe storms.



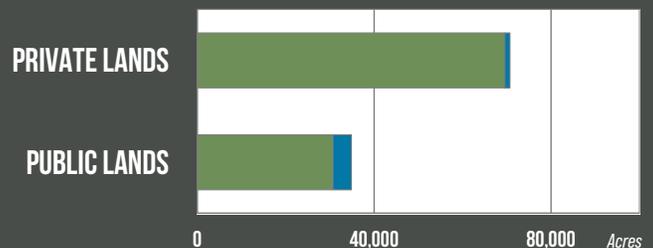
Marked timber for sustainable harvesting



Native plant seed harvesting



Treating invasive species



LONGLEAF ESTABLISHMENT

LONGLEAF THRU SILVICULTURE

America's Longleaf measures longleaf pine acres gained through tree plantings and silvicultural practices that shift an existing forest with a minor component of longleaf to longleaf dominant through thinning, prescribed fire, or other treatments.



RISK REDUCTION

LONGLEAF TREES ARE BETTER ADAPTED TO HIGH WINDS, MORE TOLERANT OF DROUGHT AND FIRE, AND LESS SUSCEPTIBLE TO PINE BEETLES AND OTHER PESTS.

Longleaf Pine and Prescribed Fire: A Natural Defense Against Wildfire

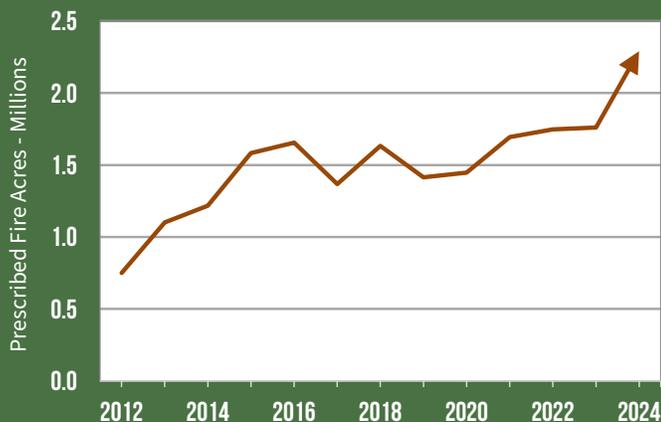
In an era of increasing wildfire threats, longleaf pine forests stand as a resilient safeguard against catastrophic losses. Longleaf pine ecosystems have evolved alongside fire. Unlike other forest types that accumulate dense undergrowth, frequent fires in longleaf natural areas maintain an open structure with low fuel availability, which reduces the intensity of wildfires if they occur.

Today, prescribed fire managers continue the legacy of historically frequent fire occurrences, ensuring that these landscapes remain resilient in the face of increasing wildfire threats. Low-intensity burns clear out competing vegetation, promote healthy tree growth, and maintain the ecosystem's natural balance. Prescribed fire is a critical tool in managing longleaf pine forests and reducing the buildup of flammable debris.

Beyond mitigating wildfire risk, longleaf pine forests provide a wealth of ecological and economic benefits. They support diverse

wildlife habitats, improve air and water quality, and offer valuable timber resources. Additionally, maintaining healthy longleaf pine ecosystems contributes to helping forests and the community adapt to changing environmental conditions. Hurricane Helene heavily impacted land and landowners from Florida to North Carolina in 2024, putting storm debris on the ground and increasing wildfire risk in many areas of the Southeast. Prescribed fire and longleaf pine restoration are critical for mitigating the increased risk.

As the nation faces growing concerns over wildfire severity, investing in longleaf pine restoration and prescribed fire practices is more important than ever. By embracing these time-tested strategies, landowners and land managers can protect communities, preserve biodiversity, and ensure the longevity of one of America's most iconic forest ecosystems.



Over 2 Million Acres Burned in 2024

"The U.S. Forest Service manages three national forests in Florida – Apalachicola, Osceola, and Ocala – all of which are home to fire-dependent forests. Longleaf pines, gopher tortoises and Red-cockaded Woodpeckers live in these forests and depend on fire for growth, forage, and habitats. With the help of great partnerships like ours with the Florida Forest Service, these three national forests were able to optimize good burn weather to more than double their controlled burn acres in 2024. These actions continue our constant effort to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations."

– Ivan D. Green, USDA Forest Service, National Forests in Florida

MILITARY READINESS

[Florida National Guard; Ching Oettel]

LONGLEAF PINE FORESTS BUFFER MILITARY FACILITIES AGAINST INCOMPATIBLE DEVELOPMENT AND POTENTIAL CONFLICTS WITH TRAINING EXERCISES.

Within military installation boundaries, healthy forests supply optimal terrain and concealment for mission training and operations while simultaneously providing essential services like erosion control and protection of the water supply. Outside installation boundaries, the presence of managed longleaf forests ensure compatible land uses that buffer against encroachment that threaten to restrict the military's ability to test, train, and operate in areas with ever-growing human populations.

Congress requires that each installation with significant natural resources prepare and implement its own Integrated Natural Resources Management Plan (INRMP). These comprehensive plans are prepared in cooperation with the U.S. Fish and Wildlife Service, the appropriate state wildlife agency, and other agencies, as appropriate, to ensure positive management outcomes on Department of Defense (DoD) lands. The result is over 725,000 acres of healthy longleaf pine forests on 36 military installations from Louisiana to Virginia which include healthy and persistent populations of threatened and endangered species.

DoD participation in America's Longleaf is part of the Readiness and Environmental Protection Integration (REPI) Program which aims to reduce conflicts that arise when military training needs are seemingly at odds with environmental or community requirements. By supporting healthy longleaf pine forests on nearby private and public lands, DoD ensures its ability to effectively test, train, and operate. Continued participation in the coalition of federal and state agencies, private organizations, forestry industry, and willing landowners leverages federal funding and resources to maximize return on investment while simultaneously achieving far greater outcomes than would be possible if DoD addressed these military readiness needs on its own.



[U.S. Army; Joey Rhodes II]

In 2024 alone, DoD burned over 400,000 acres of existing longleaf forest and established 11,000 acres of new longleaf while also facilitating the creation of easements on 8,900 acres adjacent to installation boundaries. Conservation and restoration of longleaf pine forests in and around military installations ensures service members are able to conduct realistic live-fire training, weapons system testing, and essential operations that are vital to preparing a more lethal and resilient combat force. Simultaneously, the future of the people, defense communities, and species that depend on longleaf forests will persist thanks to the potent and enduring partnership that is America's Longleaf.

A NOTABLE MILESTONE AT FORT STEWART

Fort Stewart, the largest DoD installation east of the Mississippi and home to the Army's 3rd Infantry Division, marked several milestones in 2024. Spanning 279,000 acres, the installation trains up to 50,000 soldiers annually and contains vital longleaf pine forests, wetlands, and coastal Georgia's largest remaining wiregrass savannah. Through the DoD's REPI program, approximately 50,000 acres of longleaf around the base have been permanently protected to ensure the continued use of its controlled airspace for training.

Each year, Fort Stewart burns 110,000 acres and adds about 200 acres each of longleaf pine and wiregrass, while also serving as a Red-cockaded Woodpecker translocation donor site to support new populations (donating 460 birds as of 2024). These efforts continue to safeguard military readiness, preserve working lands that benefit the local economy, alleviate safety concerns, and make significant contributions to the goals of America's Longleaf.



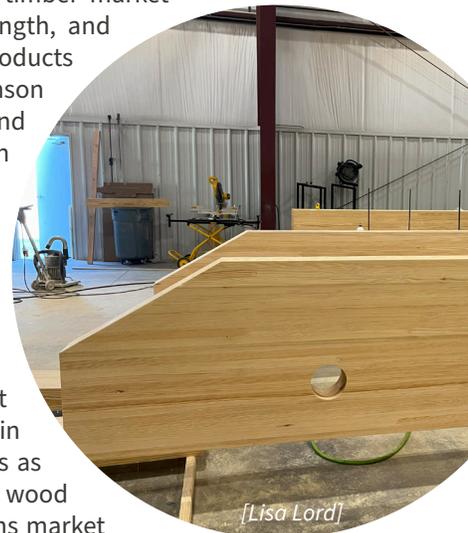


ECONOMIC VALUE

LONGLEAF FORESTS PRODUCE HIGH-QUALITY TIMBER, OPENING REVENUE STREAMS FOR LANDOWNERS THROUGH BOTH TRADITIONAL AND EMERGING MARKETS.

Known for its superior wood quality, longleaf pine supports a diverse range of market opportunities—from pine straw to poles and pilings to lumber for flooring and furniture. Longleaf excels in producing premium timber products, particularly when managed on long rotations beyond 40 years, where strength and yield begin to significantly improve. These extended timelines also support ecological co-benefits like high quality wildlife habitat, increased forest health and resilience, and improvements to water resources, making longleaf an excellent choice for sustainable forest management.

In 2024, longleaf pine's role in the emerging mass timber market gained attention. The tree's natural durability, strength, and straight form make it ideal for engineered wood products like cross-laminated timber (CLT) and glulam. Clemson University's upcoming mass timber forestry and environmental conservation facility, constructed in large part with longleaf pine harvested from Norfolk Southern's sustainably managed Brosnan Forest in South Carolina, exemplifies this potential. The project showcases how forest restoration and advanced wood construction from longleaf can go hand-in-hand.



[Lisa Lord]

This project also tracks the wood's journey from harvest to final installation in the building through blockchain technology. Blockchain is a new technology that acts as a high security digital ledger, tracking and tracing wood through the supply chain. This innovation strengthens market confidence and transparency by helping to tell the story of where a product originates from and verifying that materials are supplied from responsibly managed forests.

As mass timber demand rises, longleaf pine offers a compelling path forward—one that supports both rural communities and economies alongside long-term forest stewardship. By tapping into premium markets while also maintaining healthy forests, longleaf restoration can continue to provide a high return on investment for people and the environment.

WORKING FORESTS — COASTAL HEADWATERS

A working forest is a forest that is actively managed to provide a sustainable supply of wood and other resources while maintaining ecological and societal benefits. Resource Management Service, LLC and partners are working to create a perpetual working forest and functional longleaf pine ecosystem on up to 200,000 acres in the lower Alabama/Florida Panhandle. The Coastal Headwaters project is the largest single longleaf pine landscape restoration effort on private lands in history. Significant benefits of the project include protection of water quality in four major coastal river watersheds, economic and recreational opportunities for local communities, military readiness, longleaf pine restoration research, and species in need of conservation.

Approximately 10% of planned acres have been permanently protected, with significant economic and conservation benefits realized. While the challenges for large private landowners to obtain funding for land conservation at scale remain, the partners' commitment to the vision for Coastal Headwaters remains strong. The innovative easement structure that includes valuation of restoration of longleaf forests and ecosystems is now a model for achieving both the economic and ecological objectives of large private landowners.

ECOLOGICAL IMPORTANCE

THE LONGLEAF LANDSCAPE IS CHARACTERIZED BY OPEN LONGLEAF PINE TIMBER AND ROBUST NATIVE GROUNDCOVER PLANTS MAINTAINED BY FREQUENT FIRE. A MOSAIC OF UPLANDS AND WETLANDS SUPPORTS AN INCREDIBLE NUMBER OF PLANTS AND ANIMALS, INCLUDING UNIQUE SPECIES FOUND NOWHERE ELSE.

Conservation Milestone: Red-Cockaded Woodpecker Downlisted

Thriving in mature open pine habitats with rich groundcover and frequent fire, the Red-cockaded Woodpecker (RCW) has long been a driver of longleaf pine restoration and conservation. When the species was listed under the Endangered Species Act in 1973, around 4,000 breeding groups remained (from historic estimates of 1.5 million breeding groups), and its habitat was rapidly dwindling due to forest conversion and fire suppression.

Since then, coordinated conservation efforts from government agencies, private landowners, and non-profits have reversed the decline thanks to prescribed burning, thinning, artificial cavity installation, translocations, and native groundcover restoration. RCW numbers now reach close to 8,000 potential breeding groups across 11 states, marking a significant recovery milestone.

In 2024, the U.S. Fish and Wildlife Service downlisted RCWs from endangered to threatened. While still at risk—vulnerable to habitat loss, extreme weather events, and small population sizes—this status change reflects decades of successful partnerships to restore longleaf pine habitat and manage the species. Continued management of mature open pine habitats is essential to ensure that this iconic woodpecker, and the many species it supports, continues to thrive for generations to come.



The RCW population at Conecuh National Forest and Blackwater River State Forest reached its recovery goal of 250 potential breeding groups in 2024 thanks to collaborative efforts by the Gulf Coastal Plain Ecosystem Partnership [Artwork by Michelle Colbert].



[Brady Beck]

RCW Cavities Support An Entire Ecosystem

In the fire-maintained pine forests of the Southeast, the RCW plays a vital role as a keystone species. Unlike other woodpeckers, RCWs carve their nesting and roosting cavities exclusively in mature pines—a process that can take years. This behavior likely evolved in response to frequent fires, which historically consumed standing dead trees limiting available cavities.

RCW cavities become essential shelters for a diverse array of wildlife. Over 27 vertebrate species, including small nesting birds like the Eastern Bluebird, flying squirrels, bats, snakes, lizards, and frogs, have been documented as secondary nesters. Insects like bees occupy older, abandoned spaces, and cavity enlargements by other woodpeckers allow larger animals to also take refuge in these hollows.

Beyond their cavities, RCWs influence the broader forest ecosystem. By nesting in open, fire-maintained pine stands, they help sustain habitats for other plants and animals dependent on similar conditions. RCW conservation efforts, therefore, protect the entire web of life it supports.



LOOKING FORWARD

By Ricky Lackey, Longleaf Partnership Council Chair-Elect, National Wild Turkey Federation

America's Longleaf Restoration Initiative stands at a pivotal moment, guided by a newly completed 5-Year Strategic Priorities and Actions (SPA) Plan that outlines a clear, coordinated path forward. As Chair-Elect for the Longleaf Partnership Council, I am eager to guide the partnership in implementing the SPA Plan. The Plan sharpens priorities, strengthens partnerships, and provides a focused direction for restoring the iconic longleaf pine ecosystem across its historic range. Specifically, the SPA Plan will:

- Identify strategic priorities and actions to advance restoration goals outlined in the updated Conservation Plan;
- Incorporate the latest science, technology, and knowledge into our landscape-scale strategies;
- Establish mechanisms and metrics to track and demonstrate progress;
- Provide outreach materials to share accomplishments with Longleaf Partnership Council members and stakeholders;
- Reinforce and expand the roles of current partners;
- Identify new partnership opportunities and align with complementary conservation efforts beyond America's Longleaf.

With an emphasis on science-based management, landscape-scale planning, and community engagement, this strategy is designed to increase efficiency, impact, and alignment with broader conservation goals.

Significant progress has already been made in restoring longleaf pine habitats, thanks to years of dedicated work by agencies, landowners, and conservation professionals. These efforts have enhanced wildlife habitat, improved forest health, and supported the economic vitality of rural areas. With the recently updated Conservation Plan and now the newly minted SPA Plan, efforts can now be more strategically targeted – focusing on priority landscapes, expanding prescribed fire management capacity, and supporting long-term stewardship and workforce development.

The direction of America's Longleaf supports national conservation priorities by advancing sustainable land management, strengthening biodiversity, and increasing public engagement with natural landscapes. The restoration of longleaf pine forests ensures the protection of a uniquely American ecosystem through focused, results-driven action that benefits both people and the environment for generations to come.

BY THE NUMBERS: 2024 LONGLEAF

BY OWNERSHIP

	Longleaf Establishment <i>Acres</i>	Longleaf thru Silviculture <i>Acres</i>	Prescribed Burning <i>Acres</i>	Maintenance Activities <i>Acres</i>	Acquisition/ Easements <i>Acres</i>	TOTAL <i>Acres</i>
PUBLIC LANDS						
National Forest System (USDA Forest Service)	7,795	2,957	708,410	17,337	--	736,499
Savannah River Site (USDA Forest Service)	--	--	--	--	--	--
National Wildlife Refuges (USFWS)	4,677	98	28,641	3,890	--	37,306
Military Installations (DoD)	11,031	300	408,446	123,990	--	543,767
US Army Corps of Engineers (DoD)	--	--	374	374	--	748
National Parks/Preserves (NPS)	--	--	5,135	204	--	5,339
State Forests	2,376	161	262,229	13,141	9,307	287,214
Wildlife Management Areas (WMAs)	2,430	342	110,586	26,465	14,882	154,705
Other State/Local Lands	2,371	320	74,216	10,829	955	88,691
Total Public Lands	30,680	4,178	1,598,037	196,230	25,144	1,854,269
PRIVATE LANDS						
State Forestry Programs	6,787	544	30,649	6,120	--	44,100
State Wildlife Programs	135	268	7,155	2,149	--	9,707
NRCS Programs	49,300	--	113,821	55,983	--	219,104
Conservation Reserve Program (FSA)	4,389	--	8,277	1,172	--	13,838
Emergency Forest Restoration Program (FSA)	268	--	99	88	--	455
Partners for Fish and Wildlife Program (USFWS)	1,106	238	4,470	1,385	--	7,199
Coastal Program (USFWS)	--	--	229	14	--	243
Corporate Lands - (other funds)	222	--	6,529	303	7,467	14,521
NGO Lands (other funds)	3,287	10	24,529	8,051	6,853	42,730
Non-Industrial Private Lands (other funds)	4,086	70	496,641	863	9,873	511,533
Total Private Lands	69,580	1,130	692,399	76,128	24,193	863,430
GRAND TOTAL - ALL LANDS	100,260*	5,308	2,290,436	272,358	49,337	2,717,699



Since 2012, the Longleaf Landscape Stewardship Fund (Fund) has awarded more than \$108 million in grants to longleaf pine restoration, enhancement, and protection across the historic longleaf pine range. These grants have generated more than \$100 million in matching contributions from grantees, for a total conservation impact of more than \$208 million. Supporting public-private partnerships such as the Fund is critical to enabling larger, landscape-level conservation success. Collaboration among all partners, from funders to government agencies to private landowners is critical to restoring longleaf

habitat and increasing the resources available for restoration efforts. The National Fish and Wildlife Foundation (NFWF) has awarded grants from the Fund to nearly 60 organizations. The on-the-ground partners implementing activities supported by grants are helping achieve America's Longleaf Restoration Initiative's goals, including establishing 300,000 acres of new longleaf habitat and improving management on nearly 4.4 million additional acres of existing longleaf habitat. These efforts include more than 4 million acres of prescribed burning, which is critical to restoring and maintaining the longleaf pine ecosystem.

[Andrew Kornylak]

ACCOMPLISHMENT SUMMARIES

BY STATE

	Longleaf Establishment <i>Acres</i>	Longleaf thru Silviculture <i>Acres</i>	Prescribed Burning <i>Acres</i>	Maintenance Activities <i>Acres</i>	Acquisition/ Easements <i>Acres</i>	TOTAL <i>Acres</i>
PUBLIC LANDS						
Texas	563	97	6,581	453	--	7,694
Louisiana	5,132	--	73,921	29,657	--	108,710
Mississippi	2,756	300	113,309	8,801	--	125,166
Alabama	1,150	1,211	161,735	2,006	--	166,102
Florida	11,711	1,822	817,997	50,303	10,350	892,183
Georgia	2,685	--	238,659	62,870	2,608	306,822
South Carolina	5,475	466	89,405	7,239	10,500	113,085
North Carolina	939	63	95,180	34,526	86	130,794
Virginia	269	219	1,250	375	1,600	3,713
Total Public Lands	30,680	4,178	1,598,037	196,230	25,144	1,854,269
PRIVATE LANDS						
Texas	2,506	--	7,280	1,171	7,467	18,424
Louisiana	1,509	--	6,734	5,212	284	13,739
Mississippi	7,497	200	28,788	8,931	978	46,394
Alabama	12,082	--	291,472	22,959	--	326,513
Florida	7,499	238	19,438	10,974	1,216	39,365
Georgia	24,563	455	251,345	12,469	2,573	291,405
South Carolina	6,781	80	58,910	7,304	5,393	78,468
North Carolina	6,538	97	25,334	5,407	6,281	43,657
Virginia	605	60	3,098	1,701	1	5,465
Total Private Lands	69,580	1,130	692,399	76,128	24,193	863,430
GRAND TOTAL - ALL LANDS	100,260*	5,308	2,290,436	272,358	49,337	2,717,699

*Longleaf establishment acres do not include 2024 nursery production estimates.

THE POWER OF PARTNERSHIPS

NFWF works to increase the resources available for longleaf pine restoration, improvement and maintenance activities, and recent years have seen a significant increase in both federal and non-federal contributions. In total, this increased financial support has resulted in record amounts of funding available through the Fund and demonstrates the importance of public-private partnerships and the many benefits provided through the projects supported by the Fund, including improved biodiversity and water benefits and increased forest resilience provided by healthy longleaf pine forests.



2024 LONGLEAF PARTNERSHIP COUNCIL



American Forest Foundation



BOGGY SLOUGH
CONSERVATION AREA

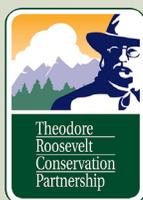
THE
CONSERVATION FUND



MAC
RHODES



TALLADEGA-MOUNTAIN
LONGLEAF CONSERVATION
PARTNERSHIP



America's Longleaf Leadership Team — Jason Dockery, Jamelle Ellis, David Gonzales, Kyle Jones, Ricky Lackey, Kathryn Smith, & Matthew Vandersande

Report Contributors — Ryan Bollinger, Jimmy Bullock, Sarah Crate, Jasmine Little, Lisa Lord, Kathryn Smith, Hannah Sodolak, & Kimberly Tillman

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government or the National Fish and Wildlife Foundation and its funding sources. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government, or the National Fish and Wildlife Foundation or its funding sources. This document is supported by a competitive grant from the National Fish and Wildlife Foundation made possible with the support of the U.S. Department of Agriculture's Natural Resources Conservation Service, USDA Forest Service, U.S. Department of Defense, Bezos Earth Fund and Southern Company.