



## SERPPAS Focus Area: Southeast Prescribed Fire Initiative

Fire is a critically important agent of renewal in natural ecosystems. However, wildfires can pose a substantial risk to people and infrastructure, and the Southeast has more wildfires than any other region. The Southeast region also contains several fire-dependent ecosystems where prescribed burning is necessary to safely manage the land and resources. Working with fire experts from around the region, the SERPPAS Prescribed Fire Work Group developed a Comprehensive Prescribed Fire Strategy, which describes regional, state, and local activities needed to progress toward several strategic goals. The Strategy recommends leveraging numerous organizations and networks to increase funding sources, and identifies existing tools and models to maximize efficiency and success. Managing land properly with prescribed fire helps restore ecosystems, reduces the risk of catastrophic wildfire, protects air quality, and improves wildlife habitat for game, at-risk, and endangered species.

### Background

In Fall 2011, the SERPPAS Principals established a Prescribed Fire Work Group to synthesize current knowledge about barriers related to prescribed fire in the Southeast, and to craft a Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine. The initial SERPPAS prescribed fire effort was in concert with the activities of the Longleaf Partnership Council, the collaborative group supporting overall implementation of the Range-wide Conservation Plan for Longleaf Pine. Through the SERPPAS partnership, a Prescribed Fire Work Group Coordinator at North Carolina State University was hired to lead these efforts.

A synthesis of current work on prescribed fire related to longleaf pine restoration uncovered numerous and interrelated challenges that are deterring wider application of prescribed fire in the nine-state historic longleaf pine range. The synthesis provided the SERPPAS Prescribed Fire Work

### Mission Benefit

Military testing and training in the Southeast is critically linked to prescribed burning, as many installations use this management practice for fuels reduction to decrease the severity of wildfires and to manage critical habitat. Increasing prescribed fire as a management tool on and off base can enhance readiness by (1) increasing flexibility under the Endangered Species Act by expanding and sustaining key habitats off-post, (2) protecting enlisted and civilian health and safety from potentially catastrophic wildfire and associated air quality concerns, (3) reducing fuels to create natural buffers to DoD facilities, infrastructure and assets, and (4) decreasing liability claims and fire costs from surrounding communities.

### Regional Milestones

- ▶ For the 2015–2017 cycles of the Longleaf Stewardship Fund (LSF), 55 grants were awarded that included prescribed burning outcomes. Approximately \$4.8 million in LSF funds supported full-time burn implementation positions, technical assistance to help private landowners develop plans and enroll in financial assistance programs, seasonal burn crews, fire equipment, materials and supplies, associated travel, and workshops, academies and other training related to prescribed burning. Combined, these projects burned approximately 629,000 acres of longleaf pine habitat. LSF grants are supported with both federal and private funds.
- ▶ In recent rulemaking actions (e.g., the 2015 Ozone Standard, the 2016 Exceptional Events Rule Revisions), the U.S. Environmental Protection Agency (EPA) has highlighted the important role that prescribed fire serves for helping avoid catastrophic wildfires and providing ecosystem benefits.
- ▶ In 2016, more than 1.6 million acres of longleaf pine ecosystems were prescribed burned. This is an increase of 88,000 acres as compared to 2015. More than 433,000 acres of this was reported on private lands. In 2017, 1.37 million acres were prescribed burned in longleaf stands, down 17% from 2016. Land managers and prescribed burn bosses recognize that appropriate conditions for prescribed burning can vary annually, depending on not only the weather, but also on the availability of fire crews. In 2017 the Southern region had an unusually wet spring, and the big Okefenokee wildfire as well as the busy western wildfire season occupied the attention of the region's burn crews.



## Background (cont..)

Group with a comprehensive understanding of the current state of prescribed burning in the Southeast, and the challenges to overcome to increase prescribed fire. In April 2012, the “Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine in the Southeast United States: A Vision for 2025” was written by the Work Group as a focused effort to increase prescribed burning in support of longleaf pine restoration. It contained eight main goals, and was written for professionals in the fire community. In 2013, the SERPPAS partners funded an Extension Assistant to help implement the education and outreach components of this Strategy.

Today, the original SERPPAS Prescribed Fire Strategy is under revision to expand the focus beyond longleaf pine, and to include new goals related to prescribed fire research, technology, and other work. The SERPPAS Prescribed Fire Work Group is comprised of two coordinating bodies. The larger group consists of more than 60 wildland fire land managers, researchers, and practitioners from around the Southern region that communicate and execute action. A smaller Advisory Team, which includes representation from each military branch, federal agencies and SERPPAS state agencies, provides strategic guidance and serves as an

- ▶ In April 2017, a Prescribed Fire Smoke Management Summit was held to address air quality issues relative to expanded prescribed burning. This Summit brought together prescribed fire practitioners and air quality regulators from several state agencies within EPA Region 4 to improve communication and address mutual issues to maintain air quality, while continuing active and expanded prescribed fire programs.
- ▶ On October 23, 2017, the USFS issued the “Million Acre Challenge” to put an additional one million acres of National Forest System lands on the path towards longleaf restoration. This challenge cannot be met without prescribed burning to maintain healthy longleaf pine ecosystems.
- ▶ In late 2017, NRCS allocated more than \$1.2 million to address the prescribed burning backlog on private lands in five SERPPAS states (NC, SC, FL, GA, and MS). These funds are being administered by the U.S. Endowment for Forestry and Communities for several select projects that will help address the backlog, while also supporting some Sentinel Landscape objectives.

## Work Group Accomplishments

- ▶ In 2014, the Work Group worked with the DoD, EPA and the Coalition of Prescribed Fire Councils to develop a Smoke Management Pocket Guide (<http://smokeapp.serppas.org>). From 2015–2017, this web app was visited more than 800 times in the SERPPAS states, and more than 6,000 times in 111 countries.
- ▶ Since 2015, there has been increased coordination with the Southeast Cohesive Wildland Fire Management Strategy. The National Cohesive Strategy, which is mandated by Congress, emphasizes the use of prescribed fire to reduce wildfire risk and improve ecosystem health. It calls for many actions that coincide with many of the SERPPAS Prescribed Fire Strategy actions, thus reinforcing the importance of prescribed fire in the Southeast.
- ▶ In January 2016, the SERPPAS Prescribed Fire Work Group began publishing the Driptorch Digest newsletter which provides prescribed fire-related content to fire professionals across the region.
- ▶ In spring of 2016, the SERPPAS Principals took part in a prescribed burn at the Principals Meeting in Fort Benning, GA. The prescribed burn was led by The Nature Conservancy (TNC) who, in partnership with Fort Benning, helps increase burning on the lands buffering the base through the Army Compatible Use Buffer program (ACUB). This highlighted the ways in which prescribed burning helps protect the military mission and the Principals were able to see this important work first hand.
- ▶ In 2016, the Work Group completed a gap analysis to identify existing efforts, gaps and opportunities related to prescribed burning in the Southeast. More than 500 efforts led by numerous organizations were identified around the region, many of which help to achieve goals of the National Cohesive Wildland Fire Management Strategy.
- ▶ In October 2017, a regional Prescribed Fire Workshop was hosted by the SERPPAS Prescribed Fire Work Group in Southern Pines, NC. This workshop brought more than 40 fire practitioners and administrators together to update strategic focus areas and begin to develop implementation actions. Since the workshop, participants have begun to discuss priority activities for the next three years as called for in the updated SERPPAS Strategy.
- ▶ From 2015–2017, the Work Group promoted and supported successful models not only to raise awareness of the importance of prescribed burning, but also to provide increased knowledge and hands-on burning experience, particularly on private lands. For example, the Work Group partnered with others to conduct six prescribed fire “Learn and Burn” field days in four Southeastern states for more than 275 private landowners and forestry consultants.



## Background (cont..)

advisory team to the larger group. The Work Group also has representation from the federal agencies that are part of both the Sentinel Landscapes and Longleaf Pine Federal Coordinating Committees (FCCs).

- ▶ From 2015–2017, the Work Group led numerous online educational efforts. An interactive website ([go.ncsu.edu/efire](http://go.ncsu.edu/efire)) was created for people to virtually “see” a prescribed burn, and learn why and how burns are conducted. In addition, more than 300 people have taken the online Southeastern prescribed fire training course (available at [campus.extension.org](http://campus.extension.org)).
- ▶ From 2015–2017, the Work Group helped educate state and federal air quality partners about the benefits of prescribed fire and served as a forum for air quality professionals to inform prescribed fire practitioners about air quality regulations and policies.
- ▶ From 2015–2017, the Work Group encouraged implementation of smoke management programs and use of basic smoke management practices to reduce the risk for air quality and human health impacts. Particulate Matter (PM) and Ozone air quality in the southeast has been steadily improving in recent years as evidenced by the reduced number of ozone nonattainment areas and that there are currently zero PM nonattainment areas in the SERPPAS states.
- ▶ From 2015–2017, the Work Group received more than \$530,000 in funding from SERPPAS and other partners. These funds supported Work Group coordination and several actions within the SERPPAS Prescribed Fire Strategy.

## Future Focus Area Objectives

The SERPPAS Prescribed Fire Work Group serves as a forum for fire practitioners to connect, share and advance together, thus ultimately increasing the use of prescribed fire in priority areas in the Southeast region. The work group has taken the recommendations that came out of the regional 2017 SERPPAS Prescribed Fire Workshop to assess where they can work to advance the fire efforts across the region. The objectives of the work group for 2018–2020 are as follows:

1. Use a spatial analysis to identify and prioritize areas for prescribed fire treatments considering the missions and objectives of SERPPAS, then review existing programs and identify opportunities to provide additional funding and capacity support in those areas, as needed.
2. Increase interagency cooperation in order to burn across boundaries, and to share personnel, equipment, and resources on fires within SERPPAS priority areas.
3. Encourage and support full-time prescribed burners and/or burn teams within Sentinel Landscapes and other SERPPAS priority areas whose primary responsibilities would be to conduct prescribed burns and associated fuels reduction work.
4. Encourage and support the development, dissemination, and utilization of new relevant fire science and tools that foster collaboration among scientists and natural resource managers, promote cooperative conservation, and support keeping areas in attainment with the National Air Quality Standards (NAAQS).
5. Continue to engage landowners and consultants through workshops and “Learn and Burn” field days within SERPPAS priority areas that provide increased prescribed burning experience and education regarding topics such as smoke management practices, burning for wildlife, liability and financial and technical assistance opportunities.

### Photo credits:

page 1, SERPPAS Principals Meeting @ Fort Benning by Addie Thornton, SERPPAS

page 2, Soldiers Walking by Markus Rauchenberger, Training Support Activity

page 3, Soldiers Putting out Fire by 1st Lt. Virginia Land