



State and Private Forestry Fact Sheet

Alabama 2018



Investment in State's Cooperative Programs

Program	FY 2017 Final
Community Forestry and Open Space	\$0
Cooperative Lands - Forest Health Management	\$470,060
Forest Legacy	\$3,000,000
Forest Stewardship	\$286,625
Landscape Scale Restoration	\$161,275
State Fire Assistance	\$1,223,883
Urban and Community Forestry	\$214,000
Volunteer Fire Assistance	\$256,996
Total	\$5,612,839

NOTE: This funding is for all entities within the state, not just the State Forester's office.

Program Goals

- The Alabama Forestry Commission (AFC) is committed to protecting and sustaining the state's forest resources using professionally applied stewardship principles and education. The AFC utilizes cooperative programs to maximize cost effectiveness through the use of partnerships in program delivery to increase forestland value and sustainability and does so in a voluntary and non-regulatory manner.
- The cooperative programs are administered and implemented through a partnership between the State of Alabama, the USDA Forest Service, Auburn University, Alabama A&M University, Tuskegee University, and many other private and government entities. These programs promote the health and productivity of forestlands and rural economies. Emphasis focuses on forest sustainability and the production of commodity and amenity values and benefits.

Key Issues

- Several years of budget reductions have reduced the AFC's wildfire response capacity to critical thresholds. At current staffing levels, each 2 person initial attack fire crew is responsible for protection on 275,000 acres. This area of responsibility is 70% greater than the next southern state in staffing and more than 100% greater than the average across the south.
- Even with a historically robust forest industry, FIA data shows the average annual rate of growth-to-removals for all species is 1.56:1 for the period 2001- 2017. An increase in markets will increase the need for more certified wood in the state. The Alabama Forestry Commission has hired an employee to focus on expanding markets for Alabama forest products.
- Fragmentation and parcelization has led to smaller tracts of forestland. Reaching more landowners with assistance specifically designed to meet their individual needs is a key to growing the number of acres under multiple benefit forest management in the state.
- Better technology has improved river and stream channel delineation, increasing the number of miles that the AFC tries to protect from 77,242 miles to 132,419 miles – almost doubling what we thought existed. Through education, site assessment, and complaint resolution, the AFC and forest industry can make a strong case that silvicultural operations with properly implemented BMPs do not degrade water quality in the state.
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- It is imperative to maintain a strong forestry water quality program through the use of forestry BMPs. Through education, site assessment, and complaint resolution, the AFC and forest industry can make a strong case that silvicultural operations maintain and/or improve water quality in the state.
- Prescribed burning is important to Alabama's fire-adapted ecosystems. A total of 29,593,000 acres (91.7% of Alabama's total land area) are subject to wildlife threat.
- Invasions, including new species of non-native plants, of pathogens and animals into forests continue to spread. These non-native invasive species, some of which are new to Alabama, increasingly erode forest productivity, hinder forest use and management activities, and degrade diversity and wildlife habitat.
- Under certain circumstances, forest insects and diseases have a significant impact on forest health and productivity through the effects of excessive defoliation, progressive decline, significant decay, root damage, stem dieback, species alteration, or outright mortality.
- Despite the rather mild climate, Alabama is prone to numerous adverse weather events such as hurricanes, tornadoes, ice storms, and droughts.

Forest Facts and Accomplishments

Selected Facts	Value	FY 2017 Accomplishments	Value
Population	4,779,736	Landowners Receiving Educational or Technical Assistance	30,144
Acres of Forest Land	23,105,863	Acres Covered by New or Revised Forest Stewardship Plans	24,682
Acres of Nonindustrial Private Forest Land	17,765,000	Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	9,559
Number of NIPF Landowners	412,000	Volunteer Fire Departments Assisted	986
Acres of Federal Land Under State Fire Protection	687,000	State Fire Communities Assisted	46
Acres of Private Land Under State Fire Protection	27,720,994	Coop Forest Health Acres Protected	3,000
Number of Rural Fire Departments	986	Forest Legacy Project Acquisitions	0
Cities and Towns	460	Communities Provided Urban Forestry Program Assistance	102
Forest Based Employment	40,837	Population Living in Communities Provided Urban Forestry Program Assistance	2,101,191
Economic Impact of Forestry (by rank)	2	Urban Forestry Volunteer Assistance	19,723
State Forestry Budget (All Sources)	21,728,209		

Program Highlights

BMP Implementation

Prevention: As part of the ongoing effort to monitor the implementation of forestry BMPs, the AFC completed 256 inspections of randomly selected, active logging jobs; 18 landowner invitations to inspect; and 76 internal AFC fire line audits, for a total of 350 inspections. Inspections on active tracts target deficient areas that showed up from inspections on closed-out tracts during the implementation monitoring cycle that is conducted every third year. The inspections on the active tracts enable AFC personnel to interact with the loggers as they work while providing one-on-one instruction.

Complaint Resolution: The AFC has MOUs with the Alabama Department of Environmental Management and the U.S. Army Corps of Engineers to assist them, as the forestry technical expert, when addressing complaints that may be the result of a silvicultural activity. This year the AFC investigated 34 complaints that were alleged to have originated from silvicultural activities. Of the 34 complaints, nine were deemed as a "not valid" complaint or "not related to silvicultural activities." Five were land use conversions and transferred to the appropriate state or federal agency. The remaining 20 complaints were deemed "valid" and remediation actions were taken. The AFC also worked with the State Implementation Committee of the Sustainable Forestry Initiative (a third-party certification program) to mitigate one inconsistent practices case.

Conservation Education

Environmental laws and regulations change periodically and can change rapidly at times. To keep all forestry stakeholders informed, the AFC is committed to be the most up-to-date forestry technical agency dealing with and sharing these changes through BMP program events. In fiscal year 2017, the AFC completed 30 educational events reaching 1,245 stakeholders. These stakeholders included loggers, foresters, environmental professionals, lawmakers and politicians, students and the public.

Cooperative Fire Protection

Due to extreme drought conditions and the lack of rainfall, fire occurrences were well above AFC averages across the state. In the 2017 Fiscal Year, 3,371 wildfires were reported and suppressed, burning 48,660 acres. Average fire size was 14 acres. The majority of fires and acreage consumed occurred in the months of October and November. With limited personnel and many with no wildfire experience, this was an excellent training opportunity for the agency. All employees were able to demonstrate the value of training and its purpose in wildfire response. Wildfires destroyed or damaged 54 structures in Alabama; however, 2,721 homes were saved. Additional fire statistics include 297 structures (other than homes) and 165 vehicles were either destroyed or damaged, while 1,722 structures and 2,541 vehicles were saved. Other property that was affected by wildfires included hay bales. Through the AFC efforts 1,355 hay bales were saved while 1,830 hay bales were destroyed or damaged.

Economic Action

The AFC contributes to forest products marketing and economic development in a number of ways. One of these ways is through the AFC's involvement with the USDA Forest Service's Forest Inventory & Analysis (FIA) program. FIA provides vital statistical data pertaining to Alabama's forest resources. Land consultants and forest industry representatives utilize FIA data to make important decisions with regards to where to locate new wood products mills and where to make expansions to existing mills, and often they receive this data from AFC personnel.

The AFC's involvement with the FIA program consists of forest resource data collection by field crews and the fulfillment of forest resource data requests by the FIA Coordinator. The FIA Coordinator responded to over 30 requests for forest resource/industry-related information during FY 2017, created 4 extended reports for industrial users, made one 10-minute presentation to the Society of American Foresters, and two hour-long presentations to industry.

Another way AFC contributes to the marketing of Alabama's forest resources is by the annual development of their "Forest Resource Report." This report contains valuable economic status indicators of the forest industry and forest resources in Alabama for the previous year. The "Forest Resource Report 2016" was completed in May and is available on the AFC website.

Finally, the AFC is a member of the Southern Group of State Foresters Services, Utilization, and Marketing (SUM) Committee. The goal of the SUM Committee is to coordinate actions to market forest resources, forest products, and other forest values of the southern U.S. The FIA Coordinator is currently in the process of updating the state's mill directory in preparation for the upcoming Timber Products Output (TPO) Primary Mill Survey. The updated list will be sent to the Forest Products Locator website maintained by the SUM Committee.

Forest Health Protection

As part of the agency's vision to ensure healthy, diverse forests for future generations, the challenge is greater than ever before with rising concerns of exotic and native pests. Laurel wilt disease continues to spread in western Alabama, while the emerald ash borer is now causing mortality to ash trees in the quarantined areas of the state. The drought of 2016 is causing detrimental health issues on all vegetation types. Declining and dying trees throughout the state are noticeable. Bark beetles are wreaking havoc on pine stands. Hypoxylon canker is causing mortality to drought-stressed hardwoods. Surveys of all kinds assist in detecting and monitoring certain insects and diseases. With encroaching exotic species, conducting these surveys is important in identifying the location of these targeted pests for early management response. Other forest health activities like financial and technical assistance programs are designed to encourage landowners to take a proactive approach in properly managing their lands to prevent or reduce the risk of forest pests.

During the first half of the year, aerial surveys for drought-related pests detected 465 beetle infestations of 19,550 pines. Later in the year as the summer months approached, southern pine beetle surveys were implemented detecting 2,322 spots, infesting 212,135 trees. Because of the significant increase in beetle infestations, employee training and landowner workshops were conducted to educate attendees about current forest pests in the state. In FY17, 133 events were conducted having a total of 67,247 attendees. Also, as a response to the increased beetle situation, the Southern Pine Beetle Prevention and Suppression Cost-share Programs were implemented. Financial assistance was offered to 31 landowners. The Alabama Forestry Commission offered other technical assistance to forest landowners. There were 2,480 forest health stand management recommendations given to landowners that encompassed 87,666 acres.

Forest Inventory and Analysis

FIA is a continuous, nationwide timber and forest resource inventory that has been ongoing for more than 70 years in Alabama. FIA data is the primary source of forest resource information and it plays a vital role in economic development. Some of the more significant information that comes from FIA is the status and trends relating to forest area, forest volume, and tree growth vs. harvest removals. This information is obtained by AFC 2-person field crews that collect a variety of forest resource data from a set of field sample locations (FIA plots) distributed across the landscape at an approximately 3 X 3 mile spacing. When fully staffed, as we were for FY17, Alabama has 6 field crews whose goal is to sample 15% of the total number of FIA plots annually. The field data collected is transferred by the FIA crew leader to USFS personnel for analysis, and subsequently compiled into statistical reports.

The 2017 FIA Inventory was completed in August. A total of 977 plots were inventoried in FY17, exceeding the desired goal by 238 plots (32%).

2017 FIA data indicates there are 23.0 million acres of timberland in Alabama, accounting for 69% of the state's total area. This amount of area remains virtually unchanged since 2000. Individual or family-owned forests account for 13.6 million acres, or 59.1% of the state's timberland.

2017 FIA data shows that Alabama is growing timber faster than it is being harvested. The average annual rate of growth-to-harvest removals for all species is 1.80:1 for the period 2009 to 2017. For softwoods, the growth-to-harvest removals ratio is 1.68:1, and for hardwoods, the ratio is 2.19:1.

According to 2017 FIA data, the "loblolly pine" forest type is by far the predominant single forest type in Alabama, occupying approximately 38.2% of total timberland area. The "mixed upland hardwood" forest type ranks a distant second, accounting for approximately 10.4% of timberland acreage.

Forest Legacy

Alabama has 13,819 acres protected through this program. The state routinely looks for properties that are in danger of being converted from working forests to non-forest uses. Working through a partnership with various conservation organizations, environmentally important forestland candidate properties are acquired through conservation easements and/or fee purchases.

Forest Stewardship

Stewardship and TREASURE (Timber, Recreation, Environment, Aesthetics, for a Sustainable, Usable, Resource) Forest certifications totaled 127, adding 43,247 acres to the programs. Scheduled landowner educational efforts permitted the AFC to reach 26,421 private individuals. Commission associates utilize three complementary recognition programs each designed to enhance the non-industrial private landowner's knowledge and understanding of multiple-use forest management. A landowner is introduced to multiple resource management with the National Stewardship Program. Sponsored by the U.S. Forest Service, the program shares multiple-use management concepts through the development of a personalized forest management plan. The forest management plan functions as a road map helping the landowner plan and achieve stated objectives. Alabama is also proud of its flagship stewardship program, TREASURE Forest. This state program identifies and publicly honors forest landowners who manage their property through sound forest management principles. The third program is the American Tree Farm System sponsored by the American Forest Foundation which introduces the concept of sustainability. The Sustainable Forestry Initiative (SFI) promotes sustainable forest management and is recognized through Tree Farm, Stewardship, and TREASURE Forest certifications. The AFC in FY 2017 used the Stewardship Accomplishment Data Loader (SADL) to make annual accomplishment reporting

available to the USFS. We intend to continue using the process in FY 2018.

Geographical Information Services

The Geographic Information Systems program for the AFC is testing and treading Esri's ArcGIS Platform with emphasis on ArcGIS Online to possibly implement the technology for the agency statewide. The AFC has several configurable and web AppBuilder mapping applications in place, such as fire dispatch and southern pine beetle maps. In addition, the pilots are collecting forest health geospatial data using disconnected editing technology from Esri. AFC's future focus is aimed at making mapping applications more available to our foresters, rangers, and management staff, allowing easier access to the maps that are centrally integrated and available across various computing devices and platforms. AFC will be focusing on integrating other mapping services, especially in the field of fire, to enable seamless mapping of fire at the state level with national visibility.

Landowner Assistance

Qualified Alabama landowners can apply for financial assistance through a variety of federal and state programs. AFC foresters and technicians are available to meet with landowners and provide technical assistance through on-the-ground assessments, while AFC staff produce written management plans.

The U.S. Farm Bill is the primary source of funding for federal financial assistance programs. The distribution of these funds is overseen by the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) and the Natural Resource Conservation Service (NRCS). These funds are used for a variety of agricultural programs including forestry. The AFC is responsible for writing plans for the implementation of practice requirements for the forestry financial assistance practices.

FSA PROGRAMS

- Conservation Reserve Program (CRP) – AFC county offices wrote 174 Stand Management Recommendations/Plans totaling 8,432 acres during FY17 for general and continuous CRP practices. AFC county offices performed 380 CRP compliance/practice checks on a total of 12,957 acres during FY17.

NRCS PROGRAMS

- EQIP– 204 Stand Management Recommendations/Plans for 12,760 acres
AFC county offices performed 27 EQIP compliance/practice checks on a total of 1,078 acres during FY17.
- Conservation Activity Plans (CAP) – AFC Technical Service Provider (TSP) foresters wrote 12 CAP or 106 Forest Management Plans for 598 acres in FY17.

STATE FUNDED PROGRAMS

- Alabama Agricultural & Conservation Development Commission Program (AACDCP)
- AFC counties prepared 5 Stand Management Recommendations/Plans totaling 194 acres. AAFC counties performed 11 AACDC compliance/practice checks on a total of 336 acres during FY17.

Prevention

As part of the ongoing effort to interact with loggers on active sites, 26 BMP inspections were made as well as 66 internal BMP audits on work performed by AFC associates on private lands.

Threatened and Endangered Species

The threatened and endangered species specialist for the Alabama Forestry Commission continues to monitor the federal register and address the impacts of increased numbers of species being protected under the Endangered Species Act. Federal Register activities were discussed among agency employees and necessary comments developed and submitted to the U.S. Fish and Wildlife Service as needed.

This employee met with U.S. Fish and Wildlife Service personnel and other conservation agencies/organizations to gather information regarding Strategic Habitat Units (SHU) and the management of aquatic species. Information gathered was used to create guidelines for incorporating SHU information into stand management recommendations at the work unit level. Management information sheets regarding threatened and endangered plant and animal species were revised as time allowed and uploaded to the agency website for use by agency employees and citizens. An excel spreadsheet listing each threatened and endangered species in Alabama by county was updated as needed. The wildlife biologist represented the AFC at professional conferences, forums, workshops,

trainings and landowner tours to share information related to threatened and endangered species issues and activities. The wildlife biologist also met with Geneva State Forest and Little River State Forest personnel to discuss management activities and needs of gopher tortoises and other species of concern. The harvest schedule at Geneva State Forest was modified to improve habitat conditions in areas with highly suitable soils for gopher tortoises. AFC staff visited two sites in Covington County to monitor pondberry (endangered plant) populations to ensure they are not impacted by Laurel Wilt.

Urban and Community Forestry

The Urban and Community Forestry (U&CF) Assistance Program was authorized by the Cooperative Forestry Assistance Act of 1978 (PL 95-313), Section 9, and amended by the 1990 Farm Bill (PL 101-624), and provides technical and financial assistance through the Alabama Forestry Commission to local governments and other organizations within Alabama who are planning urban forestry programs or managing urban forests. In FY17, onsite persuasion, collaborative teamwork, and municipal cooperation were required for the Tree City USA communities to remain at 82 cities, but Tree Campus USA numbers reached a new high of 13 individual campuses. Public distribution of more than 40,000 seedlings of eight different species were delivered across Alabama for Arbor Week, February 20-25, and AFC employees logged 172 urban forestry technical assists throughout the state during the period. Both the Alabama Urban Forestry Association annual meeting and the Tree Board Academy were supported in FY17, as well as the Your Town workshop which provides orientation and education, including urban forestry guidelines, to new city officials. A regional training for the Urban Forestry Strike Team was hosted in May 2017 increasing storm response readiness, which promotes the resilience of our communities.

FY17 also saw an increase in urban forestry grant activity, as four community pass-through grants were closed out that provided funds for tree plantings, urban forestry education and promotion, and an urban forestry volunteer leadership workshop. The state was awarded a \$105,000 grant to fly the northern counties with hyperspectral imagery in preparation of the recently discovered non-native invasive pest, the emerald ash borer. This is in addition to the FY17 Landscape Scale Restoration grant of \$85,700 which documents and promotes stormwater mitigation through tree canopy manipulation.

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