

# **2017 Annual Report**



#### Honorable Nathan Deal, Governor

Robert D. Farris, Director

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## Forest Management

Forestry-related technical information and assistance is provided to Georgia's private forest landowners by the Forest Management Department to enhance their woodlands for economic, social, and environmental benefits. This system is delivered to private landowners through professional foresters, some of whom are assigned counties and deal directly with the public. Other foresters help implement and deliver regional and/or statewide programs, including: water quality, forest stewardship and legacy, urban and wildland-urban interface, forest health, cost share programs, and forest inventory and analysis. By statute, the GFC is authorized to take action pertaining to the nurture and culture of Georgia's forests, to monitor and suppress forest insect and disease outbreaks, and by authority granted by the Georgia Environmental Protection Division, the GFC is the authority to monitor and investigate water quality issues pertaining to any type of silvicultural activities.

The Georgia Forestry Commission also manages several state forests for multiple objectives, including traditional forest products, clean water, wildlife habitat, and recreational opportunities. Assistance is also given to other state agencies with the management of forest lands they own, and these include the Georgia Department of Natural Resources, Georgia Department of Transportation, University of Georgia, and Georgia Department of Corrections. Assistance to these other agencies varies from developing management plans to meet the owning agency's objectives to conducting a variety of silvicultural treatments (timber sales, site preparation, tree planting, prescribed burning, and planning and implementing road improvements). Additionally, the GFC entered into a "Good Neighbor Authority" agreement with the US Forest Service to use state resources to manage Forest Service land.

GFC foresters and technicians handled 9,331 field visits with landowners involving 651,450 acres. Almost half of these visits were cost share visits (4,142), with the remainder involving technical advice to landowners in forest health, water quality, forest stewardship and invasive plants. Georgia's forests remain healthy overall and are 91% privately owned. The services GFC foresters provide, along with private consultants and industry foresters, are vital to keep our resource healthy and productive.

#### **COST SHARE INCENTIVE PROGRAMS**

Cost share incentive programs play an important role in assisting Georgia landowners with properly managing their forests. The GFC partners with the Farm Service Agency (FSA), Natural Resources Conservation Service (NRCS), US Forest Service (USFS), US Fish & Wildlife Service (USFWS) and the Georgia Department of Natural Resources (DNR) to deliver these programs. The GFC takes the lead role on some programs and serves as the technical agency responsible for determining specifications necessary for landowners to install a range of forestry practices. Georgia Forestry Commission efforts in FY 2017 have resulted in a total of \$8.5 million going to landowners to help fund completed practices. See *Table 1* for a breakdown of the dollars by incentive program.

The following is an overview of GFC accomplishments within each incentive program:

**Conservation Reserve Program (CRP)** – CRP was primarily created to provide soil erosion protection and crop base reduction, but was expanded to improve wildlife habitat. GFC provided assistance on 1,721 CRP cases covering 58,958 acres. As a result of this work, approximately \$1.13 million went to Georgia landowners to help fund forest management practices. Also, these participants will receive rental payments for a total \$1.5 million annually for the next 10-15 years, depending on the contract length. The total dollar impact for the year is \$2.63 million.

**Emergency Forest Restoration Program (EFRP)** – During FY 2017, GFC worked to complete EFRP contracts funded to restore forests destroyed by recent hurricanes and tornadoes. GFC wrote plans for 170 tracts covering 11,584 acres, and certified the performance of six practices covering 220 acres, resulting in a cost share impact for landowners totaling \$2.19 million.

**Environmental Quality Incentives Program (EQIP)** – The Georgia Forestry Commission assisted the NRCS in implementing EQIP forestry practices. Assistance was provided on initial prescription plans for 859 practices covering 46,396 acres. The performance of 849 practices was also certified, covering 36,692 acres. As a result of these services, landowners received approximately \$3.4 million in cost share payments.

**Wildlife Habitat Incentives Program (WHIP)** - This program has been consolidated with EQIP but GFC continues to service any remaining contracts. There were 11 practice performance inspections completed covering 656 acres. As a result of these services landowners received approximately \$23,868 in cost share payments.

**Southern Pine Beetle Prevention & Restoration Program (SPBPR)** – In cooperation with the USFS, GFC offers cost share to help minimize the impacts of the southern pine beetle. The grant is primarily utilized for direct cost-share payments to landowners to implement several prevention practices to treat high risk stands and for several restoration practices. Landowners deal directly with their county GFC forester for all phases of the program (application, needs determination, practice supervision, performance check, final reporting and payment requests), and payments are made directly from the GFC Administration Department in Macon.

Assistance was provided on initial prescription plans for 256 practices covering 9,932 acres. There were 278 practice performance certifications completed covering 14,105 acres. As a result of these services, landowners received \$232,573 in cost share payments.

**Invasive Species Plant Control Program (ISPC)** - The USFS has provided federal grants in this program area to help control invasive plants in Georgia. These grants were primarily utilized for direct cost-share payments to Georgia landowners to help control privet, Japanese climbing fern, tallow tree, multiflora rose and olive spps.

Assistance was provided on 16 initial prescription plans covering 686 acres. GFC personnel went on to certify the performance of 15 plans covering 737 acres. As a result of these services, landowners received \$31,620 in cost share payments.

**Partners for Fish & Wildlife Program** – The GFC assists the USFWS with the technical side of this program. The focus of the program is the restoration of longleaf pine ecosystems, riparian/stream habitat & endangered species habitat.

Assistance was provided on two initial prescription plans covering 68 acres. GFC personnel went on to certify the performance of two plans covering 100 acres. As a result of these services, landowners received approximately \$35,984 in cost share payments.

Table 1: Incentive payments to GA landowners related to GFC services in FY 2017

Program	\$ Received
EFRP	\$2,190,000
WHIP	\$23,868
EQIP	\$3,400,000
SPB	\$232,573
CRP	\$2,630,000
Invasive Plant	\$31,620
Partners - USFWS	\$\$35,984
Total	\$8,544,045

#### **FOREST HEALTH**

The Forest Health Management Group provides statewide leadership and guidance to consulting firms, industry, natural resource managers, landowners, and Georgia Forestry Commission (GFC) foresters on a wide range of forest health related issues. Georgia Forestry Commission foresters incorporated insect, disease, or invasive species advice into 361 management cases involving 9,012 acres for the year.

Each stewardship and tree farm plan written in the State of Georgia incorporates advice to landowners concerning forest health issues, and insect and disease advice is incorporated in each plan; 178 plans were presented to landowners with a total acreage of 55,143 acres. Additionally, 270 acres of cogongrass have been treated with all known sites being sprayed at least once, and approximately 81% of all known sites are being reported as negative for cogongrass. There are 114 sites in Georgia that have shown one year of negative post inspection, 100 sites that have shown two years of negative post inspection, and 637 sites have been declared eradicated. Statewide, forest health training was provided to foresters, resource managers, loggers, public works departments (state and county), nurserymen, regulatory agencies, and landowners on 124 occasions with 5,586 attendees being reached. Additional surveys are conducted by the Forest Health staff to identify non-native pests seen as a potential threat to native species. These include: emerald ash borer, Sirex noctillio woodwasp, non-native bark beetles, gypsy moth, Heterobasidion root disease, thousand canker disease, hemlock woolly adelgid, and the pathogen Phytopthora ramorum, which is responsible for substantial west coast tree mortality. Our forest health staff conducted 38 multimedia interviews with an estimated audience of 250.000.

#### **FOREST LEGACY PROGRAM**

The Forest Legacy Program protects environmentally important working forests threatened by conversion to non-forest uses. The program allows for the donation and/or purchase of conservation easements or fee simple land from willing participants who wish to keep the land in forestry use. Landowners may continue to own their land or sell it to someone who wants undeveloped forestland. The State of Georgia holds title to the Forest Legacy conservation easements and provides technical advice to landowners. In 2017 the GFC was again able to partner with the Georgia Department of Natural Resources and other groups to protect an additional 19,515 acres by purchasing the tract known as Sansavilla. This project ranked #1 in the country as a forest legacy project and continues the long standing history for Georgia as a competitive state for funding.

#### FOREST STEWARDSHIP PROGRAM

A Forest Stewardship management plan can be provided to landowners interested in managing their forestland for multiple use purposes such as timber, wildlife habitat, recreational opportunities, aesthetics, and soil and water conservation. This is a detailed and comprehensive management plan written by natural resource professionals with backgrounds in forestry, wildlife biology, soil science, and recreation management. Landowners with an interest in multiple use management begin by completing an official application which details their interests and objectives. The resource professional responsible for constructing the plan will evaluate the property and develop a management program to help the landowner reach their objectives while improving the management of all resources. The forest stewardship program completed its 27th year of service to Georgia's forest landowners with a current total enrollment of 2,144 plans covering 684,938 acres. Another 182 plans covering an additional 58,166 acres were added this past year. In addition, the program seeks to partner with many like-minded groups and organizations to promote multiple resource stewardship. Partnerships with the Quality Deer Management Association and National Wild Turkey Federation are two examples where the GFC works together to host events and field days etc.

#### **GEORGIA'S FOREST INVENTORY/ FIA**

During State Fiscal Year 2017, the Forest Inventory and Analysis Program (FIA) in Georgia collected data on 928 plots. These plots were collected by six certified full time crews strategically located across the state (though one area was vacant much of the year). Each crew is ideally (during years with full funding) made up of two FIA Foresters. We never had 12 FIA Foresters during FY 17.

Of the 928 FIA plots, 68 were P3 or Forest Health Monitoring Plots and 55 were new install USFS Intensified Plots, which fall on the most rugged and inaccessible land in the state (with the exception of perhaps the Okefenokee Swamp plots). P3 and National Forest Intensification plots take approximately twice as long to complete data collection as a regular plot, because there is more crown/tree health information and "Downed Woody Material" data to collect than on a regular plot. In addition, the P3 plots are widely dispersed across the state, so driving time is increased (making more than one of these plots in a day nearly impossible in most cases).

Production is up somewhat over last year and will continue to improve in FY 2018 as our funding increased and we were able to approach full staffing. As our new hires improve their speed we will definitely see improved productivity. We had much of the year with a vacant work area, requiring time traveling to and from that area by other crews to complete those plots. We now have all work areas staffed and are making good progress.

A certain percentage of FIA plots completed are checked by USFS personnel for accuracy of data collection. A percentage score is given to the person responsible for the data collected on that plot. Georgia had a consistently excellent check score average for FY 2016 of 96% for all of the plots that were checked. A minimum average of 87% is required for a FIA cruiser to remain certified. If their average drops below 87% they will be decertified and will be unable to collect plots in their name (assist only). No Georgia cruiser has ever been decertified.

FIA data collection is broken up into cycles and sub cycles. A cycle includes data collection on all of the FIA plots in Georgia and should take approximately five years (if full funding is provided to the states). Each cycle is broken up into five sub cycles. Each sub cycle consists of approximately 20% of the total number of plots. Each sub cycle should take about one year to complete with full federal funding and fully staffed crews.

Georgia began data collection of Cycle 11, Sub cycle 1 (Inventory Year 2015) in January 2015. All 1164 Plots were transmitted by end of June 2016. This was the sub cycle most negatively impacted by the reduced budget we were allocated.

Georgia began data collection of Cycle 11, Sub cycle 2 (Inventory Year 2016) in June of 2016. We transmitted the last plots in November 2017. Goals still not achieved.

Georgia began data collection of Cycle 11, Sub cycle 3 (Inventory Year 2017) in October 2017. With full funding and close to full staffing (11 of 12) we should be finished in one year. Back to good progress if I can keep everyone working and healthy.

The FIA federal grant has finally increased to full funding. With no work on other federal projects needed to make payroll and all work areas having certified staff, things look promising for us to get back on track and meet production goals.

#### **URBAN AND COMMUNITY FORESTRY**

In FY-2017, Georgia had 140 Tree City USA communities, 19 Tree Campus USA schools and one Tree Line USA utility.

Funds from the Urban & Community Forestry Assistance program were used to contract with the Georgia Urban Forest Council to utilize circuit-rider arborists to make personal visits and assist communities in developing community forestry programs. The circuit rider arborists contacted 194 communities, assisted in writing or revising 22 ordinances, developed 31 tree management plans, conducted hazardous tree assessments, assisted with Tree City USA certifications and conducted 34 trainings/workshops for municipal tree care workers. Additional services provided by the circuit riders included conducting three Certified Arborist Review classes. These classes were held over two days and trained 69 tree care workers and potential arborists. Many attendees went on to take the test to become an ISA Certified Arborist. In addition, one circuit rider was tasked with creating a website devoted to tree ordinances. The Tree Ordnance Construction Zone website provides in depth information related to crafting or revising tree ordinances, including examples from various sized communities, samples of typical clauses, suggestions for dealing with particular issues and a portal to receive one on one ordinance assistance.

U&CF funding was also used to complete Making the Shade projects, which planted 62 trees at two schools to shade playground equipment and provide a healthier play environment. Funding was also used to provide 10,000 seedlings to Keep Georgia Beautiful affiliates for distribution at their Bring One for the Chipper events.

The SCFP also continued to provide technical advice through the Ask the Arborist (ATA) project to communicate more effectively with homeowners across the state and provide citizens with timely, unbiased information from a GFC-certified arborist. The GFC received funding to help create and expand the American Grove, www. AmericanGrove.org, a social networking website that reaches consumers with tree benefits messages and encourages them to take action and plant trees.

Two projects utilized special LSR funding from the US Forest Service. An animated video was created to finalize the Coastal Green Infrastructure project. GFC partnered with UGA and students from Savannah College of Art and Design (SCAD) to create the short video that explains the need for green infrastructure and how it can be accomplished. Another project involved partnering with the Arbor Day Foundation (ADF), Georgia Power and Snapping Shoals EMC to provide 2,167 seedlings to their customers to encourage strategic tree planting for energy savings. Using ADF's Energy Savings Tree program, homeowners were

able to use a website to determine the most effective places to plant trees around their home to provide shade and energy savings.

SCFP continues to support local grass roots community forest groups and programs through Arbor Day, Tree City USA, and other educational programs and technical transfer efforts, expanding community capacity for developing sustainable community forests. The Small Landowner forest management program was launched to assist landowners in taking personal ownership of managing their forestlands in a sustainable fashion by creating a management plan based on their goals and objectives. Additionally, the SCFP program worked with the University of North Georgia to complete a statewide forest canopy analysis using current technology and satellite imagery of tree canopy cover to develop a baseline of forest canopy change, parcelization and land use change.

In September 2016, SCFP hosted training for the Urban Forest Strike Team (UFST) in Rome. In addition to the eight GFC staff who participated, six people from other Georgia communities were trained along with seven people from other states. In October 2016, the City of Tybee Island requested assistance from the Urban Forest Strike Team after suffering severe damage from Hurricane Matthew. SCFP deployed six people to conduct tree risk evaluations on Tybee which was completed in three days. They provided much needed professional tree care recommendations to the city staff, contractors and FEMA, which helped Tybee to prioritize hazard reduction while saving healthy trees. A GFC Urban Forest Strike Team was also deployed in February 2017 to the City of Albany, which experienced extensive damage after two tornadoes in January. Eight GFC staff members spent three days assessing tree damage in Albany's historic district. This provided much needed, unbiased recommendations for hazard reduction and prioritized tree care, which was utilized by the city to recover from the storms and receive FEMA assistance.

#### WATER QUALITY PROGRAM

For FY 2017 GFC has completed the items that follow. Funded largely through the EPA Section 319 grant program, the GFC Water Quality program is staffed with one state coordinator, four regional specialist positions, and seven district/area water quality foresters. During FY 2017, GFC water quality foresters provided 96 BMP talks to 3002 people. In addition, GFC water quality foresters put on 18 BMP field demonstrations with 102 in attendance. GFC investigated 37 separate water quality complaints requiring 91 site visits to mediate. The GFC completed a total of 185 BMP Assurance Exams on harvests and other management activities. Water quality/BMP advice was given during the course of 338 general advice site visits for landowners on a total of 51,485.5 acres. GFC water quality foresters, field foresters, and district management staff completed 275 state and district level firebreak BMP inspections on GFC firebreaks. During the first part of FY 2017, GFC foresters and forest technicians collected sites for the 2017 Silvicultural BMP Survey. GFC water quality foresters started field-work on the eleventh Statewide Silvicultural BMP Survey during FY 2017, completing 129 of the 232 total randomly selected sites that were eventually finished prior to the end of calendar year 2017. During FY 2017, GFC started the process of setting up outreach projects in three major watershed areas of Georgia: Lower Savannah River, Oconee River, and Middle Chattahoochee River. This was done under an LSR Grant from the USFS to make people aware of the important connection between retaining forestland and good forest management and water supplies. On May 18, 2017, GFC water quality and management personnel participated in a forum concerning the forest/water connection for the Middle Chattahoochee watershed to bring in stakeholders into the discussion about the LSR grant project.

The GFC continues to be involved in the Governor's Comprehensive Water Plan Study Committee. As required by state law, the Regional Councils have continued to meet periodically, with GFC foresters attending as needed.

#### STATE LANDS FOREST MANAGEMENT

The Georgia Forestry Commission's State Lands Forest Management program is in place to assist our sister agencies with management of their forestlands. Over the past eight years our program responsibilities have grown to the extent that we now have five full time employees: a staff forester serving as the coordinator; two field supervisors, one in North Georgia and one in South Georgia overseeing field work; and two state lands technicians. State of Georgia public lands we help manage reach to all four corners of the state and everywhere in between. Georgia sister agencies with which we have entered into interagency governmental agreements and are receiving our management assistance on a regular basis include: the Department of Natural Resources; the UGA College of Agricultural and Environmental Sciences; the Department of Transportation; and Georgia Correctional Industries, part of the Department of Corrections. Other agencies receive assistance when requested. In addition, the currently signed Good Neighbor Authority Wireskull Agreement allowed for continued opportunities with the Forest Service.

#### **Georgia Department of Natural Resources**

The Department of Natural Resources (DNR) owns the majority of state owned land, including wildlife management areas, public fishing areas, state parks and historic sites and natural areas. Our Fiscal Year 2017 DNR responsibilities have been primarily conducting timber sales. This included assisting DNR foresters in the field with marking and cruising timber, marking sale area and streamside management zone boundaries, GPS work, BMP inspections, preparing timber sale bid packet information, advertising timber sales, and other aspects of timber sale administration. Sixteen timber sales occurred during FY 2017. Assistance was also given with site preparation and prescribed burns.

#### <u>University of Georgia - College of Agricultural and Environmental Sciences</u>

The University of Georgia's College of Agricultural and Environmental Sciences (UGA CAES) forestlands are located on their experiment stations. While no timber sales were put out for bid during Fiscal Year 2017, active timber sales from previous years were completed and reforestation planning occurred. Two timber sales are expected to take place during fiscal year 2018.

#### **Georgia Department of Transportation**

Mitigation properties owned by the Department of Transportation (GDOT) serve to offset other GDOT activities where wetlands and endangered species are negatively affected. The GFC helps manage some of these properties. As with the UGA CAES, GFC handled all aspects of GDOT timber sale administration during Fiscal Year 2017. Located on the Stuckey tract in Bleckley County, a timber sale bid occurred and harvest was completed in FY 2017. Reforestation of longleaf pine on roughly 400 acres occurred on the Long County tract during the FY 2017 planting season. Planning for more longleaf pine reforestation on the Long County tract is occurring now for the FY 2019 planting season. Expected FY 2018 timber sales are located on the Little River tract in Putnam County and Flint River Ravines tract in Upson County.

#### **US Forest Service**

The first timber sale under the "Good Neighbor Authority" Wireskull Agreement on the Oconee Ranger district is currently active. An agreement modification to the GNA Wireskull Agreement added three sales, one for each of the next three fiscal years. The additional sales total over 1,000 acres.

#### **Timber Transaction Complaints**

The Georgia Forestry Commission assumed the new role of investigating timber transaction complaints on July 1, 2015. State Lands Forest Management assists with investigations by performing stump cruises. Three stump cruises were performed in FY 2017.

#### **LOOKING FORWARD TO FY2018**

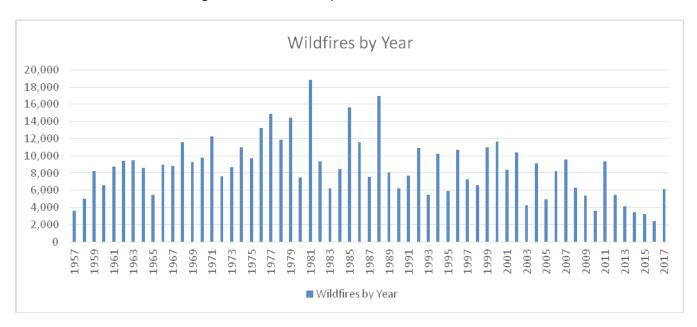
FY 2018 will be busy for GFC's State Lands Forest Management, as we continue to assist our sister agencies in the management of State of Georgia forestlands and assist our investigators by performing stump cruises. In addition, more timber sale opportunities are expected to be discussed with the US Forest Service through the Good Neighbor Authority, as an overarching agreement is planned.



## **Forest Protection**

#### WILDFIRE ACTIVITY

Wildfire occurrence for Fiscal Year 2017 (FY17) was above average. We experienced 6,129 wildfires that burned 71, 085 acres in Georgia. The average size of each wildfire was 11.6 acres which is almost double what we normally experience. We recognize that these increases are directly contributed to the extended drought conditions that occurred in the fall of 2016, mostly in the north parts of the state, and continued into the southern parts through early summer of 2017. The largest wildfire occurred in Charlton, Clinch and Ware Counties, burning 32,145 acres on private lands.



#### **COUNTY AND DISTRICT OFFICE OPERATIONS**

The GFC provided 1,121 burn assists for landowners in Georgia totaling about 90,128 acres, or about eight percent of the total acres prescribed burned in GA., which includes assistance to landowners for agriculture, silviculture and land clearing types of burns. When compared to the five year average, the number of burn assists was below average in 2017, largely due to drought conditions during which our wildland fire personnel were heavily engaged in wildfire suppression operations.

Total Burn Assist Number	1,121
Total Burn Assist Acre	90,128

Pre-suppression plowing and harrowing services in FY17 decreased in the number of landowners serviced as well as the total hours/miles of firebreaks installed when compared to the previous fiscal year. In FY17,

the GFC performed a total of 4,455 plowing/harrowing services for landowners for a total of 12,778 hours of firebreaks installed by GFC professionals using tractor/plow/harrow equipment.

Year	2017
Total Plowing and Harrowing Serviced	4,455
Total Plowing and Harrowing Miles	25,543
Total Plowing and Harrowing Hours	12,778

#### WILDFIRE PREVENTION

GFC again provided fire prevention efforts through large events across the state, including: The Georgia Mountain Fair, Moultrie Sunbelt Expo, the Buck-a-Rama, Fish-a-Rama, Turkey-a-Rama, Georgia National Fair in Perry, and Georgia Outdoor Expo in Gwinnett.

The GFC took advantage of social media outlets to assist in fire prevention messaging. Facebook and Twitter were used primarily to convey information, especially during wildfire incidents, to take advantage of a captive audience to provide fire prevention campaign messages and the importance of preventing wildfires.

The GFC continued to provide programs in which wildfire prevention was the primary theme, and that included appearances by Smokey Bear to promote fire prevention in Georgia. In FY17, there were 221 fire prevention programs or interviews conducted by the GFC professionals who invested 948 hours. It is estimated fire prevention efforts reached over 16 million citizens in Georgia and through many national media and social media sources. The audience size is contributed to local, state and national attention received during periods of heightened wildfire activity.

Fire Prevention Programs conducted	GFC Hours Invested	Audience Size
221	948	16,199,879

#### **COMMUNITY WILDFIRE PROTECTION PLANS (CWPP)**

As of June 30, 2017, 142 County-wide Community Wildfire Protection Plans (CWPP) in Georgia have been completed, with another six initiated. Through partnership with the Georgia Emergency Management and Homeland Security Agency, it has now been made mandatory for all counties to complete or renew their CWPP as part of the county's Hazard Mitigation Plan.

A CWPP provides a community or county road map to reduce its risk from wildfire. A CWPP is designed through collaboration between state, local, and federal fire agencies, homeowners, adjacent landowners, and other interested parties. This planning enables counties in Georgia to address their development patterns in the Wildland Urban Interface (WUI) and determine how they can begin to reduce their risk. Forest Protection staff members and our field personnel have examined CWPPs completed in 2010 and 2011 and are continuing to make contact with local county officials to update CWPP's. In FY17, five CWPP's were updated.

#### FIREWISE & FIRE ADAPTED COMMUNITIES PROGRAMS

The Firewise USA Recognition Program is a process that empowers neighbors to work together in reducing their wildfire risk. The GFC continued to contract with Georgia's Rural Conservation and Development Councils (RC&D) in an effort to engage more local participation. Georgia currently has 93 Firewise USA

communities as of June, 2017, with several current communities beginning to develop risk assessment and action plans to prepare for becoming certified as a Firewise USA community.

A fire adapted community incorporates people, buildings, businesses, infrastructure, cultural resources, and natural areas into the effort to prepare for the effects of wildland fire. Community leaders and residents accept responsibility for living in an area with wildfire hazards. They have the knowledge and skills and have adopted tools and behaviors to prepare in advance for their community's resilience in a wildfire prone environment.

#### **TYPE II INCIDENT MANAGEMENT TEAM**

More than 100 professional participate in and are on the roster for GFC's Incident Management Team. Many of the team's members are within the Trainee and Apprentice phases of qualification development. This is an important aspect of IMT management to ensure team sustainability and succession training for the future. Twenty-three GFC Type 2 IMT members participated in 17 separate out of state wildfire assignments to gain experience, maintain NWCG qualifications, and/or function as trainees.

#### **LAW ENFORCEMENT**

From July 1, 2016 through June 30, 2017 (FY17), GFC Investigators opened a total of 130 new cases. There were 86 fire investigations which resulted in 55 arson cases. Thirteen criminal charges were filed as a result of these investigations. During the same period, GFC investigators received 75 timber security complaints which lead to four charges being filed, along with \$22,738 recovered for landowners in Georgia.

#### **REGIONAL RESPONSE CENTERS**

The GFC operates two regional Dispatch/Response Centers. One located in Macon, GA at the GFC HQ complex referred to Central Response Center (CRC) operates 24 hours per day, seven days a week. The other located in Tifton, GA adjacent to our Tift Co. Forestry Unit known as Southern Response Center (SRC) operates from 7:00am until 7:00pm each day, with capabilities to continue beyond normal hours as wildfire situations require. During FY2017, the GFC Response Centers issued 25,598 burning permits for agriculture, silviculture and land clearing in the state, accounting for 33.18% of the total burning permits issued.

The Response Center's primary objective is to receive reports of wildfires and dispatch GFC personnel and equipment to those locations. In FY17 the Response Centers communicated with and tracked resources on 6,129 wildfires, documenting important information concerning wildfire situations, resource needs and entering time information.

The Response Centers continue to use Spider-Tracks and the GFC Flight Following and Tracking system, in which each aircraft is tracked and dispatched to locations for smoke investigations or wildfire support operations.

#### **STATEWIDE AIR OPERATIONS**

While maintaining our overall mission of detecting wildfires and supporting suppression efforts, the Air Operations Unit has continued to focus on the overall goal of being a safer, more efficient, and more effective aviation program within the GFC.

Air Operations pilots flew 5,620 hours on patrol flights, reported 765 wildfires and provided support on 1,014 wildfires, reported 1,613 controlled burns and checked over 28,621 controlled burns. The Air Operations Maintenance team performed 114 aircraft maintenance and repair projects on GFC aircraft in FY17. The GFC helicopter made 1,508 bambi bucket drops on wildfires during FY17.

#### PRESCRIBED FIRE

Prescribed fire continues to be the best, most cost efficient forest management tool for wildlife management, protection of the forest from wildfires, restoration of fire dependent forest ecosystems, forest regeneration, and control of certain unwanted plant species. In FY17 there were 777,896 burning permits issued for 1,114,753 acres of prescribed burning in Georgia and reported within our burning permit information system. Silviculture burning accounted for the majority of those acres at about 843,259 acres. The Georgia Forestry Commission continues to give on-the-ground assistance while also providing technical advice, weather forecasts, assistance in writing plans, and prescribed fire workshops for landowners across the state.

This year, five certification courses were held across the state with 175 students attending. To date, there are 3,185 certified burners in Georgia.

The Georgia Prescribed Fire Council held its annual meeting in September, 2016 at the UGA Conference Center in Tifton, with over 250 burn practitioners in attendance. Visit the council's website at <a href="https://www.garxfire.com">www.garxfire.com</a> for more information about the Prescribed Fire Council's activities and annual meeting.

#### FIRE WEATHER FORECASTING

Wildfire behavior is determined by forest fuels, surrounding topography, and weather conditions such as wind and relative humidity. Daily readiness for fire suppression is usually expressed in terms of fire weather and fire danger.

The GFC Fire Weather Website averaged about 70,000 visitors and about 60,000 hits per month in FY17.

Georgia uses a sophisticated National Fire Danger Rating System in which weather data is measured at 19 GFC weather stations and interpolated into levels of readiness understood by forest rangers and fire cooperators. The fire danger ratings with fire weather forecasting are produced daily by the Forest Protection meteorologist and are posted on <a href="GaTrees.org">GaTrees.org</a>.

Valuable tools and information for forest managers intending to conduct prescribed burning are available on the fire weather website. These tools include weather maps, rainfall maps, drought maps, lightning maps, point-forecast system, a prescribed fire climatology system, prescribed weather notification system, and web-based V-smoke application.

The GFC continues to utilize two weather station coordinator positions to help the GFC meteorologist monitor data quality from our weather stations. The coordinators assisted the meteorologist to make sure all hourly data are collected from all our weather stations.

#### **RURAL FIRE DEFENSE (RFD) PROGRAM**

The GFC's Rural Fire Defense Program continues to assist local county and municipal fire departments through acquisition, fabrication and repairs/modification of fire apparatus. In addition, funding to support fire departments within communities of fewer than 10,000 population provides opportunities for training,

personal protective equipment and water handling supplies. The RFD program administers the Volunteer Fire Assistance Program funding through federal grants provided by the US Forest Service.

The RFD program supports 396 fire departments in Georgia with over 1,695 pieces of fire suppression equipment in 121 counties. This equipment is in the form of vehicles, fire pumps, water tanks and various other types of fire protection apparatus. Through cooperation and partnerships, Georgia's local fire service agencies supported the GFC in its mission of protecting the forest resources of Georgia by responding to and assisting with the suppression of 5,298 wildland fires in FY17. In addition, the training and equipment provide through the RFD program supports local fire departments in their response to local emergencies, such as motor vehicle accidents and fires, structure fires and other miscellaneous emergency responses. In many locations and communities throughout Georgia, the vehicles and equipment provided by the GFC is the only emergency response apparatus available to citizens.

The GFC works closely with the Rural Fire Defense Council in Georgia to ensure the programs and projects being offered add value and are best utilized for their intended purposes. There were four regularly scheduled quarterly meetings held with the Rural Fire Defense Council in FY17.

RFD FISCAL YEAR FIRE SUMMARY					
Cooperating Fire Departments	Statewide Report				
Fiscal Year	2017		l	Level of Damage	
Type Fire	Number	Acres	Light	Moderate	Extensive
Wildland (or the old Forest Land)	5,298	14,611.87			
Open Land	0	0.00			
Motorized Equipment	1,209	0.00	366	339	15,502
Structural	1,897	0.00	749	552	440,597
Miscellaneous	15,846	0.00	0	0	0
Grand Total	24,250	14,611.87	1,115	891	456,099
Number Pieces Of Equipment NOT In Service			220		
Total Number Pieces Of Equipment				1,695	
Number Counties Utilizing RFD Equipment			121		
Number Departments Utilizing RFD Equipment			396		
Total Number Of RFD Stations			945		
Number Of Outstanding Requests: Lease/FED/State Excess			495		
Number of Fire Department Meetings Attended by GFC Personnel				2,714	

#### **Equipment and RFD Fabrication Shop**

The GFC's fabrication shop continues to provide construction, repairs and oversight of both GFC and Rural Fire Department vehicles and equipment. The majority of the activities carried out in the fabrication shop are performed to support fire suppression equipment being provided to GFC county units as well as Rural Fire Departments throughout the state. Continuous process improvements occur frequently as new vehicle and equipment configurations that require modifications to designs and fabrication phases are introduced. GFC fabrication welders and mechanics strive to provide high quality and timely products that keep the GFC's fire suppression fleet in a constant state of readiness. Fabrication staff works closely with the RFD program coordinator and the GFC's district and county units to support local fire departments in fabricating and repairing fire apparatus to support their mission and efforts. In FY17, the Fabrication shop performed a total of 373 work projects.

#### Fabrication Shop Production Table- Major Project Area for FY 2017

Equipment Classification	New	Repair	Paint	Other	Total Number of Projects
Electrical	0	3	0	1	4
Fire Knocker	2	0	0	0	2
Fire Knocker (Super)	1	0	4	0	5
Harrow	0	26	0	1	27
Motor Vehicle	0	2	0	0	2
Others	15	52	16	0	83
Plow	3	51	13	0	67
Pump	0	0	0	0	0
Tank	1	1	1	0	3
Tractor	9	44	22	0	75
Trailer	0	6	2	0	8
Truck Bed	1	13	0	0	14
Type 6 Engine	0	16	0	0	16
Type 7 Engine	1	13	1	0	15
V-Blade	13	29	10	0	52
Total	46	256	69	2	373



## **Communications**

Communications staff for fiscal year 2017 consisted of a director, an administrative assistant/graphic artist, a conservation education coordinator, a communications specialist and a media specialist. GFC also hosted a photography intern in FY17.

During the year, 13 press releases were produced and hundreds of news articles appeared in print. In addition, various magazine articles appeared in publications as diverse as *Georgia Forestry, Out of the Woods, Georgia County Government* and *Southern Farm and Garden,* among others. Many radio and television appearances were made, with topics ranging from fire prevention and fire activity to Arbor Day.

GFC continued to strengthen its presence on social media in fiscal year 2017. GFC now has pages on Facebook, Twitter, LinkedIn, Instagram, YouTube and Flickr. All agency press releases were shared on these pages, as were photos of GFC events and professionals. Social media is quickly becoming one of our main avenues of disseminating information to our publics in a timely manner.

GFC's e-Update, our bi-monthly e-newsletter, continues to expand. Throughout FY17, the publication was emailed to over 10,000 customers, partners, elected officials and individual subscribers every two to three months. With each new edition, we see the number of subscriptions increase.

Professionals across the state again tied in with First Lady Sandra Deal's Read Across Georgia month. Throughout the month of March, GFC professionals read Chuck Leavell's *The Tree Farmer* to elementary students throughout the state. Readings were documented on social media with the established hashtag #ReadAcrossGA, and photos were shared by the Department of Education and other educational groups.

Georgia's Forest Action Plan was highlighted in a new animated video, *The Forests of Georgia*. The video was promoted on social media, at meetings, and has now been developed into a school program for GFC professionals' use. Additionally, GFC Ranger Patricia Stockett was featured in the Southern Group of State Foresters' new video series highlighting forestry careers, *People of Forestry*. The video series, and Ms. Stockett's video specifically, was recognized nationally by the Public Relations Society of America.



# Forest Products Utilization, Marketing & Development

The mission of GFC's Forest Utilization & Marketing (U&M) department is to add value to Georgia's forest industry via customer-centered services and assistance in three program areas: Economic Development, Marketing, and Utilization. Beyond Georgia initiatives, GFC U&M also provides regional and national assistance to partners in the Southern Group of State Foresters and other organizations in efforts to expand the forest industry in the U.S. South and nation.

Following is a brief summary of the department's activities, by program area, in fiscal year 2017.

#### **ECONOMIC DEVELOPMENT**

**<u>Program Goal:</u>** Increase the value of the forest industry throughout the supply chain, from forest to markets.

**Program Driver:** The state's highly productive and sustainable forests are growing 45% more wood volume than is harvested each year. The result of this very high positive wood growth to removals ratio is that excess wood supply is available for existing industry expansion and/or new forest industries. Creating new demand for excess wood supply is critical for encouraging forest owners to keep their forests as forests, and not convert their land to other uses.

<u>Program Service Delivery:</u> The department provides forest resource analyses for existing industries seeking to expand operations, new industrial prospects, forest owners, business consultants, and state and local economic developers.

**Program Output:** The department provided assistance to 40 prospects: 15 bioenergy and 25 traditional forest industry; analyses of timber and biomass supply was provided to 13 of these prospects.

#### **MARKETING**

**Program Goal:** Strengthen and expand domestic and global markets for Georgia forest products.

**Program Driver:** Economic Benefits of the Forest Industry in Georgia 2016 reports that the state's forest industry contributed more than \$35 billion in revenue output and over 144,500 jobs in Georgia. Maintaining the forest industry's status as one of the top economic drivers in the state is critical, particularly for rural communities.

**Program Service Delivery:** The department promotes the state and its forest resources through print and online media and by cultivating new customers at domestic and international trade venues.

<u>Program Output:</u> Staff conducted the bi-annual Timber Product Output Survey 2015 in cooperation with the project lead, U.S. Forest Service Southern Research Station, completing 64 surveys of primary wood-using industries. Technical advice and marketing services totaled 441, including assistance with certified wood products and exporting, and disseminating domestic and international trade leads to potential buyers and exporters, cultivated via memberships with the American Hardwood Export Council and the Hardwood States Export Group. Formal presentations were provided to four groups with a total audience of 68 participants. Staff distributed 2,946 pieces of marketing materials. Staff operated a forest utilization and marketing exhibit at two domestic trade shows: Southern Forest Products Association Expo; and International Woodworking Fair, where 300 contacts were made with buyers from 21 countries.

#### **UTILIZATION**

**<u>Program Goal:</u>** Establish new forest products and values from the forest.

<u>Program Driver:</u> Sustaining the economic viability of forest ownership is critical to encouraging forest owners to keep their lands as working forests; healthy, sustainable forests provide clean air, clean water, and abundant products for future generations.

<u>Program Service Delivery:</u> The department takes an active leadership role in the development and growth of all sectors of the forest industry, particularly the biomass energy sector. The department developed, maintains and promotes the Georgia Carbon Sequestration Registry, a tool that forest owners can use to quantify their sequestered carbon in their growing trees and forests. The department cooperates with regional partners in developing standardized ecosystem services evaluation tools, which may lead to new values realized from forests. The department provides financial and economic analyses to forest owners using modeling programs.

Program Output: Staff provided six assists to forest owners utilizing SiMs growth and yield modeling and analysis to promulgate improved economic outcomes from various forest management scenarios. Technical advice on ecosystem services was provided to one forest owner. Staying current with technical information is critical to our mission's success and for providing quality services to our customers; staff attended several technical conferences on timber supply, new and emerging markets such as ecosystem services and new forest products such as mass timber, naval stores and bio-products. Staff provided one report on carbon sequestration generated on Georgia's forests. The department partners with non-profits, and state, regional and national organizations in the development of new forest products such as cross-laminated timber (CLT). Staff co-hosted a CLT symposium at the Georgia Institute of Technology attended by 300 architects, builders and students. Staff maintains two five-year-old, biomass reforestation demonstration plots, located on the Bartram and Dixon state forests. Technical data is collected annually, which may result in new forest biomass silvicultural prescriptions and potentially new income streams from forest biomass.



### Reforestation

The Reforestation Department had a very successful fiscal year in seedling sales, seed collection, and in continuing to advance the genetic value of our seedlings. We were able to do some small infrastructure improvements to our Flint River Reforestation Complex. These improvements will continue into the next fiscal year. There were many positives this past fiscal year, which are highlighted by program area in the next sections of this report.

#### TREE IMPROVEMENT

- Controlled cross pollinations were made at Arrowhead Seed Orchard. These crosses were made toward 4<sup>th</sup> cycle selections.
- There were two loblolly progeny tests measured, with results uploaded into the NCSU Tree Improvement Cooperative's data base. There were also two slash progeny tests measured and sent to the CFGRP for assessment.
- Three six rep progeny tests were installed this fiscal year.
- Maintenance on these sites were performed during the growing season.
- The annual tree improvement contact and advisory meetings for both co-ops were attended by Jeff Fields.
- The GFC continues to play a vital role in the development of pine genotypes, not just for Georgia landowners, but landowners across the Southeast. This is due to a continuing agreement between the GFC and the NCSU Tree Improvement Cooperative at the GFC's Arrowhead Seed Orchard.
- This program continues to be a success and an asset to the GFC and landowners across the Southeast. The latest figures that were supported by the NCSU co-op continue to show the present value of the Arrowhead Breeding Center to be \$483,000,000 south-wide and \$113,000,000 in Georgia.

#### **SEED ORCHARD**

The GFC Seed Orchard program continues to be a successfully run segment of the Reforestation Department. With superior pine genotypes being supplied by the Tree Improvement Program and continually going into our orchard program, the landowners of Georgia benefit greatly.

The following accomplishments in seed collection were made by our professionals, not only in the Seed Orchard program, but also by GFC professionals in the field who are a very important part of our efforts.

The following numbers of bushels of cones were collected from GFC orchards and were cleaned in our seed extractory to supply the nursery program with genetically elite seed for many more years.

Species	Bushels Collected
Loblolly Ga. Giants	188.00
Loblolly High Volume	81.00
Loblolly P-3	638.00
Loblolly P-3 Select	295.00
Loblolly RR3	360.00
Elite Straight Loblolly	94.00
Slash Premium	1318.00
Slash Select Premium	876.00
Slash Super Select	130.00

In addition to these elite pine species that were collected and processed, there were also **13,073.25** pounds and/or gallons of hardwood seeds collected, processed, and planted! We also were able to sell over **\$144,000** worth of genetically improved pine seed to private nurseries, furthering the reach of the GFC's superior seed and genetic resources.

#### **NURSERY**

The nursery continues to be the financial engine that drives the Tree Improvement and Orchard programs. For fiscal year 17, there were **12,260,780** seedlings sold. This was up more than 1.6 million from the previous year. The nursery filled **2,934** orders for the year, reforesting over **23,000** acres!



# **Administration**

INCOME AND EXPENDITURES							
	FY2015	FY2016	FY2017				
FUNDING SOURCE							
FEDERAL FUNDS	9,306,162	12,396,615	6,466,832				
FEDERAL STIMLUS							
OTHER FUNDS	8,168,043	10,365,388	12,329,118				
STATE GENERAL FUNDS	32,958,632	35,318,388	46,280,750				
GOVERNOR'S EMERGENCY FUNDS	0	0	0				
FEMA-FIRE MANAGEMENT GRANT	0	0	0				
PRIOR YEAR INVENTORY	0	0	0				
TOTAL FUNDS	50,432,837	58,080,391	65,076,700				
EXPENDITURES BY OBJECT CLASS							
TOTAL PERSONAL SERVICES	32,937,813	36,228,012	37,318,026				
TOTAL REGULAR OPERATING EXPENSES	8,840,852	7,525,726	9,852,967				
TRAVEL	252,193	415,812	388,680				
MOTOR VEHICLE EQUIPMENT PURCHASES	885,041	789,983	3,394,632				
EQUIPMENT PURCHASES	317,264	2,107,625	9,569,841				
COMPUTER CHARGES	1,433,907	1,532,394	2,037,270				
REAL ESTATE RENTALS	30,781	27,060	29,556				
TELECOMMUNICATIONS	708,902	609,227	741,121				
CAPITAL OUTLAY	19,518	262,609	4,000				
PER DIEM & FEES	0						
CONTRACTS	4,943,224	8,477,624	1,664,773				
WARE COUNTY TAX - RD. MAINT.	60,000	60,000	60,000				
WARE COUNTY TAX - S. FOREST	0	0	0				
TOTAL EXPENDITURES	50,429,495	58,036,071	65,060,866				
EXPENDITURES BY PROGRAM							
REFORESTATION	1,202,326	1,250,936	1,217,068				
PROTECTION	35,242,389	38,488,594	52,039,687				
MANAGEMENT	10,301,619	14,510,549	7,544,616				
GENERAL ADMINISTRATION AND SUPPORT	3,683,161	3,785,992	4,259,495				
BONDS							
EQUIPMENT BONDS	6,302,840	4,000,000	0.00				
CAPITAL OUTLAY BONDS	472,028	1,080,973	312,550				
NUMBER OF EMPLOYEES	652	581	554				





5645 Riggins Mill Road Dry Branch, GA 31020 1-800-GA TREES GaTrees.org

#### **GFC VISION:**

Healthy, sustainable forests providing clean air, clean water and abundant products for future generations.