



2018 Annual Report



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Chuck Williams, 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 and to monitor and suppress forest insect and disease outbreaks. The GFC is also granted authority by the Georgia Environmental Protection Division 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. 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 9199 field visits with landowners involving 495,342 acres. Over half of these visits were cost share visits (4,625), 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 2018 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 1,805 CRP cases covering 65,472 acres. As a result of this work, approximately \$956,842 went to Georgia landowners to help fund forest management practices. Also, these participants will receive rental payments for a total \$371,722 annually for the next 10-15 years, depending on the contract length. The total dollar impact for the year is \$1.3 million.

Emergency Forest Restoration Program (EFRP) – During FY 2018, GFC worked to complete EFRP contracts funded to restore forests destroyed by recent hurricanes and tornadoes. GFC wrote plans for 113 tracts covering 8,407 acres, and certified the performance of 53 practices covering 3,201 acres, resulting in a cost share impact for landowners totaling \$727,985.

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 917 contracts covering 59,243 acres. The performance of 1,287 practices was also certified, covering 64,658 acres. As a result of these services, landowners received approximately \$6.1 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 12 practice performance inspections completed covering 444 acres. As a result of these services landowners received approximately \$14,197 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 277 practices covering 18,423.35 acres. There were 203 practice performance certifications completed covering 12,659 acres. As a result of these services, landowners received \$294,856 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 chinaberry.

Assistance was provided on 29 initial prescription plans covering 1,174 acres. GFC personnel certified the performance of 30 plans covering 1,309 acres. As a result of these services, landowners received \$60,400 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 three initial prescription plans covering 115 acres. GFC personnel went on to certify the performance of three plans covering 115 acres. As a result of these services, landowners received approximately \$17,250 in cost share payments.

Table 1: Incentive payments to GA landowners related to GFC services in FY 2018

Program	\$ Received
EFRP	\$727,984.93
WHIP	\$14,197.80
EQIP	\$6,149,651.00
SPB	\$294,856.40
CRP	\$1,328,564.00
Invasive Plant	\$60,400.00
Partners- USFWS	\$17,250.00
Totals	\$8,592,904.13

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 732 management cases involving 30,052 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; 173 plans were presented to landowners with a total acreage of 50,921 acres. Additionally, 296 acres of cogongrass have been treated with all known sites being sprayed at least once, and approximately 85% of all known sites are being reported as negative for cogongrass. There are 152 sites in Georgia that have shown one year of negative post inspection, 107 sites that have shown two years of negative post inspection, and 723 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 87 occasions with 35,289 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 Phytophthora ramorum, which is responsible for substantial west coast tree mortality. Our forest health staff conducted 17 multimedia interviews with an estimated audience of 297,100.

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 FY 2018 the GFC was again able to partner with the Georgia Department of Natural Resources and other groups to protect an additional 8,170 acres by purchasing the tract known

as Hilliard tract. 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.

The Hilliard tract comprises well-stocked longleaf and loblolly pine working forestland immediately adjacent to the Fort Benning (FB) Army Post. Hilliard is the largest and most important tract within the FB Priority 1 Buffer Area, a region where the Army and partners have invested over \$73M to protect FB from encroaching development and environmental issues that would limit military operations. Supporting America's LLP Restoration Initiative, Hilliard is critical habitat for the federally endangered red-cockaded woodpecker (RCW) and the gopher tortoise, a candidate species which, if listed, would severely reduce mission capabilities on FB. Fort Benning is under a Jeopardy Biological Opinion for the RCW which restricts training; protecting Hilliard will relieve that and provide training flexibility. Due to Hilliard's size, configuration and location, industrial development or agricultural conversion is an imminent threat. Hilliard is FB's and Georgia Department of Natural Resources (GA DNR) #1 conservation priority. The Army, The Nature Conservancy (TNC), US Fish & Wildlife Service (FWS), GA DNR, and Natural Resource Conservation Service (NRCS) will invest more than \$14.3M to protect Hilliard.

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 28th year of service to Georgia's forest landowners with a current total active enrollment of 2,382 plans covering 785,837 acres. Another 280 plans covering an additional 100,899 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 American Forest Foundation, Tree Farm, National Wild Turkey Federation, Quail Forever, and the Natural Resource & Conservation Service are just a few examples where the GFC works together to host events, field days, and etc.

URBAN AND COMMUNITY FORESTRY

During FY 2018, Georgia had 155 Tree City USA communities which was an increase of 15 new cities from the previous year. There were also 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 200 communities or organizations to create or revise tree ordinances, develop management plans, conduct hazardous tree assessments, assist with Tree City USA certifications and/or conduct trainings/workshops for municipal tree care workers. Additional services provided by the circuit riders included conducting four Certified Arborist Review classes. These classes were held over two days and trained 81 tree care workers and potential arborists. Many attendees went on to take the test to become an Arborist Certified by the International Society of Arboriculture.

U&CF funding was also used to complete Making the Shade projects, which planted 80 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 continue administration of 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.

One project utilized special LSR funding from the US Forest Service. SCFP contracted with the Green Infrastructure Center out of Virginia to work with the cities of Alpharetta and Norcross to develop ways that the cities can better integrate trees into their stormwater management program. This project was done in conjunction with the states of Virginia, North and South Carolina, Florida, Oklahoma and Alabama.

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. SCFP provided funding or sponsorship to several professional organizations to help expand their capacity or support specific projects or programs. These include providing funding to hire an Administrative Assistant for the Coastal Arborist Association; funding to the Women's Arborists of the Southeast to create a video in both English and Spanish about stopping the harmful practice of topping trees; sponsorship of programs or conferences held by the Georgia Arborist Association and Park Pride Atlanta.

WATER QUALITY PROGRAM

For Georgia's Fiscal Year 2018 (July 1, 2017 – June 30, 2018) GFC completed the items that follow. Funded largely through the EPA Section 319 grant program, handed down from GA-EPD, the GFC Water Quality program was staffed with one State Water Quality Program Coordinator, four Water Quality Specialist Foresters, and seven Region Water Quality CDI Foresters. During FY 2018, GFC water quality foresters provided 101 BMP talks to 7,814 people. In addition, GFC water quality foresters put on 19 BMP field demonstrations with 159 people in attendance. GFC foresters investigated 39 separate water quality complaints requiring 94 site visits to mediate. GFC foresters completed a total of 139 BMP Assurance Exams on harvests and other management activities. Water quality/BMP advice was given during the course of 221 general advice site visits for landowners on a total of 22,308 acres. GFC water quality foresters, field foresters, and management staff completed 595 state and region level firebreak BMP inspections on GFC firebreaks. During the first part of FY 2018, GFC foresters finished site inspections for the 2017 Silvicultural BMP Survey, completing the final 103 of the 232 total of randomly selected sites that were eventually completed prior to the end of calendar year 2017. A comprehensive report detailing the results of that survey was completed and provided to GA-EPD.

The GFC continues to be involved with the Regional Water Planning Councils throughout the state as those councils have continued to meet periodically. The GFC water quality program continues to stay engaged in various meetings including various forestry/water stakeholders such as natural resource agencies, regulatory agencies, policy makers, local officials, landowners, foresters, loggers, forestry contractors, forest industry, academia, non-government conservation organizations, general public, etc. During FY 2018 GFC personnel participated in 131 such meetings with 1,425 people attending.

During FY 2018, GFC continued the process of reviewing projects in three major watershed areas of GA: Lower Savannah River, Oconee River, and Middle Chattahoochee River. This was done under an LSR Grant from the USFS to help make people aware of the important connections between retaining forestland (especially working forestland), good forest management, and healthy water supplies.

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. The program's current responsibilities require 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: Department of Natural Resources; UGA College of Agricultural and Environmental Sciences; Department of Transportation; and Georgia Correctional Industries, part of the Department of Corrections. Other agencies receive assistance when requested. In addition, the Good Neighbor Authority Wireskull Agreement allows for opportunities with the U.S. 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 2018 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. Twenty-four timber sales occurred during FY 2018. Assistance was also given with site preparation and prescribed burns.

University of Georgia - College of Agricultural and Environmental Sciences

The University of Georgia's College of Agricultural and Environmental Sciences (UGA CAES) forestlands are located on their experiment stations. No timber sales were conducted during FY 2018. Reforestation planning and coordination occurred regarding previously harvested sites on Tifton Campus farm sites.

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. GFC handled all aspects of GDOT timber sale administration during FY 2018. One timber sale occurred during FY 2018 on the Little River Tract in Putnam County, involving a timber salvage and harvest operation. The I-16 Safety Enhancement harvest continued and was completed. Further reforestation planning and coordination occurred on the Long County tract; however, a planned replanting effort did not occur due to high water levels prohibiting access. Timber harvesting on Little River Tract is to continue into FY 2019. Expected FY 2019 timber sales are located on the Mayhaw tract in Miller 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 continued. The second of the three additional timber sales, Check Redlands 1, 2 & 3, to the Wireskull Agreement was prepared with the bid sale to occur before the end of the federal fiscal year. Common Stand Exam inventory work began on a 3,800 acre block of the Oconee National Forest with completion planned in FY 2019.

Timber Transaction Complaints

The Georgia Forestry Commission assumed the role of investigating timber transaction complaints on July 1, 2015. State Lands Forest Management assists with investigations by performing stump cruises. Four stump cruises were performed in FY 2018.

LOOKING FORWARD TO FY 2019

FY 2019 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, continue with new GNA opportunities with the U.S. Forest Service and assist our investigators by performing stump cruises.



Forest Protection

WILDFIRE ACTIVITY

Wildfire occurrence for Fiscal Year 2018 (FY 2018) was below the 5 year average. We experienced 2,930 wildfires that burned 15,385 acres in Georgia. The average size of each wildfire was 5.25 acres which is close to the average normally experienced. The largest wildfire occurred in Marion County and burned 522 acres on private lands.

COUNTY AND AREA OFFICE OPERATIONS

The GFC provided 1,853 burn assists for landowners in Georgia totaling about 172,434 acres, or about twelve percent of the total acres prescribed burned in GA, which includes assistance to landowners for agriculture, silviculture and land clearing types of burns.

Total Burn Assist Number	1,853
Total Burn Assist Acre	172,434

Pre-suppression plowing and harrowing services in FY18 increased in the number of landowners serviced as well as the total hours/miles of firebreaks installed when compared to the previous fiscal year. In FY 2018, the GFC performed a total of 5,057 plowing/harrowing services for landowners for a total of 15,476 hours of firebreaks installed by GFC professionals using tractor/plow/harrow equipment.

Year	2018
Total Plowing and Harrowing Serviced	5,057
Total Plowing and Harrowing Miles	30,071
Total Plowing and Harrowing Hours	15,476

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 included appearances by Smokey Bear to promote fire prevention in Georgia. In FY 2018, there were 236 fire prevention programs or interviews conducted by the GFC professionals who invested 946 hours. It is estimated fire prevention efforts reached over 1.5 million citizens in Georgia and through many national media and social media sources.

Fire Prevention Programs Conducted	GFC Hours Invested	Audience Size
236	946	1,525,709

COMMUNITY WILDFIRE PROTECTION PLANS (CWPP)

As of June 30, 2018, 141 County-wide Community Wildfire Protection Plans (CWPP) in Georgia have been completed. It is not anticipated any further new CWPP's will be added however updates to current plans are continuing. 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 2011 and 2012 and are continuing to make contact with local county officials to update CWPP's. In FY 2018, three 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 99 Firewise USA communities as of June, 2018, 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.

LAW ENFORCEMENT

From July 1, 2017 through June 30, 2018 (FY 2018), GFC Investigators opened a total of 106 new cases. There were 55 arson cases which resulted in twenty-four criminal charges filed as a result of these investigations. During the same period, GFC investigators received 85 timber security complaints which led to six charges being filed, along with \$12,177.00 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 7:00 am until 7:00 pm each day, with capabilities to continue beyond normal hours as wildfire situations require. During FY 2018, the GFC Response Centers issued 28,809 burning permits for agriculture, silviculture and land clearing in the state, which accounted for 35.48% of the total burning permits issued.

The Response Centers' primary objective is to receive reports of wildfires and dispatch GFC personnel and equipment to those locations. In FY 2018, the Response Centers communicated with and tracked resources on 2,930 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 2,015 hours on patrol flights, reported 185 wildfires and provided support on 249 wildfires, reported 1,260 controlled burns and checked 18,237 controlled burns. The Air Operations Maintenance team performed 86 aircraft maintenance and repair projects on GFC aircraft in FY 2018

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 FY 18 there were 891,243 burning permits issued for 1,355,985 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 1,053,863 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 four certification courses were held across the state with 190 students attending. To date, there are 3,210 certified burners in Georgia.

The Georgia Prescribed Fire Council held its annual meeting in September, 2018 at the UGA Conference Center in Tifton, with over 285 burn practitioners in attendance. Visit the council's website at www.garxfire.com 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.

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 GaTrees.org.

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 is 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 supported 423 fire departments in Georgia with over 1,739 pieces of fire suppression equipment in 123 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 3,390 wildland fires in FY 2018. 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 are 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 FY 2018.

RFD Fiscal Year Fire Summary					
Cooperating Fire Departments	Statewide Report				
Fiscal Year	2018		Level of Damage		
Type Fire	Number	Acres	Light	Moderate	Extensive
Wildland (or the old Forest Land)	3,390	7,029.09			
Open Land	0	0.00			
Motorized Equipment	1,334	0.00	450	388	496
Structural	2,207	0.00	1,035	603	568
Miscellaneous	13,567	0.00	0	0	0
Grand Total	20,498	7,029.09	1,485	991	1,064
Number Pieces Of Equipment NOT In Service			249		
Total Number Pieces Of Equipment			1,739		
Number Counties Utilizing RFD Equipment			123		
Number Departments Utilizing RFD Equipment			423		
Total Number Of RFD Stations			1,033		
Number Of Outstanding Requests: Lease/FED/State Excess			615		
Number of Fire Department Meetings Attended by GFC Personnel			2,178		

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 FY 2018, the Fabrication shop performed and completed a total of 379 work projects.

Equipment Classification	New	Repair	Paint	Other	Total Number of Projects
Electrical	1	1	0	1	3
Fire Knocker	0	0	0	0	0
Fire Knocker (Super)	1	0	1	0	2
Harrow	0	42	0	0	42
Motor Vehicle	0	1	1	0	2
Others	19	35	13	0	67
Plow	4	44	19	0	67
Pump	0	0	0	0	0
Tank	8	8	5	0	21
Tractor	51	16	7	0	74
Trailer	0	23	8	0	31
Truck Bed	0	16	4	0	20
Type 6 Engine	2	4	0	0	6
Type 7 Engine	14	5	0	0	19
V-Blade	1	20	3	0	24
Total	101	215	61	1	378

Fabrication Shop Production Table - Major Project Area for FY 2018



Communications

Communications staff for fiscal year 2018 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 again for part of FY 2018.

During the year, 12 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* and *Georgia County Government*, 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 FY 2018. 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 FY 2018, 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.

Environmental Education took center stage when GFC partnered with Fernbank Science Center in Atlanta to bring fourth grade students from Dekalb Elementary School of the Arts to Fernbank Forest. First Lady Sandra Deal and Rolling Stones keyboardist Chuck Leavell both took part in the program, which generated publicity in Atlanta and throughout the state. Students engaged in several Project Learning Tree activities at different areas in the forest, and learned about forest benefits, forest management and several other topics.



Forest Products Utilization, Marketing & Development

The mission of the Georgia Forestry Commission 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, U&M also provides regional and national assistance to forestry agency partners and other organizations in efforts to expand the forest industry in the U.S. South and nation. One staff member retired this year and the position remained unfilled for the last quarter of the fiscal year. Following is a brief summary of the department's activities, by program area, in FY 2018.

ECONOMIC DEVELOPMENT

Program Goal: Increase forest industry value, throughout the supply chain, from forest to markets.

Program Driver: Georgia's 24 million acres of timberlands grow an astonishing two tons of wood per second! Furthermore, the state's timberlands grow 46% more wood volume than is harvested each year. The result of this large positive wood growth to removals ratio, one measure of resource sustainability, is that excess wood supply is available for existing industry expansion and/or new forest industries. New markets and demand for this large excess wood supply will help forest owners keep their forests as forests and not converting them to other uses.

Program Service Delivery: 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 13 prospects: eight bioenergy and five traditional forest industry; analyses of timber and biomass supply was provided to six of these prospects.

MARKETING

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

Program Driver: 2017 Economic Benefits of the Forest Industry in Georgia reports that the state's forest industry contributed nearly \$36 billion in revenue output and over 147,000 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 markets and promotes the state's forest resources through print and online media and public speaking venues; forest industry surveys and economic impact reports; and by cultivating new customers at domestic and international trade shows.

Program Output: Staff initiated the 2017 Timber Product Output Survey in cooperation with the project lead, U.S. Forest Service Southern Research Station, completing about 77 of 167 total surveys of primary wood-using industries. Technical advice and marketing services totaled 648 including disseminating domestic and international trade leads to potential buyers and exporters, cultivated via memberships with the Southern Forest Products Association, American Hardwood Export Council and the Hardwood States Export Group. Formal presentations were provided to five groups with a total audience of 150 participants. Staff distributed 2,534 pieces of marketing materials. Staff displayed a GFC exhibit at four trade shows: Wood Bioenergy Conference & Expo and Panel & Engineered Lumber International Conference, Southeast Wood Solutions Fair, all in Atlanta; and displayed an American Hardwood Export Council & Hardwood States Export Group exhibit at IndiaWood, Bangalore, India; and attended two others: Atlanta Build Expo, National Hardwood Lumber Association annual conference. Staff provided insight during Georgia Congressional staff tour of wood-using industries in southeast Georgia.

UTILIZATION

Program Goal: Establish new forest products and values from the forest.

Program Driver: Sustaining 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.

Program Service Delivery: The department champions market growth of all forest industry sectors through existing and new product research, development and technology transfer that may lead to new income streams for forest owners including sequestered carbon and other ecosystem service valuations, forest planning and financial analyses.

Program Output: Staff provided four forest planning and financial analyses assists using Simulator for Managed Stands (SiMS) growth and yield modeling to educate forest owners on improving economic outcomes from various forest management scenarios. Staff provided four technical advice/reports on carbon sequestration, carbon markets, Georgia's Carbon Sequestration Registry and other ecosystem services that may lead to new values realized from forests. Staff attended five technical conferences on timber supply forecasting, mass timber, forest industry logistics, and financial analyses and delivered this information through outreach/education efforts to customers, company prospects, and the general public via various media. Staff collaborated with several NGO's, state, regional and national organizations to advance the development of a new forest product in Georgia, cross-laminated timber (CLT), at a seminar in Atlanta. Staff maintains, monitors and collects growth data on two six-year-old, biomass reforestation demonstration plots, located on the Bartram and Dixon state forests, which may result in new forest biomass silvicultural prescriptions and potentially new income streams from forest biomass. Staff began research on four, multi-year and multi-state projects including construction sector wood usage, forestry sector economic impact modeling, urban forest wood utilization and projections on timber harvest and wood supplies. Staff provided pre-publication peer review of two technical U.S. Forest Service documents.



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. 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. This breeding work should finally finish the breeding for the 4th cycle.
- Survival checks were conducted on three 4th cycle Loblolly Pine progeny tests and measurements were taken on three full syb. Block plot tests for the CFGRP
- Field Grafting for 4th cycle Slash Pine selections were done at Chiefland, Florida for the CFGRP's Slash Pine clone bank.
- 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	LBS
Loblolly Ga. Giants	269.5	319.00
Loblolly High Volume	271.00	356.00
Loblolly P-3	678.00	905.00
Loblolly P-3 Select	210.00	340.00
Loblolly RR3	383.50	535.00
Elite Straight Loblolly	354.50	490.00
Slash Premium	780.00	820.00
Slash Select Premium	900.00	897.00
Slash Super Select	175.00	189.00
Loblolly C3	472.00	548.00

In addition to these elite pine species that were collected and processed, there were also 10,982.75 pounds and/or gallons of hardwood seeds collected, processed, and planted!

We also were able to sell over \$200,000 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 FY 2018, there were 12,484,990 seedlings sold. This was up slightly from the previous year. The nursery filled 2,734 orders for the year, reforesting over 23,000 acres! This was one of the best years, sales and revenue wise that we have had in several years.



Administration

INCOME AND EXPENDITURES			
	FY2016	FY2017	FY2018
FUNDING SOURCE			
FEDERAL FUNDS	12,396,615	6,466,832	17,143,762
FEDERAL STIMULUS			
OTHER FUNDS	10,365,388	12,329,118	15,663,630
STATE GENERAL FUNDS	35,318,388	46,280,750	40,456,415
GOVERNOR'S EMERGENCY FUNDS			
FEMA-FIRE MANAGEMENT GRANT			
PRIOR YEAR INVENTORY			
TOTAL FUNDS	58,080,391	65,076,700	73,263,807
EXPENDITURES BY OBJECT CLASS			
TOTAL PERSONAL SERVICES	36,228,012	37,318,026	39,879,668
TOTAL REGULAR OPERATING EXPENSES	7,525,726	9,852,967	9,611,140
TRAVEL	415,812	388,680	523,317
MOTOR VEHICLE EQUIPMENT PURCHASES	789,983	3,394,632	3,903,877
EQUIPMENT PURCHASES	2,107,625	9,569,841	501,605
COMPUTER CHARGES	1,532,394	2,037,270	1,804,772
REAL ESTATE RENTALS	27,060	29,556	43,288
TELECOMMUNICATIONS	609,227	741,121	821,813
CAPITAL OUTLAY	262,609	4,000	252,221
PER DIEM & FEES			
CONTRACTS	8,477,624	1,664,773	15,831,750
WARE COUNTY TAX - RD. MAINT.	60,000	60,000	60,000
WARE COUNTY TAX - S. FOREST			
TOTAL EXPENDITURES	58,036,071	65,060,866	73,233,452
EXPENDITURES BY PROGRAM			
REFORESTATION	1,250,936	1,217,068	1,230,652
PROTECTION	38,488,594	52,039,687	53,769,530
MANAGEMENT	14,510,549	7,544,616	13,549,692
GENERAL ADMINISTRATION AND SUPPORT	3,785,992	4,259,495	4,683,578
BONDS			
EQUIPMENT BONDS	4,000,000	0.00	0.00
CAPITAL OUTLAY BONDS	1,080,973	312,550	471,958
NUMBER OF EMPLOYEES	581	554	551

GEORGIA FORESTRY
COMMISSION



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GaTrees.org

GFC VISION:

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

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