

GEORGIA FORESTRY
COMMISSION



2010 Annual Report



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Robert D. Farris, Director

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Table of Contents

Forest Management.....	1
Forest Protection.....	11
Communications.....	16
Forest Products Utilization, Marketing & Development.....	17
Reforestation.....	19
Administration.....	20



The Georgia Forestry Commission's Forest Management Department provides forestry-related technical information and assistance to Georgia's private forest landowners to enhance their woodlands for economical, social, and environmental benefits.

STATE FOREST RESOURCE ASSESSMENT

In accordance with the 2008 Farm Bill, the GFC completed its State Forest Resource Assessment and Strategy Report and submitted it to the USDA Forest Service on June 18, 2010. This Assessment provides a comprehensive analysis of forest-related conditions, trends, threats and opportunities in the state, and identifies priority rural and urban forest landscapes. The statewide assessment can be viewed at: <http://www.gatrees.org/ForestManagement/GAForestResourceAssessmentStrategy.cfm>

Issues identified in the 2008 Forest Management Sustainability Report found at: <http://www.gatrees.org/Resources/documents/SustainableForestManagementinGeorgiarev0309.pdf> were communicated to key partners and the general public and utilized in the assessment. Georgia also developed long term strategies for investing federal, state, and other resources to manage these identified priority landscapes while addressing national, regional, and state themes or guidance.

Georgia worked collaboratively with key partners and stakeholders, including the Forest Stewardship Coordinating Committee, State Technical Committee, Urban Forest Council, to develop the assessment and incorporated State Wildlife Action Plans, Community Wildfire Protections Plans, Southern Wildfire Risk Assessment, the Georgia Comprehensive State-wide Water Management Plan and other relevant information.

The GFC contracted with the University of Georgia College of Agriculture and Environmental Sciences to develop geospatial data layers to be used to identify priority areas.

Forest Management

RURAL FORESTRY ASSISTANCE

Rural forestry assistance promotes healthy, vigorous forests that provide a renewable and dependable source of forest products for the state's economy. This assistance includes written management advice, brief plans, Tree Farm inspections, harvesting advice, and timber marking. Other than Forest Stewardship and cost-share assistance, during FY2010 GFC provided technical assistance to 2,637 landowners managing 279,939 acres as follows:

- 1,838 advice cases on 155,323 acres
- 608 brief plans on 53,639 acres
- 147 Tree Farm inspections on 69,001 acres
- 38 harvesting advice on 1,817 acres
- 6 timber marking cases on 159 acres

MINORITY OUTREACH

The Georgia Forestry Commission's Minority Outreach Program provides outreach and assistance to minority and underserved landowners in Georgia. The goal is to enhance awareness of GFC programs and services among minority landowners previously unfamiliar with these opportunities.

In 2010 the GFC Minority Outreach Program:

- Sponsored and participated in the Team Agriculture Georgia (TAG) fall workshop for small and beginning farmers/landowners in Douglas, Ga.
- Continued the new partnership with the Georgia Forestry Association (GFA), which entailed inviting minority landowners previously not involved with GFA to participate in GFA's regional landowner meetings (held across the state) as well as their annual meeting.
- Sponsored and participated in the SoGreen Network's Greening the Southeast Summit in Savannah, Ga., where a variety of natural resource issues were discussed in an educational format. More than 225 people attended the event.

- Sponsored and participated in a landowner field day in Milledgeville, Ga., at the GFC's own Bartram Educational Forest in partnership with the Oconee River Resource Conservation & Development Council.
- Continued work with one part-time GIS intern through January 2010 and subsequently hired one full-time summer intern to work on the minority landowner GIS database, which will aid the GFC in providing more focused outreach and service delivery to our customers. This included contacting minority landowners and visiting their properties to collect GIS data.
- Sponsored and participated in the Federation of Southern Cooperatives Annual Conference in Albany.
- Participated in the development of a farm succession planning workbook for use by agricultural and forest landowners through the Rolling Hills Resource Conservation & Development Council.
- Sponsored and participated in the Central Georgia Stewardship Landowner Field Day at Big K Farm in Jones County.
- Participated in the Griffin Agroforestry & Wildlife Field Day for forest landowners and farmers.
- Strengthened a partnership with the National Wild Turkey Federation (NWTF) by developing several Stewardship Field days, a seed subsidy program, and the creation of a promotional video on stewardship.
- Created 500+ acres of habitat improvement on Georgia forest land through the seed subsidy program, which cost-shared more than 20,000 pounds of seed.
- Enhanced the partnership with the Quality Deer Management Association (QDMA), including field days and participation in several TV show episodes.
- Developed a web page for Stewardship and GROWS where landowners can obtain information.
- Created new displays for meetings and other public events with new partners.
- Participated in a TV show on conservation easements and stewardship.
- Hired a stewardship outreach coordinator to manage the Central Georgia strategic outreach effort.

This year marked the third round of competitive grant proposals through the U.S. Forest Service. Georgia was awarded several grants, but the two most relevant to the Stewardship Program are the Central Georgia Strategic Outreach Initiative and the Southern Regional Marketing Grant. Both grants are described below.

FOREST STEWARDSHIP PROGRAM (FSP)

The Stewardship Program completed its 18th year of program delivery. The cornerstone of the Forest Stewardship Program is the Forest Stewardship Plan developed for each landowner in the program. These plans evaluate the landowner's timber, wildlife, soil, water, scenic, and recreational resources – making specific recommendations on how these resources can be best managed. A total of 163 plans covering 59,995 acres were written in FY2010.

This year the program has undergone some significant changes. First and foremost, only plans that are current, meaning less than 10 years old, are counted for annual reporting purposes (to the US Forest Service, which funds this program). Second, with the completion of the statewide assessment and subsequent strategy, consultant plan contracting is limited to funds appropriated for designated priority areas. Currently the cumulative enrollment is 2,878 landowners covering 815,490 acres in Georgia. Through its Certified Steward designation, FSP also recognizes landowners who demonstrated commitment to forest stewardship by doing an outstanding job of management on their property. Eighty-three new Certified Stewards were recognized in FY2010, covering 38,057 acres.

Forest Stewardship Program Accomplishments - 2010:

- Provided assistance to the Georgia Envirothon and Regional FFA Field Days.

CENTRAL GEORGIA STRATEGIC OUTREACH INITIATIVE

The Central Georgia Strategic Outreach Initiative is designed to model a new way of accomplishing landscape scale conservation of forests within a specified geographical area to meet the multiple values and benefits of sustaining intact working forest landscapes. The basic idea is to partner with nongovernmental organizations (NGO's) and other partners to target landowners within the specified focus area. Each partner can bring their unique values and outreach resources to provide landowners with the full complement of information, services and tools available to affect sustainable forestry. This project will rely heavily on NGO partners who have a strong presence in the upper Ocmulgee and Oconee River watersheds with many landowner relationships and contacts. Efforts will include a cooperative among landowners, in which multiple-use management plans will be developed to address the overall landscape management objectives, while meeting the individual landowner's specific needs and interests. Field days and special events will be held to relay information to landowners. Important measures of accomplishment will be recognizing landowners as Certified Stewards and recognition of efforts to implement forest health practices. The combination of conservation easements and contiguous lands dedicated to multiple-resource management will result in a positive impact on forests in the region. Staff will be dedicated full time to the

development and implementation of the focused effort. FY10 accomplishments include:

- Held first meeting with the Bear Creek Cooperative in Twiggs county.
- Presented the Central Georgia Strategic Outreach effort at the GFA teacher workshop in June of 2010.
- Attended initial meeting of the Oconee National Forest Large Scale Assessment planning group.
- Attended QDMA Deer Steward I training course.

SOUTHERN REGIONAL MARKETING GRANT

The intent of this grant is to leverage the outreach capacity of certain conservation partners to deliver good land management practices and principals to private forest landowners throughout the Southern region. More specifically, the sponsorship of TV shows such as Quality Whitetail, produced by the QDMA, and Get in the Game, produced by the NWTF, are examples in which specific management practices that enhance the awareness of good land stewardship are highlighted. In addition, magazine articles and sponsorship of national conventions will inform forest landowners of services available through the Southern Group of State Foresters. Fiscal Year 2010 accomplishments include:

- Sponsored QDMA national convention in Chattanooga, TN.
- Sponsored Quality Whitetails magazine.
- Contributed to content on QDMA TV show.
- Sponsored The Management Advantage TV show.
- Completed a DVD about the 100 acre wood project with NWTF.

LONGLEAF CORRIDOR GRANT

The Longleaf Pine Ecosystem Recovery Corridor covers 11 Georgia Counties in west central and southwest Georgia. The Southeast Regional Partnership for Planning and Sustainability (SERPPAS) has defined the critical areas encompassing Alabama, northwest Florida and central Georgia. This project seeks to further the goals of that initiative and further leverage funds and partnerships to accomplish its objectives. Restoration of longleaf pine ecosystems has been identified as a high priority in the Southeast. Most federal and state agencies in the region have begun the process of restoring longleaf ecosystems on their lands. In cooperation with partners, the Georgia Forestry Commission (GFC) would educate landowners on Stewardship certification to secure sustainable forestry management throughout the region. There is much technical assistance available, but if significant recovery is to occur, it must happen on private lands, which involve 90% of the southern landscape. In the area of the corridor private ownership is 60%+, Industry ownership is 20%+, and government is less than four percent.

As urban growth or "sprawl" and development expands into rural forestlands, threats to forest sustainability, water quality, and wildfire potential increases. GFC will use these funds to minimize the effects of urban growth to existing forests, and to replace, enhance and restore longleaf pine habitat in its natural range across the corridor. The first goal of this project will be to conserve working forests, protect environmental quality, and enhance forest sustainability. Second, training would then be used to provide technical assistance to city planners, homeowners, and developers in the conservation of open spaces, particularly in fast-growing areas at risk. One component of the project is to establish one or more silvopasture demonstration sites in the Corridor with the guidance of the Longleaf Alliance. This would include fencing, tree planting and grass establishment for grazing.

In conjunction with the Longleaf Alliance, GFC participated in six Longleaf Academies held at the Solon Dixon Forest in Andalusia, Al., the headquarters of the Longleaf Alliance. GFC sent 71 natural resource professionals, which include foresters and wildlife biologists from GFC and the Georgia Department of Natural Resources (DNR).

COST SHARE INCENTIVE PROGRAMS

GFC is the technical agency responsible for determining specifications necessary for landowners to install a range of forest practices under three different cost-share incentive programs administered by the Farm Services Agency (FSA). An additional program, introduced in 1992, is administered by GFC with assistance from FSA, Natural Resources Conservation Service (NRCS), Georgia Department of Natural Resources, and U. S. Forest Service.

The incentive programs include:

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 foresters provided technical assistance in preparing 768 plans covering 32,307 acres. Assistance was provided on 1,184 performance inspections for practice completion covering 40,989 acres.

Environmental Quality Incentives Program (EQIP) – The Georgia Forestry Commission also assists the NRCS in implementing the EQIP forestry practices. Assistance was provided on 50 initial prescription plans covering 5,482 acres. There were 12 practice performance inspections completed covering 1,044 acres.

Southern Pine Beetle Prevention & Restoration Program (SPBPR) - The U.S. Forest Service has provided federal grants for this program since 2003 totaling \$9.25 million. These grants

were primarily utilized for direct cost-share payments to Georgia landowners to implement several prevention practices to treat high risk stands, and for several restoration practices. From these grants, \$5.9 million has been obligated towards direct landowner payments under cost-share practices. These practices total 197,709 acres which have been approved for treatment.

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.

REGENERATION

Georgia planted 227,244 acres with hardwood and pine seedlings during the 2008-2009 planting season. This included 174,250 acres of pine and 7,000 acres of hardwood on private lands, 42,571 acres of pine on forest industry lands, and 3,415 acres of pine and eight acres of hardwood on government lands. Georgia has led the South in tree planting for the past 20 years. GFC maintains a list of recommended site preparation, tree planting and herbicide vendors for landowners seeking those services. This list can be found at the GFC website, GaTrees.org.

FOREST HEALTH

The Forest Health Unit provided statewide leadership and guidance to consulting, industry, and GFC foresters and other natural resource managers on a wide range of forest health-related issues. GFC foresters incorporated insect and/or disease advice on 1,094 management plans involving 93,287 acres for the year. Statewide, forest health training was provided to foresters, resource managers, loggers, public works departments (state and county), nurserymen and regulatory officials, landowners and field day participants on 128 occasions (4,376 attendees) involving most of the program areas listed in this report.

Special notes of interest:

- The Forest Health Coordinator and four regional specialists responded to 230 forest industry / consultant / GFC forester requests requiring field visits throughout the state.
- Pine Beetle Aerial Survey: Minimal pine bark beetle activity was detected by ground and aerial surveys in 2010. Ips and black turpentine beetles caused some smaller spots in drought-stressed stands.
- GFC foresters conducted the southern pine beetle pheromone-trapping program – 20 counties were trapped in 2010. All but one predicted low spb levels.

Hemlock Woolly Adelgid

A survey for the hemlock woolly adelgid (HWA) was conducted for a seventh year. One temporary employee worked on this survey, concentrating on the western front of the spread. HWA continues to spread at a rapid pace. The counties with HWA include Rabun, Towns, Union, White, Habersham, Stephens, Lumpkin, Dawson, Fannin, Gilmer, Pickens and Murray.

The GFC supported predator beetle rearing labs with foliage collection and beetle release locations. With the area of suitable foliage and release sites advancing rapidly west, coordination of these activities was critical. GFC was used to scout for suitable collection sites and loads of infested branches were delivered as needed from December through early June. GFC also served as a site locator for the release of predator beetles raised by Georgia labs and the Clemson University lab.

The GFC continued to work with the Georgia Department of Natural Resources (DNR) to help survey and protect hemlocks on state lands. This partnership continued to focus on the treatment of hemlocks using pesticides, and a supply of pesticide was given to DNR to help continue treating the many affected trees. The GFC was involved in starting a volunteer program using Friends of the Parks Chapters to help fight HWA on state park lands.

The GFC assisted numerous cities, communities, homeowner associations and individuals regarding HWA. Public awareness of the kioritz injectors available for loan at GFC offices in Habersham, Union, Lumpkin, Gilmer, Fannin and Pickens Counties has increased. One injector was also placed in Rabun County at the UGA Cooperative Extension Office. Most counties reported frequent use of the tool and some counties have a waiting list. At least 15 presentations were made to the public about HWA, including workshops targeting counties on the leading edge of the HWA infestation. GFC continued to work with UGA researchers and others to gather the most up to date HWA information. GFC public website postings were added and updated in an effort to relay this information.

Invasive Weeds

Although many invasive plants cause problems in Georgia, most of GFC's efforts have focused on cogongrass and Chinese privet. Georgia's "Cogongrass Task Force" continues its mission to address the threat this plant presents to the environment. Training has been given to resource professionals throughout the state, and an educational campaign is underway to help landowners identify the plant. When landowners find suspect plants, they notify the GFC to verify the identification, and if confirmed, the site is treated by the GFC. All known cogongrass

infested sites are being treated by the GFC, Animal and Plant Health Inspection Service, or in a few cases, the landowners.

The GFC spearheaded an effort to bring all concerned groups and agencies together to help detect cogongrass. A total of 23 state, federal and private partners signed an agreement to establish the entire state of Georgia as a Cooperative Weed Management Area for cogongrass in 2008, and these partners are critical to success. The combined efforts of this group should have far reaching impacts, helping educate the public about cogongrass, as well as helping locate all infested sites. All information regarding this noxious weed has been assembled at this web site: <http://www.cogongrass.org/>.

Through an ongoing grant with the U.S. Forest Service, the GFC continues to treat all new cogongrass detections with herbicide at no cost to landowners. This noxious weed has now been found in 44 Georgia counties, involving 453 sites. Presently, all sites have received at least one herbicide treatment. Herbicide results have been positive, with the majority of all sites now being controlled within two growing seasons, based on the current herbicide mixture and rate.

The forest health staff has also begun a widespread effort to test various herbicides, timing and rates to eradicate Chinese privet, which is the most widespread non-native invasive plant in Georgia's forests. A document titled Aerial Glyphosate Application to Control Privet in Mature Hardwood Stand was published highlighting our control recommendations and is posted on the GFC website. An addendum was recently added to this document, highlighting supplemental control information gleaned from additional work and research done this year. (<http://www.gatrees.org/ForestManagement/documents/AerialGlyphosateApplicationtoControlPrivetAug2010.pdf>).

Exotic Wood Borer / Bark Beetle Survey

The GFC surveys approximately 100+ warehouse locations that import cargo using Solid Wood Packing Material (SWPM) from foreign countries. Each location is checked monthly (May through September), bringing the number of inspections to around 500 for the season. Insects found within these sites are identified, and appropriate action is taken by the U.S. Department of Agriculture if warranted.

Gypsy Moth

The gypsy moth is a major forest pest in the northeastern United States. There is a good probability gypsy moths will show up in Georgia through the movement of egg masses from within the infested zone. In fact, Georgia has had three previous outbreaks attributed to such movement. This year, 4,500+ traps were placed

by GFC rangers and foresters in 20 counties scattered about the state. No moths have been detected at this point. In 2009, a total of 13 moths were caught at seven different locations. These areas were trapped at a heavier density in 2010 to determine if an infestation has occurred. No moths have been caught from this additional trapping at this time.

Light Brown Apple Moth

The light brown apple moth (LBAM) was confirmed in California in March, 2007, and it has a host range of 120+ plants and trees. Many of the favored host trees are native to Georgia. Twenty-four traps have been deployed throughout the state in stands with preferred host trees, through a partnership with a larger trapping program coordinated by the Georgia Department of Agriculture. Trapping occurs from July through September to detect any LBAM that might be present in Georgia. The traps are checked every two weeks, but no LBAM were found in the traps this year.

Emerald Ash Borer

The emerald ash borer (EAB) has devastated ash trees in the northeastern U.S. and is now as far south as Tennessee, and could have significant impacts in Georgia if it is introduced and becomes established. More than 100 traps specific for this insect were deployed throughout the state from April through July to detect any EAB that might be present in Georgia. The traps are checked once a month for any suspect EAB, but none were caught in Georgia.

Redbay Ambrosia Beetle/Laurel Wilt Disease

Laurel wilt disease (LWD), caused by the fungus *Raffaelea lauricola*, is a new disease of plants in the Lauraceae family in the United States. Vectored by an introduced Asian ambrosia beetle, *Xyleborus glabratus*, this disease has spread rapidly through the abundant redbay in the maritime and coastal plain forests northward in South Carolina and south well into Florida, killing most of the large redbay (*Persia borbonia*) trees in its path. Other plants in the laurel family known to be susceptible to varying degrees include: camphor tree (*Cinnamomum camphora*), sassafras (*Sassafras albidum*), avocado (*Persea americana*), pondspice (*Litsea aestivalis*), and pondberry (*Lindera melissifolia*).

Laurel wilt disease continues moving rapidly across southeast Georgia. To date, almost 7- million acres of land have been impacted by this disease in Georgia. The majority of the reports of LWD come from redbay, but sassafras infestations are being more frequently reported in counties on the leading edge of the infestation. To date, LWD has been documented on sassafras in many counties in Georgia, and the fear is that it could move throughout eastern North America via that host.

Research has still produced no viable, large scale protection from LWD. There is no mechanical or chemical treatment that can be used to slow or stop the spread of the Redbay Ambrosia Beetle or the associated fungus *Raffaelea lauricola*. The Georgia Forestry Commission maintains a working relationship with the U.S. Forest Service, Georgia Southern University, the University of Georgia, and many other partners to document the spread, study the biology, and possibly find a solution to this non-native invasive insect. More info on LWD can be found at: <http://www.gatrees.org/ForestManagement/LaurelWilt.cfm> .

FOREST WATER QUALITY

The Georgia Forestry Commission has a contract with the Georgia Department of Natural Resources Environmental Protection Division (GAEPD) to coordinate the state's forestry water quality program. GFC's major responsibilities include Best Management Practices (BMP) education in an effort to minimize erosion and sedimentation from all silvicultural practices; complaint investigation and remediation; and BMP monitoring. The Commission's program, managed with four full-time regional water quality forester positions and six part-time district water quality forester positions, works statewide to help keep Georgia's waters clean during forestry operations.

The GFC was given unallocated grant money to be used to update and reprint the 1999 BMP manual. The new 2009 manual now has incorporated canal and ditch guidance, floodplain guidance, and headwater ephemeral and gully guidance. The manual can be viewed and downloaded at: <http://www.gatrees.org/ForestManagement/documents/BMPManualGA0609.pdf>.

The GFC was an integral team member of the Southern Group of State Foresters to develop a set of "Recommendations for Determining Ongoing Silviculture in Bottomland Hardwoods/Cypress Stands" for the U.S. EPA. It can be viewed at: <http://www.southernforests.org/documents/EPA%20forestry%20recommendations.pdf>.

During the year, 124 BMP presentations were given to more than 3,540 people. Four of the talks were presented to 93 new loggers and foresters participating in the Forest Resources Association-sponsored Sustainable Forestry Initiative's (SFI) Master Timber Harvesters' Program (MTH). Participants are able to interact with various experts speaking on the sustainable forest initiative, silviculture, wildlife habitat, endangered species, wetlands, water quality, harvest planning, business management, OSHA rules, workers' compensation and safety management.

In order to deliver wood to SFI participating mills, MTH participants are required to complete 12 hours of continuing logger education

classes every two years. Four of the hours must be environmental and can include BMP field trips. The GFC provided BMP talks to the following groups:

- 36 talks to 1,093 people at continuing logger education classes.
- Two talks to 35 people at forest industry workshops.
- 14 talks to 512 forest landowners.
- 68 talks to 1,807 people at various other state or local government meetings.

Topics focused on identifying stream types and floodplain features, determining streamside management zone widths, proper stream crossings, and proper road building techniques.

The GFC maintains a list of MTH timber buyers who have completed this training on its web site at: <http://www.gatrees.org/Resources/Directories/MasterTimberBuyers.cfm>.

A link to the UGA MTH list of all participants is provided.

The department received 106 documented water quality complaints related to forestry practices during the year. Approximately 163 site visits were made by GFC district water quality foresters to investigate and mediate those complaints. GFC district water quality foresters made approximately 138 BMP pre-harvest advice site visits.

Sample timber sale contracts and invitations to bid, which include specific BMP language, are available at all GFC offices, and on our public web site.

In an effort to determine if our educational efforts are effective, the GFC conducted its seventh statewide BMP implementation survey. The 2009 survey evaluated 221 sites that were selected to meet a stratified random sample, which is based on the volume of wood harvested by county and the number of acres treated by the different ownerships (non-industrial private, forest industry and public lands). The sites had to have experienced forestry activities within the past two years, preferably within the last six months. Sites covered all geographic regions of the state. Overall BMP implementation is 94.15% with 99.8 % of the acres evaluated in compliance with BMPs. To view the 2009 BMP survey results, click on: <http://www.gatrees.org/Resources/documents/2009BMPSurveyResults.pdf>.

The GFC plows approximately 30,000 miles of firebreaks annually. The potential for erosion and stream sedimentation could be great if BMPs are not installed properly. Violations of water quality standards (sediment) could subject landowners to significant fines by GAEPD. Therefore, the GFC has an aggressive implementation and evaluation policy to ensure firebreaks are in compliance with BMPs. During the year, GFC

regional water quality specialists evaluated approximately 92.8 miles of pre-suppression and wildfire firebreaks on 88 sites for BMPs. Overall, BMP implementation was 89%, with 97.4% of the miles in compliance. Results indicate that more BMP water bars are needed to reduce erosion impacts.

In its 2007 biennial report, the GAEPD estimated that of the 70,150 miles of streams in the state, approximately 14,027 miles, were assessed for water quality. Approximately 61% or 8,556 miles were impaired. Georgia is under a federal court consent order that requires well over 1,100 Total Maximum Daily Load (TMDL) limits for various pollutants to be developed in order to improve conditions in these streams. It was determined that the fish communities (biota), due to sediment inputs or low dissolved oxygen levels, occurred in 460 of these segments, totaling 3,565 miles of stream. These impairments were primarily due to heavy sediment accumulations and/or low dissolved oxygen levels due to nonpoint sources of pollution, which includes forestry activities.

Beginning in January, 2003, the GFC began conducting a statewide BMP Assurance Monitoring Project targeting the most current list of sediment or dissolved oxygen impaired TMDL watersheds identified by GAEPD as needing sediment reductions. Active sites are identified by air, on the ground observations, county records, and by requests. Logger, timber buyer, landowner, and receiving mill(s) information are identified. With landowner permission, GFC personnel conduct an initial BMP audit to provide any needed advice to prevent problems. A final examination is conducted after the operation is complete.

During FY 2010, there were 349 examinations made, of which 321 involved timber harvesting operations and 28 involved site preparation or other timber management operations. Comparing the results from the initial and the final harvest exams for timber harvesting indicate that a 9.3% increase in BMP implementation from 86.8% to 96.1% was achieved in the final inspection. The number of water quality risks identified dropped from 63 to 0. This clearly demonstrates a pro-active approach of providing "reasonable assurance" that BMPs are being implemented and that water quality is being protected through the services of the GFC.

The GFC has been involved in the Governor's Comprehensive Water Plan Study Committee and Director Robert Farris is a member of the State Water Council. The plan will address water quantity and quality issues. The district water quality foresters are active and provide input as needed to the Regional Water Councils as needed.

STATE LANDS ASSISTANCE

Many state agencies request GFC assistance coordinating timber sales from their lands. GFC is charged by law to handle such sales, which involve timber cruising to determine wood volumes, timber marking, advertising, sending out bid invitations, conducting bid openings, negotiating terms, and awarding contracts to successful bidders.

In FY2010, there were 33 timber sales on state agency lands which resulted in a total value of \$4,295,135 to the state.

STATE FOREST LAND MANAGEMENT

GFC owns or manages several properties in the state. These lands incorporate forest stewardship (multiple resources) management, including forest products, wildlife, recreation, soil and water conservation, aesthetics, historical and cultural resources. Forest Stewardship Plans on these lands detail various activities benefiting the state and general public economically, socially, and environmentally. The properties include:

Dixon Memorial State Forest – The largest of GFC holdings (35,708 acres), the Dixon Memorial State Forest is located near Waycross, Georgia. It is a bio-diverse forest, including approximately 15,000 acres of the Okefenokee Swamp. Dixon has been managed by the GFC since 1955, following an earlier "Swamp Fire." This year, Dixon State Forest is continuing its recovery from the 2007 wildfire, known as the "2007 Georgia Bay Complex Fire," the largest wildfire in Georgia's history. More than 19,000 acres of state forest land was consumed by this wildfire, of which 4,802 acres was in commercial pine timber. Accomplishments for FY2010 include two management thinning sales on 421 acres of planted pine, harvesting a total of 18,348.68 tons of pine timber for a total of \$233,142. A total of 188.46 tons of pine stumpwood was harvested for \$1,099.48. Other accomplishments include 1,048.93 acres of site preparation and tree planting, 26.9 miles of firebreak maintenance, and 200.25 acres of prescribed burns. Revenues received through the sale of various forest products at Dixon totaled \$ 243,693., and expenses amounted to \$140,657.

The Herty Building at Dixon Memorial State Forest hosted more than 550 persons attending meetings, including logger workshops, natural resources meetings, and educational training programs by the Department of Transportation and the Georgia Forestry Commission.

Georgia DNR Wildlife Resources and the GFC provided 28 miles of horse and bicycle trails for public use during the year.

There were also an estimated 4,000 hunters, fishermen and birdwatchers who used Dixon Memorial State Forest during the period.

Dawson and Paulding Forests – City of Atlanta Project - On July 1, 1975, the Georgia Forestry Commission (GFC) and the City of Atlanta (COA)/Hartsfield-Jackson Atlanta International Airport entered into a legal agreement that established a land management program for the Dawson Forest and Paulding Forest properties. The Dawson Forest is a 10,130 acre contiguous area of woodland in Dawson County, while the Paulding Forest comprises 9,868 acres of woodland in Paulding County. Land area in Paulding was reduced in 2007 by 162 acres due to land being sold to Paulding County for the new county airport. Since the land management program began, the social and economic value of conservation use land has greatly increased. The expansion of suburban and commercial areas to the north and west of the metropolitan Atlanta area has further magnified the importance of these lands. The management of these properties provides proper care and utilization of the natural resources, including land, forest and water.

The Commission employs three people in management of the two forests: a staff forester, or forest manager, and two forest technicians. These employees are responsible for all aspects of care for the land, including decision-making, on the ground application of management practices, contractor services solicitation and inspections and public relations. The Georgia Forestry Commission also has contractual agreements with the Georgia Department of Natural Resources, Wildlife Resources Division, for certain aspects of management, including wildlife, trail use and law enforcement. Income collected from timber sales and the trail program at Dawson Forest covered 81% of management expenses for the year.

Dawson Forest - Forest Management activities for FY2010 included one 44-acre timber cruise/sale involving 3,442 tons of wood volume, 28 acres of timber stand improvement (TSI), two active timber harvests covering 89 acres, and no prescribed burning due to wet conditions throughout the burn season. Timber income was \$47,280., minus timber taxes of \$1,085., while trail income totaled \$18,489 for the year. Maintenance and construction of access facilities included: 18 miles of road grading and ditch maintenance, 1,190 tons of gravel applied to nine miles of primary access road and one mile of secondary forestry road, herbicide treatment on 14 miles of forest roads, installation of 50 signs, one steel gate, 10 miles of roadside mowing with a rotor mower, and two miles with a HD sidearm mower. The entire road system (26 miles) was traveled and cleared of downed trees and litter as needed throughout the year. Herbicides were applied as spot treatments across a large portion of the property for the

control of Autumn-olive, privet and unwanted vegetation along access roads and parking areas. Six stands totaling 211 acres were evaluated for mapping and management needs.

The Dawson Forest and staff was host to five organized trail rides, 13 Boy Scout campout events, and one youth small game hunt. More than 800 pieces of literature were distributed in FY2010. The recreational trail program, a cooperative effort of Georgia DNR Wildlife Resources and the GFC, provided 28 miles of horse and bicycle trails for public use during the year. An estimated 3,210 people used the trail system during the period. There were also an estimated 4,100 hunters, fishermen and birdwatchers who used the forest during the period. A one-mile section of the trail system was re-graded and enhanced using the GFC bulldozer.

Various training programs were conducted at Dawson Forest during the period. These programs included three hand-line construction/wildfire ICS Training courses involving GFC and local fire departments, two GFC Water Quality trainings, one Prescribed Burn Training with GFC and volunteer firemen, one Georgia Civil Air Patrol Search and Rescue program and four local law enforcement Woodland Search Dog trainings.

Inspection of the security fences around the secure areas, including the "hot cell" and "cooling area" was completed 35 times. Repairs were made to the fences once during the period and access closure to the underground reactor control room and hot-cell offices were addressed once at each location. Concrete was poured to permanently close access points. Numerous tires and dumped debris were collected and properly disposed of by the Dawson Forest staff.

Due to continued DNR cut-backs and reduced manpower, no full-time DNR Technician III has been assigned to patrol the area. The Dawson Forest staff assisted Georgia DNR with one 240 acre prescribed burn and five food plot reestablishments during the year.

Paulding Forest – Forest management activities for FY2010 included one stand totaling 89 acres on which boundaries were located and marked for future reference. Four stands comprising 170 acres were evaluated for management needs and access. Two boundary issues and two easement request were addressed for the COA during the period.

Fifteen active Southern pine beetle spots were located via GFC aerial survey and ground detection across the property during the year. Eight of the 15 active spots were removed through timber salvage operations involving 16,522 tons of wood. Thinning was implemented in two stands in close proximity to

beetle populations since stocking and growth conditions were conducive to additional beetle activity. Reevaluation/monitoring of the remaining seven spots were ongoing through the end of the year.

Reforestation efforts included chemical site preparation of 120 acres in October. Planting included 125 acres of upland containerized longleaf pine, of which 115 acres were funded through the "American Recovery & Reinvestment Act" (AARA), and three acres of bare-root loblolly.

Access/Maintenance included: Gate and lock evaluation at 22 locations across the property. Five locks were replaced and eight signs were posted during the period. Periodic trash details were completed during the year to remove various materials including furniture, tires and household trash. Other related activities included several informal meetings with Georgia DNR to evaluate and discuss land trespass, dumping and other law enforcement issues. Due to limited fuel usage and damp weather conditions during much of the burning season, no prescribed burns were conducted during the year.

There were an estimated 2,600 users of the City of Atlanta portion of Paulding Forest during the year by non-fee related visitors (hikers, hunters, fisherman and bird watchers). An estimated 365 pieces of literature were distributed during FY 2010 with an estimated 20 emails and 25 phone calls concerning use and access of the property.

GEORGIA'S FOREST INVENTORY/ FIA

During fiscal year 2010, the Forest Inventory and Analysis Program (FIA) in Georgia collected data on 1,189 plots. These plots were collected by six certified full time crews strategically located across the state. Each crew is made up of two FIA Foresters.

Of the 1,189 FIA plots, 1088 were regular P2 plots, 53 were P3 or Forest Health Monitoring Plots and 48 were Ozone Plots. P3 plots take approximately twice as long to complete data collection for than does a regular plot, since 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.

Ozone plots are collected to help measure air quality across the state. Data collection involves looking for leaf samples from susceptible plant species that are damaged by ozone and coding variables describing severity of damage on each plant and severity of damage in the chosen sample area.

A certain percentage of FIA plots completed are rechecked 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 an excellent check score average for FY 2010 of 97.8% 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 panels. A cycle includes data collection on all of the FIA plots in Georgia and should take approximately five years. Each cycle is broken up into five subcycles. Each subcycle consists of approximately 20% of the total number of plots. Each subcycle should take about one year to complete.

- The last subcycle of Cycle 9 was completed August 24, 2009 – more than two months ahead of schedule.
- The first subcycle of Cycle 10 began September 14, 2009 – delayed by USFS getting materials ready.
- Subcycle 1 of Cycle 10 was completed in August 2010.

The FIA Federal Grant increased from \$481,000 last year to \$521,000 this Fiscal Year. Full funding for the FIA grant is approximately \$550,000., which would only be achieved if the USFS FIA received full funding from Congress. Six experienced crews are working out well and we are keeping up with our grant's goals.

SUSTAINABLE COMMUNITY FORESTRY PROGRAM

The Sustainable Community Forestry program (SCFP) provides communities with resources to increase awareness of the benefits provided by a healthy and sustainable forest. SCFP's previous leader retired and was replaced by SCFP Regional Forester, Gary White. Several regional forester positions within this program have been lost as previous foresters retired and budget cuts necessitated reductions.

To encourage citizen involvement in building long-term and sustainable community forestry programs, the SCFP Grant Program provided federal cost-share funding for 40 community-based projects. The 2009 program focus followed the objectives for the U.S. Forest Service's Urban and Community Forestry (U&CF) program by concentrating on projects that involved management plans/tree inventories, certified arborists, tree ordinances or tree advocacy groups. A total of \$462,396 was allocated to grant recipients, who matched this money with \$189,675 in cash and \$318,291 in in-kind services and contributions. Five grant workshops were held in Gainesville, Marietta, Milledgeville, Statesboro and Newnan.

SCFP continued to work on three landscape-scale projects funded by the U.S. Forest Service. First, SCFP partnered with the Association County Commissioners of Georgia on the Integrated Green Infrastructure Management System project, which uses a regional approach to help developing communities along the I-95 corridor identify, conserve and manage important areas of canopy cover and greenspace. Second, The Grove (GeorgiaGrove.org) was expanded regionally (AmericanGrove.org) to include the 13 states in the South. Third, SCFP funded the contract for development of the State Assessment (including the Etowah Watershed) and completed maps and gathered information to pilot-test the state assessment in the Etowah watershed.

The statewide Arbor Day Ceremony was held at Chattahoochee Nature Center to engage and inform consumers and site visitors about the benefits of community trees, the importance of planting and maintenance, and encouragement to leave a legacy by planting a tree in The Grove. The Mayors of Georgia's new Tree City USA communities and Georgia's Arbor Day Poster Contest winner were recognized. Fifth grade student Shakarria Evans of Pike Elementary School in Pike County received the Georgia Arbor Day Poster Contest award. More than 1200 students participated in the contest across the state.

Tim Womick presented the Trail of Trees program at 10 different schools or community centers in Roswell, Sandy Springs, Decatur, Marietta, Monroe, Mansfield, Cedartown and Atlanta. Womick engages students at a level unlike most other speakers. His message has impact due to his unique presentation of mixing rhythm, fast-paced dialogue, and interaction with students. Approximately 1,500 students, teachers and others left this program with at least one memorable fact about trees - and benefits they previously did not know. They also were presented with the big picture of processes within trees and the vital role of trees in the environment.

SCFP's "Making the Shade" program completed its fourth year. "Making the Shade" is designed to improve the physical health of students by strategically planting shade trees around elementary school playgrounds. The trees then help minimize the impact of elevated surface temperatures and direct exposure to the sun. The trees also contribute to energy conservation by shading air conditioning equipment, windows and buildings. Urban & Community Forest grant funding totaling \$31,439 was awarded to four elementary schools, one city park and one family crisis center -Atha Road Elementary in Monroe, Pelham Elementary in Pelham, TG Scott Elementary in Macon, Wheeler County Elementary in Alamo, the Northwest Georgia Family Crisis Center in Dalton and Hughey Park in Jefferson.

Approximately 2,200 children will benefit from the installation of 225 trees at these participating schools.

The cities of Chattahoochee Hills, Commerce, Doraville, Fayetteville, Milton, Pooler, Sandy Springs and Yatesville and Fort Stewart/Hunter AAF received first-time Tree City USA certifications for outstanding accomplishments. There were 121 communities recertified, for a total of 130 Tree City USA's in Georgia. Twenty-four cities received the Tree City USA Growth Award and were recognized for programs demonstrating environmental improvement and higher levels of tree care.

GFC worked with the Georgia Urban Forest Council (GUFC) to host several educational programs relating to basic tree care, tree ordinances, tree risk assessment and risk management, the Lifestyles of Health and Sustainability (LOHAS) Consumer Market Segment and urban forest insects and diseases,. The annual conference and awards program focused on trees and transportation and was held in Stockbridge in November. In addition, activities in the Five-Year Plan for Georgia's Urban and Community Forest 2007 - 2011 were accomplished; the GUFC was the only non-profit in Georgia to earn the Standards for Excellence Institute's Seal of Approval demonstrating responsible organizational management; and the GUFC and GFC worked together to launch The American Grove and the GUFC's first fundraising event.

SCFP personnel participated in more than 325 public education events, including 93 programs, nine display exhibits, 12 field days and 211 meetings or presentations with community forestry partners. SCFP foresters continued to provide technical assistance to Georgia communities and non-profits with tree ordinance development, project management, cultural practices and partnership development.

Tree planting projects have taken place in 14 communities through the Georgia's Growing Green ARRA Grant. The primary goal of the program is to create jobs. The hours worked by landscape contractors and grant administrators in the March to May quarter were equal to four-point-nine full time positions. Using a formula to estimate the amount of labor required to grow a tree suggests that an additional four-point-one positions have been needed within the nursery industry, resulting in a total of nine full time positions supported by ARRA funds. The program also seeks to provide lasting environmental benefits for communities through tree planting. To date, 629 trees have been planted to mitigate storm water runoff along streets, provide habitat and shade at playgrounds and parks, and cool downtown areas.



Forest Protection

On January 20, 2011, the National Weather Service issued the following news release: "WILDFIRE ACTIVITY TO INCREASE DUE TO DROUGHT." The warning could not have been more accurate or timely, as it continued, saying "drought conditions for the next couple months could set the stage for an active wildfire season" in southeastern Georgia.

On March 24, 2011, Long, Bacon, Clinch, and Coffee counties were inundated with fire; tens of thousands of acres were lost, the largest number in history for a 24-hour period. Weather was one of the major contributing factors.

March 25, 2011, Governor Nathan Deal declared a State of Emergency, activating the Georgia Emergency Operations Plan and mobilizing state resources.

"The state and local governments are taking proactive steps to contain and extinguish the fires," said Deal. "The Georgia Forestry Commission and GEMA are working together and establishing command centers in the affected counties. We're hopeful for cooperative weather this weekend to aid in extinguishing the blazes, but we're going to do everything possible to protect lives and property."

The protection of people and property is the Georgia Forestry Commission's primary concern. The number one cause of wildfire in Georgia is escaped debris burns. When conditions are conducive to wildfire, understanding safety and the need for enforcing burn permits is essential.

Forest Protection has been taking proactive steps to contain the number of wildfires. Working together with our counties, districts, and communities - we are seeing results.

In Fiscal Year 2010, Forest Protection began development on a new statewide, web-based Permit Tracking System. This new system allows permit data to be entered when requested. As data is entered, we can zoom to a specific District to view a list

of current permits and provide counts of automated permits, in addition to wildfires in that specified area. It will allow a search to locate permits and a pre-loaded entry for frequent burn customers.

While still in development, we are receiving positive feedback and results. Permits will be issued more quickly to our customers, callers will experience fewer busy signals, and dispatchers will no longer need to page rangers to approve permits.

WILDFIRE ACTIVITY 2010

Georgia lost more than 12,750 acres to wildfire in FY10, bringing the 10-year average of acreage burned annually to 49,664. Fiscal Year 2010 was a relatively light year in both fires and acres. Our fire numbers for 2010 were approximately 48% lower than the five-year average and the acreage total was 78% less than the five-year average. Overall, debris burning was the number one cause of wildfire and accounted for 6,848 acres, with incendiary fire following as the second leading cause with 2,386 acres. Coosa District had the highest acreage burned with approximately 3,307 acres lost to 510 fires. Flint District had the second highest acreage burned, with approximately 2,955 acres lost to 686 fires. Ogeechee District ranked third highest with approximately 1,963 acres lost to 924 fires.

COUNTY AND DISTRICT OFFICE OPERATIONS

Georgia went through a major redistricting process this past year. The state reduced the number of Districts from 10 to six.. The strength of the GFC Forest Protection Program still lays within the six Districts and the 131 County Units. Response to wildfires, issuing burn permits, pre-suppression firebreak plowing, professional burning assistance, fire prevention programs, training, records and reports, surveys, and local community assistance in all aspects of Forest Protection depend on this network of offices and employees for services provided statewide.

Firebreak harrowing is the most popular landowner service provided by Forest Protection. During 2010, Forest Rangers serviced 2,607 requests, installing an estimated 15,018 miles of pre-suppression firebreaks.

Online permits, which began in 2004, allow homeowners to receive permits via the internet for burning small piles of yard debris. The Georgia Forestry Commission highly promotes the use of the internet to obtain permits, which helps alleviate more than 426,852 telephone requests to burn. During FY10, 674,236 burn permits were issued in Georgia. Of that total, 79,129 permits were issued online.

WILDFIRE PREVENTION

Although a year with lower than average fire numbers was a welcome change from previous years, fire prevention is still a top priority. Wildfire prevention is a key component of Georgia's Fire Program. The Wildfire Prevention effort in Georgia is coordinated through six District offices, 131 county offices, and Macon Headquarters. GFC's state budget is complimented significantly with monies available from the National Fire Plan Grant Program.

GFC's main prevention philosophy is to target specific high fire areas and fire causes, thus affording the highest results. One of the foundations of this approach has been the 50 County Grant Program, in which the counties with the highest fire numbers develop plans to address their fire problems. These counties have consistently shown that concentrated fire prevention aimed at particular problems can have profound results.

GFC also provides fire prevention efforts that are presented at large events across the state, including the Georgia Mountain Fair, Moultrie Sunbelt Expo, the Buck-a-Rama/Fish-a-Rama and Turkey-Rama, and the Georgia National Fair at Perry. Prevention messages are also developed for fire prevention signs, displays, brochures, and news advertisements. We present programs during the times of year during which we experience an increase in wildfires and also reach our target audiences.

One of our most visible programs has been using the UGA Bulldog Radio Network to broadcast fire prevention messages during the UGA football games. Response to the campaign has been positive the past two years.

During periods of high fire activity, and with the assistance of the Communications Department, we have used targeted media campaigns including print, radio, and web-based efforts such as GaTrees.org, Facebook, and Twitter.

COMMUNITY WILDFIRE PROTECTION PLANS (CWPP'S)

The Forest Protection Department received redirection grant money over a three year period beginning in 2009 from the USDA Forest Service to promote Community Wildfire Protection Plans (CWPP's). The Georgia Forestry Commission is in the second year of this grant program. We hired four specialists to manage a program geared towards developing countywide CWPP's in communities with the highest risk for wildfire, as identified by the Southern Wildfire Risk Assessment. Each CWPP contains an action plan to help mitigate each of the communities' wildfire risks. Key stakeholders in the counties will work together on a collaborative effort to reach the goals specified in the plan. These plans will also fulfill the State Emergency Management Hazard Mitigation requirements for the state's Hazard Mitigation Plan required by FEMA. This three-year grant will be used to develop plans for 143 Georgia counties. We have initiated 119 county plans; 73 have been completed.

FIREWISE AND FIREWISE COMMUNITIES/USA

The Firewise and Firewise Communities/USA Programs were active in Georgia during FY10. Last year, two Firewise Communities/USA were recognized and this year we have 14. These communities encompass more than 4,400 structures and 10,600 residents who are taking responsibility for their own fire prevention and protection from wildfire. Six other communities are preparing Plans of Action to submit for national recognition this year. And the momentum doesn't stop there! An additional 12 communities have been contacted and are making decisions about pursuing Firewise Communities/USA designation.

TYPE II INCIDENT MANAGEMENT TEAM

The GFC Type II Team, established in 2004, has worked many assignments and has grown with each incident to which it has been deployed. Because the year had reduced fire activity nationally, and a relatively inactive hurricane season, our team saw little action for the year. The team did have the opportunity to participate in a mock hurricane drill in which we worked in collaboration with the Georgia Emergency Management Agency on a statewide response to a hurricane hitting Georgia's east coast. The drill was a great training exercise for many new team members and gave us the opportunity to practice with members of the Alabama Type 2 Incident Management Team.

Many of our team members also responded to incidents as Single Resource Requests for the Gulf Oil Spill Incident, gaining valuable experience in their positions.

GFC team members and other qualified employees provided aid to Texas and other western states this past spring by assisting with wildfires.

There are approximately 70 active members on the team. The team is growing, with future plans to integrate other agencies into membership and building a Multi-Agency All-Hazards Team for Georgia. Each year the team builds on its experiences and is establishing an excellent reputation for the Georgia Forestry Commission and the state of Georgia.

LAW ENFORCEMENT

The Georgia Forestry Commission Law Enforcement Program was revitalized at the end of 2008. The reorganized program is now in its third year and has made continued progress in its ability to investigate arson fires and identify those responsible. Through training, experience, equipment acquisitions, adoption of policies, and the hard work of our investigators, the program is moving toward becoming the best forestry investigation program in the country.

The Law Enforcement Program was awarded a FEMA grant, which was used to purchase a reporting database, equipment, update the GFC website, produce a media campaign for arson and fire prevention, and provide funding for training. This was the first time GFC has been awarded this type of grant. The new reporting program will allow GFC to comply with mandated crime reporting laws.

A training program for investigators has been established to ensure compliance with accepted investigation techniques and to meet certification requirements. A fire investigation training program was also developed for Chief Rangers and has been completed across the state, with the exception of the Rome area, where training has been delayed numerous times, due to weather.

Increased focus has been placed on illegal burning. Adherence to the burn permit requirements is a focal point of this effort. Unlawful Burn Notices were updated and issued to all GFC firefighting personnel. Four-hundred-six such notices were issued this fiscal year, more than any previous year. These notices are tracked to identify multiple offenses by the same person. After a third offense, the person may be criminally charged by a GFC investigator, with a warrant or a citation.

From July 1, 2009 through June 30, 2010, GFC investigators examined 153 fires and 17 other incidents. Those investigations resulted in 13 criminal charges being filed against suspects. Investigations revealed 82 of those fires to be incendiary. Due

to the limited number of investigators currently in the Law Enforcement Program, this is only a small portion of the 535 incendiary fires GFC reported for Fiscal Year 2009-2010.

Future plans include the acquisition of more up-to-date equipment and increased training with an emphasis on arson and general criminal investigations. The program is in the process of acquiring GCIC/NCIC access which will provide more investigative intelligence and assist in clearing criminal cases. Investigators have also been concentrating on known serial arson cases. Expansion of the program is needed to allow investigation of more suspected arson fires.

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. This year, there were 1,118,973 acres treated with prescribed fire in Georgia. The Georgia Forestry Commission gave on-the-ground assistance with 120,052 of these acres, while also providing technical advice, weather forecasts, assistance in writing plans, and prescribed fire workshops for landowners across the state.

Often misunderstood by the general public, this age-old forest management practice requires support and promotion in Georgia's increasingly urbanized environment. One way Forest Protection supports this practice is through the Georgia Prescribed Fire Manager Certification Program. The program guarantees a basic level of knowledge and experience for those who practice prescribed burning. Last year, the class was extended from a one day course to a two day course, allowing more time for hands-on exercises in smoke management and writing the burn prescription, as well as a more in-depth look at the other aspects of prescribed fire. In FY10 there were three certification sessions conducted, with 138 Georgia land managers becoming certified burners. Since inception of the certification program in 1993, 2,830 practitioners have been certified. Demand for the course continues to be high for landowners and land managers who use prescribed fire as a management tool.

The GFC has written a 10-year Strategic Plan for prescribed fire in Georgia. Realizing the needs are very similar, the Georgia Forestry Commission and the Florida Division of Forestry had a joint meeting to discuss the common barriers each state faces with its Prescribed Fire Programs. More than 50 people, totaling over 500 years experience with fire, met to lay out the plan. Participants were made up of burn practitioners from state and federal government as well as consultant foresters, land

conservancies, scientists and private landowners, thus assuring that everyone using fire had a voice in this plan. The plan in Georgia is already in use, and will map the way for better burning and public understanding about the use of prescribed fire well into the future.

The number one obstacle recognized by both states from the Strategic Plan meeting was the public's misunderstanding of prescribed fire, and people's low tolerance of smoke resulting from prescribed fire. As a result, a new and different way of educating the public about the use of fire was unveiled. The theme of this outreach program is One Message, Many Voices and has been adopted by all 13 southern states. A kick off campaign in Georgia began in January 2010, with radio PSA's and billboards advertising the new websites.

THE GEORGIA PRESCRIBED FIRE COUNCIL

The Georgia Prescribed Fire Council, formed in 2001, has been very active in promoting prescribed fire, not only in Georgia, but across the nation and beyond. The Georgia Council led the way in forming a National Coalition of Prescribed Fire Councils. Currently 30 states and British Columbia have established councils. Four additional states are developing councils and the work is not over yet.

On October 29, 2010 EPA hosted a conference call with the coalition to discuss revision of the Interim Air Quality Policy on Wildland and Prescribed Fire. Thirty councils participated and represented more than 12 million acres of annual prescribed fire use. For notes on the conference call, visit the Georgia Prescribed Fire Council website at www.garxfire.com. The Georgia Prescribed Fire Council and the Georgia Forestry Commission were successful in having all but two of Georgia's 159 counties sign a Prescribed Fire Proclamation supporting prescribed fire in their respective counties.

The Georgia Prescribed Fire Council has the full support of the Georgia Forestry Commission and for the sixth straight year, the two have succeeded in having the Governor sign a proclamation declaring the first full week in February as Prescribed Fire Awareness Week in Georgia. The Council holds its annual meeting each fall. This year, the meeting was held in Tifton, Ga., with more than 100 people in attendance. Subjects on the agenda at this year's meeting included addressing the media, managing smoke, code of ethics for burners, and much more. For more information on the Georgia Prescribed Fire Council visit the Council's website.

The Georgia Prescribed Fire Council is critical to the safe use of fire in Georgia. It helps educate the public, promote the safe use

of fire, share information on new and better technology used by burn practitioners, and actively works to implement the Strategic Plan for Prescribed Fire in Georgia.

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. Georgia uses a sophisticated National Fire Danger Rating System in which weather data is measured 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.

Starting in FY10, Daily KBDI, and KBDI Deviation from normal, lightning-rainfall and fire danger maps are archived online. The Louisville Weather Station was relocated to a well-exposed site after many years of discussion. Thanks go out to the Rangers at GFC's Jefferson/McDuffie Unit!

After 10 years of using the NOAAport/LEADS software from IPS Meteostar Inc. of Denver, Co., to collect and generate weather information in-house, a major upgrade of the hardware/software is needed. In the face of the tight budget conditions, the weather office determined the most cost effective way to move forward is to obtain the in-house system for a data subscription service from the same vendor.

The GFC will continue to get all the weather information as before, but will not be able to use the LEADS software to analyze weather patterns. This will have minimal impact on the services and products provided by the GFC weather office.

The weather office continued to perform annual maintenance on our 19 weather stations to meet NFDRS standards.

RURAL FIRE DEFENSE (RFD) PROGRAM OPERATIONS

The RFD is proud to offer continued assistance in this state-wide endeavor. More than 2,100 types of equipment are located in 142 Georgia counties, involving over 930 fire station locations.

Volunteer Fire Assistance funds managed by RFD were dispersed as 50/50 Grants to 18 government entities to purchase structural fire gear, hoses, nozzles, and other items needed to make fire trucks operational. VFA funds were supplied as grants to the Georgia Fire Academy to provide basic structural firefighter training for 325 firefighters representing 20 fire departments for a total of almost 800 contact hours. Additional VFA funding provided over 1,700 hours of Basic Wildland Firefighter courses.

Through the GFC "Helping Hands" Program, \$95,000 worth of wildland firefighter clothing was provided to fire departments, forest industry cooperators, and other state agencies involved with prescribed and wildland fires. This program was discontinued in January, 2011.

Four meetings were held with the Rural Fire Defense Advisory Council, a group comprised of Georgia fire officials, cooperators, and insurance representatives. GFC has provided facilitation and logistical support for the council's activities for 18 years.

The Firewise traveling exhibit used to display concepts of defensible space, Firewise landscaping, and fire resistant building materials was decommissioned.

The Rural Fire Defense Program also consists of two fabrication shops. The shops' goals are to ensure that the state of Georgia has the best equipment available for the suppression of wildfires.

RURAL FIRE DEFENSE (RFD) SHOP

RFD lease equipment provided for rural fire departments during FY-10 totaled eight units, one 1,000-gpm front mount pumper and three super fire knockers. Five other apparatuses were refurbished, for total revenue of \$135,172.43. In addition, 14 Type 7 Chief Ranger and four Type 6 wildland fire engines with a total value of \$895,129.38 were produced for internal use by GFC county units. Another six work orders for repairs of pumping equipment for internal GFC customers were processed. Three work orders were processed for repairs of RFD equipment such as vehicles, pumps, tanks, and plumbing.

FABRICATION SHOP

During the 2011 fiscal year, the Georgia Forestry Commission Fabrication Shop supported the state by providing quality customized fire suppression equipment. Plans have been started for construction of an addition to the existing fabrication shop.

Thirty-six projects were completed for new fire suppression equipment. Two new road tractors were put into service with

equipment installed. The fabrication shop built seven transport beds for new trucks and provided GFC's Rural Fire Defense Department with five large tanks for their RFD Program. The shop this year repaired 15 "V Blades", four new plows, and four new harrows. A total of 18 painting projects were completed, as were 101 other projects.



Communications

Communications staff for fiscal year 2010 consisted of a director, an administrative assistant, a graphic artist, a conservation education coordinator and a contracted writer.

Several measures were implemented in fiscal year 2010 to improve communications within the agency. GFC Headline News is a weekly electronic newsletter giving employees important updates in each of the agency's program areas. Ask the Director is a GFC intranet site allowing employees to ask questions, express concerns or give praise for good work directly to the director of the agency.

During the year, 38 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 Today, Georgia's Cities, Out of the Woods, and Georgia Trend, among others. Many radio and television appearances were made, with topics ranging from fire prevention and fire activity to Arbor Day.

GFC launched its presence on Facebook and twitter in fiscal year 2010. All agency press releases were shared on the sites, as were photos of GFC events and professionals. Just over 1,000 individuals "liked" GFC's Facebook page, and 150 organizations and individuals followed @GaTrees on twitter.



Forest Products Utilization, Marketing & Development

The Forest Utilization Department provided technical and marketing assistance to the forest products community, provided leadership to expand the value of Georgia's forests by pursuing forestry and bioenergy economic development projects, and provided assistance to forest landowners through the carbon sequestration registry program. These services ensure that Georgia's forest industry remains a leading competitor in the global marketplace while contributing to the state's economic well being. Without healthy markets, owners of Georgia's 24 million acres of commercial forest have few economic incentives to manage their forests. Wise utilization of the state's forest resource base as an economic engine is a high priority. Rural economic development activities relate to quality of life issues as well as creating and sustaining jobs. Environmental concerns about climate change and carbon emissions are addressed by encouraging participation in forest carbon sequestration projects. These combined efforts are vital to the state's overall objective to maintain a strong economy, healthy forests, and a sustainable environment.

TECHNICAL ASSISTANCE AND FOREST PRODUCT MARKET DEVELOPMENT

The GFC Forest Utilization Department staff responded to 339 individual requests for technical and marketing assistance. Formal presentations were provided to 52 groups during meetings, workshops or conferences, with a total audience of 2,081 persons. The topics of these presentations included: forest biomass energy, the potential of carbon sequestration in Georgia forests, and other general timber utilization topics. A total of 5,632 literature items were distributed.

The Utilization staff contacted representatives of 127 of Georgia's primary forest product manufacturing firms and collected timber drain data and information for an updated Forest Products Directory that will be available in late 2010. The 2009 Directory was made available on GaTrees.org in a variety of formats and was printed to be used during marketing events. Requests for the published directory continued to originate from throughout the United States and many foreign countries.

The staff developed a variety of marketing tools for use by those in the forestry community. These included fact sheets covering financial assistance for loggers, wood pellets, the Biomass Crop Assistance Program, and several others. The Department produced four electronic newsletters and distributed them to customers within the forestry community. The marketing staff established and operated exhibits at the Georgia Tech Wood Expo and the Southeast Bioenergy Conference. The staff also cooperated with the Hardwood States Export Group, which resulted in Georgia Forest Product Export Directories being distributed at trade shows in Turkey and China.

ECONOMIC DEVELOPMENT OF FORESTRY RELATED PROJECTS

Forest Utilization staff foresters provided assistance to a total of 83 potential projects. Twelve projects involved companies that are considering expanding in Georgia with new traditional wood products facilities. Seventy projects involved companies, or non-profit groups assisting companies, that desired to develop facilities to produce energy products from forest biomass as follows:

- Twelve projects involved biomass-to-electricity.
- Seven projects involved biomass-to-liquid fuels or chemicals.
- Fourteen projects involved pellet production.
- Thirty-seven projects were a mixture of biomass producer potential startups, biomass energy equipment manufacturing projects, industrial heat projects, and several projects with consultants and local development groups in which the project type was confidential.

Twenty-nine resource reports regarding timber and biomass availability were provided to firms by the Forest Utilization staff as part of their feasibility analyses. In addition, 95 other packets of information on potential industrial development sites and other information was provided to firms involved with the projects listed above.

The announcement and commencement of construction of the RWE Innogy wood pellet mill in Waycross was of particular significance. The mill will be the largest wood pellet manufacturing facility in the world and is expected to begin operation in spring of 2011. The RWE plant will utilize an estimated 1.5 million tons of small-diameter pine. In addition, the Multitrade Corporation started the first stand-alone biopower facility in Georgia in February 2010 in Rabun Gap.

NEW FOREST PRODUCTS AND VALUES

Although the Biomass Program Manager position was eliminated during the year due to budget constraints, other staff members continued to support the development of a forest bioenergy industry in Georgia. The bioenergy-related activities are quantified in the above sections. The GFC provided support regarding biomass energy for many activities with particular emphasis on the production of resource reports to industries, which provide information on the inventory of Georgia's forest biomass and its level of sustainability. The GFC partnered with several other organizations to support the Pine 2 Energy Coalition. The GFC staff assisted with developing bioenergy information tools that encourage the sustainable utilization of Georgia's forest resources for energy purposes and to increase the value of forest management for Georgia landowners. In addition, the marketing staff participated in the Georgia Energy Center of Innovation's One Stop Shops, which provide a first step for potential bioenergy projects beginning in Georgia.

The Georgia Carbon Sequestration Registry program continued operation during the year by providing assistance to 79 landowners who needed information about obtaining carbon credit values. The GFC utilization staff facilitated a forest carbon sequestration training workshop with the Climate Action Registry, in which more than 40 forest managers participated.

The department continues to be active as a member of the Southeast Agriculture and Forestry Energy Resources Alliance (SAFER), a member of the Hardwood States Export Group, and coordinating with the U. S. Forest Service in interpreting forest inventory and analysis data for reports.



Reforestation

The 2009-10 year was challenging for the GFC nursery, seed orchards and tree improvement program. Personnel losses, restricted budgets and aging equipment continue to plague Reforestation, but extraordinary efforts from a committed and diligent staff made the year successful.

Tree planting in Georgia continued to slump in 2009-2010. Though forests may be the state's most valuable natural resource, the acres planted in Georgia remain at levels more common to the 1970s than to any extended period since. Consequently, seedling sales remain sluggish. With revenue from seedling sales supplying the lion's share of funding for the department, budgets remain tight.

Nevertheless, more than 11 million trees were sold from the Flint River Nursery, providing economic, environmental and aesthetic benefits directly to nearly 4,000 customers and reforesting close to 20,000 acres in Georgia. When these trees reach initial merchantability, their value will exceed \$12,000,000., and several times that at full maturity. In the interim, they will protect watersheds, sequester carbon, prevent soil erosion, create wildlife habitat, and provide recreational opportunities.

Georgia's valuable forests depend on a reliable source of high quality seeds and the Georgia Forestry Commission's two seed orchards remain productive. Enough seeds were produced to meet nursery demands for premium, Pitch Canker-resistant, and select premium slash pine seedlings. Loblolly seed crops were only moderate in terms of volume, but produced more than enough high-quality, advanced generation seeds to satisfy nursery requirements. Hardwood seed crops varied by species as expected, but the usual array of vigorous hardwood seedlings, well adapted to thrive in Georgia, will be available in the coming months.

Though reduced budgets have virtually eliminated full-time tree improvement staffing, genetic gains in both loblolly and slash continue to be impressive. The average level of improvement from seedlings developed by the breeding program and distributed through the nursery has steadily risen to 28 percent in FY10.

Taken together, tree improvement gains added to the benefits of tree planting puts the present value of the GFC Reforestation Department at close to \$5 million annually. Since the department received no state appropriations, Reforestation may be the most effective and efficient service the state offers.



Administration

INCOME AND EXPENDITURES			
	FY2008	FY2009	FY2010
FUNDING SOURCE			
FEDERAL FUNDS	8,266,970.00	13,576,799.00	6,429,810.85
FEDERAL STIMULUS			2,943,449.40
OTHER FUNDS	8,578,388.00	6,898,309.00	5,579,953.27
STATE GENERAL FUNDS	37,290,677.00	32,730,123.00	29,230,328.00
GOVERNOR'S Emergency Funds			
FEMA-FIRE MANAGEMENT GRANT	1,859,230.00	348,441.00	
PRIOR YEAR INVENTORY	120,000.00		
TOTAL FUNDS	56,115,265.00	53,553,672.00	44,183,541.52
EXPENDITURES BY OBJECT CLASS			
TOTAL PERSONAL SERVICES	34,536,416.00	31,238,638.00	30,629,940.78
TOTAL REGULAR OPERATING EXPENSES	12,644,605.00	8,509,629.00	6,747,389.13
TRAVEL	380,935.00	201,819.00	337,337.57
MOTOR VEHICLE EQUIPMENT PURCHASES	795,213.00	397,768.00	415,925.15
EQUIPMENT PURCHASES	1,023,953.00	1,498,820.00	204,537.52
COMPUTER CHARGES	1,508,987.00	989,910.00	908,517.39
REAL ESTATE RENTALS	32,028.00	33,503.00	28,525.02
TELECOMMUNICATIONS	963,319.00	1,022,106.00	699,199.21
CAPITAL OUTLAY			26,936.14
PER DIEM & FEES	406,881.00	277,672.00	258,268.93
CONTRACTS	3,702,638.00	9,234,982.00	3,859,281.36
WARE COUNTY TAX - RD. MAINT.	60,000.00	60,000.00	60,000.00
WARE COUNTY TAX - S. FOREST	20,000.00	20,000.00	
TOTAL EXPENDITURES	56,074,975.00	53,484,847.00	44,175,858.20
EXPENDITURES BY PROGRAM			
REFORESTATION	1,493,800.00	1,267,632.00	1,213,984.70
PROTECTION	38,240,778.00	33,321,415.00	30,190,948.39
MANAGEMENT	11,753,929.00	14,767,213.00	8,986,350.21
GENERAL ADMINISTRATION AND SUPPORT	4,586,466.00	4,128,587.00	3,784,574.90
BONDS			
EQUIPMENT BONDS	2,500,000.00	2,500,000.00	2,955,243.92
CAPITAL OUTLAY BONDS	860,000.00	1,000,000.00	653,644.38
NUMBER OF EMPLOYEES	687	682	672

GEORGIA FORESTRY
COMMISSION



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