

GEORGIA FORESTRY  
COMMISSION



# 2009 Annual Report



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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 economical, social, and environmental benefits.

## STATE FOREST RESOURCE ASSESSMENT

The 2008 Farm Bill requires states to complete a State Forest Assessment and Resource Strategy within two years following its June 18, 2008 enactment. This Assessment must provide a comprehensive analysis of forest-related conditions, trends, threats and opportunities in the state, and identify priority rural and urban forest landscapes. Additionally, states must develop 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.

Each state is to work collaboratively with key partners and stakeholders, such as the Forest Stewardship Coordinating Committee, State Technical Committee, and Urban Forest Council, to develop the assessment and to incorporate State Wildlife Action Plans, Community Wildfire Protections Plans, Southern Wildfire Risk Assessment, and the like.

The GFC has contracted with the University of Georgia College of Agriculture and Environmental Sciences to develop geospatial data layers to be used to identify priority areas. Issues identified in the 2008 Forest Management Sustainability Report found at: <http://www.ga-trees.org/Resources/documents/Sustainable-ForestManagementinGeorgiarev0309.pdf> will be communicated to key partners and the general public and utilized in the assessment. The

statewide assessment should be completed by June 2010.

## 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 management advice, brief plans, Tree Farm inspections, harvesting advice, and timber marking. Other than Forest Stewardship and cost-share assistance, during FY2009 GFC provided technical assistance to 2,870 landowners managing 314,870 acres as follows:

- 2,046 advice cases on 184,492 acres
- 676 brief plans on 39,858 acres
- 97 Tree Farm inspections on 82,022 acres
- 51 harvesting advice cases on 8,498 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 2009 the GFC Minority Outreach Program:

- Sponsored and participated in two landowner agriculture & forestry workshops in conjunction with the Team Agriculture Georgia (TAG) organization. The fall workshop was held in Moultrie, GA and the spring workshop in Martinez, GA. Both were quite successful with well over 75 participants at each event.

- Established a 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 Community Based Land Development Consortium Natural Resources and Leadership Conference held in Columbiana, AL.
- Sponsored and participated in a landowner field day in Watkinsville, GA with the Oconee River Resource Conservation & Development Council.
- Hired one part-time and one full-time intern to work on a 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. The majority of field work was completed in 2009, but the full project is scheduled for completion by the end of calendar year 2009.

## **FOREST STEWARDSHIP PROGRAM (FSP)**

The Stewardship Program completed its 17th year with a cumulative enrollment of 6,713 landowners covering 1,683,608 acres in Georgia. 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 90 plans covering 37,948 acres were written in FY09 by GFC Foresters. The unique cooperation between the public and private sectors continued and strengthened this year as consulting and industry foresters provided 117 plans on 50,416 acres for their clients.

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. In FY09 19 new Certified Stewards were recognized.

## **Forest Stewardship Program Accomplishments - 2009:**

- Provided assistance to the Georgia Envirothon and Regional FFA Field Days.
- 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 over 500 acres of habitat improvement on Georgia forest land through the seed subsidy program, which cost-shared over 20,000 pounds of seed.
- Enhanced the partnership with the Quality Deer Management Association (QDMA) including field days and participation on 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.
- Sponsored a graduate student to develop a protocol for recreational components within stewardship management plans and other requests for technical assistance.
- Hired a stewardship outreach coordinator to manage the Central Georgia strategic outreach effort.

This year marked the second 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.

## **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 where 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 accomplishments 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. FY09 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 2009
- 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 like the "Quality Whitetail" show produced by the QDMA and the "Get in the Game" show produced by the NWTF are examples where specific management practices are highlighted that enhance the awareness of good land stewardship. In addition, magazine articles and sponsorship of national conventions will inform forest landowners of services available through the Southern Group of State Foresters. FY09 accomplishments include:

- Sponsored QDMA national convention in Chattanooga, TN.
- Sponsored Quality Whitetails magazine
- Contributed to show content on QDMA TV show
- Sponsored The Management Advantage TV show

## **LONGLEAF CORRIDOR GRANT**

The Longleaf Pine Ecosystem Recovery Corridor (Corridor) covers eleven 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 their 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 GFC will 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 that involve 90% of the southern landscape. In the area of the corridor private ownership is 60%+, Industry ownership is 20%+, and government ownership is less than 4%. As urban growth and development, or "sprawl," expands into rural forestlands, threats to forest sustainability, water quality, and wildfire potential increase. GFC will use these funds to minimize the effects of urban growth on 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 will 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 included 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 DNR, and the 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 570 tree planting plans covering 21,726 acres. Assistance was provided on 1,633 performance inspections for practice completion covering 60,746 acres.

Environmental Quality Incentives Program (EQIP) - The Georgia Forestry Commission also assists the NRCS in implementing the EQIP forestry practices. Assistance was provided on 51 initial prescription plans covering 3,051 acres. There were five practice performance inspections completed covering 325 acres.

Southern Pine Beetle Prevention & Restoration Program (SPBPR) - The U.S. Forest Service has provided federal grants in this program area totaling \$8.1 million since 2003. 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, \$5.1 million has been obligated towards direct landowner payments under cost-share practices. These practices total 175,922 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. This streamlined process has been favorably accepted and minimizes the bureaucracy that landowners face with many federal cost-share programs.

## **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 (8) acres of hardwood on government lands. Georgia has led the South in tree planting for the past twenty 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](http://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 1,619 management plans involving 94,940 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 144 occasions (4,366 attendees) involving most of the program areas listed in this report.

Special notes of interest:

- AnnosumRootDiseaseOutbreak: Widespread damage in recently thinned Slash and Loblolly pine plantations was first detected in 2005, and the disease continues to cause damage with new sites reported in 2009. The primary

region with the highest incidence and most severe mortality is a zone from Augusta to Columbus and south for about 75 miles (correlating to the sandhills and upper coastal plain regions).

- The Forest Health Coordinator and four regional specialists responded to 269 forest industry / consultant / GFC forester requests requiring field visits throughout the state. Annosus root rot, pine bark beetles, and drought-related damage were to blame in many of these inspections.
- Pine Beetle Aerial Survey: Minimal pine bark beetle activity was detected by ground and aerial surveys in 2009. Ips and black turpentine beetles caused many smaller spots in drought-stressed stands and a few southern pine beetles were detected by late summer.
- GFC foresters conducted the southern pine beetle pheromone-trapping program – twenty counties were trapped in 2008. All predicted low SPB levels.

### **Hemlock Woolly Adelgid**

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

The GFC continued to assist the UGA predator beetle rearing lab by supplying infested branch material. GFC survey employees were 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 Georgia DNR to help survey and protect hemlocks on state lands. This partnership continued regarding 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 has been directly involved in the selection of predator beetle release sites and the actual releases on DNR lands.

The GFC assisted numerous cities, communities, homeowner associations and individuals regarding HWA. Public awareness of the kioritz injectors available at GFC offices in Habersham, Union, Lumpkin and Fannin Counties has increased. Most counties reported frequent use of the tool with some counties having a waiting list. At least thirteen presentations were made to the public on HWA, including a regional HWA workshop the GFC conducted at North Georgia College (February 2008) which was attended by over 100 persons. GFC public website postings were added and updated in an effort to relay current 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. Once 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 into this umbrella for detecting 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 the 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: [www.cogongrass.org](http://www.cogongrass.org).



Through an ongoing grant with the U.S. Forest Service, the GFC continues to treat the majority of cogongrass sites with herbicide at no cost to landowners. This noxious weed has now been found in 35 Georgia counties, involving almost 300 sites.

The forest health staff has also begun a widespread effort to test various herbicides, timing and rates to eradicate Chinese privet, which is probably the most widespread and harmful non-native invasive plant in Georgia's forests. Field trials were published highlighting our control recommendations and are posted on our website.

### **Exotic Wood Borer / Bark Beetle Survey**

The GFC surveys approximately 100+ warehouse locations that import cargo using Solid Wood Packing Material from foreign countries. Each location is checked monthly from May- 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.

### **Sirex Woodwasp**

The sirex woodwasp poses a threat to all of Georgia's southern yellow pines. Fifty insect traps were deployed throughout the state from May-November to detect any *Sirex noctilio* that might be present. These traps are checked twice each month and any suspect siricids are screened for identification by the forest health staff. No *Sirex noctilio* have been caught thus far.

The GFC forest health staff continues to partner with researchers at UGA and Cornell University in their quest for additional biology on the native woodwasps, and for suppression techniques that could be used in the event this non-native insect invades Georgia. Huge losses of both loblolly and slash pine have occurred on other continents due to this insect.

### **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. Thirty 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-November in efforts 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 Kentucky, and could have significant impacts in Georgia if it is introduced and becomes established. Over 100 traps specific for this insect were deployed throughout the state from June-October 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 through these trapping efforts.

### **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 (*Persia borbonia*) in the maritime and coastal plain forests northward in South Carolina and south well into Florida, killing most of the large redbay 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, Georgia has almost 7 million acres impacted by this disease. The majority of the reports of LWD come from redbay, but sassafras infestations are being more frequently reported in the 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 the eastern North American continent on 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. The 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 the canal and ditch guidance, the floodplain guidance, and the 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 US EPA. It can be viewed at: <http://www.southernforests.org/documents/EPA%20forestry%20recommendations.pdf>.

During the year, 87 BMP talks were given to over 2,073 people. Three of the talks were presented to 119 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 twelve 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:

- 43 talks to 1,079 people at continuing logger education classes
- 6 talks to 93 people at forest industry workshops
- 3 talks to 111 forest landowners
- 32 talks to 671 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> and a link to the University of Georgia MTH list of all participants.

The department received 88 documented water quality complaints related to forestry practices during the year. Approximately 194 site visits were made by GFC district water quality foresters to investigate and mediate those complaints. Thirty-one complaints have been resolved and eleven have been turned over to the regulatory authorities. The remainder are in the process of being resolved.

GFC district water quality foresters made approximately 109 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.

In an effort to determine if our educational efforts are effective, the GFC normally conducts a statewide BMP implementation survey every other year. The 2009 survey is scheduled to begin in the fall of 2009. The sites are 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 have to experience forestry activities within the past two years, preferably within the last six months. Sites cover all geographic regions of the state.

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 hefty 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 259.6 miles of pre-suppression and wildfire firebreaks on 264 sites for BMPs. Overall BMP implementation was 85% with 91.7% 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 were impaired in 460 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.

Starting 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 once the operation is completed.

During FY09 there were 557 examinations made, of which 460 involved timber harvesting operations and 97 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 2.6% increase in BMP implementation from 93.3% to 95.87% was achieved in the final inspection. The number of water quality risks identified dropped from 59 to 5 or 91.5%. 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.

## **STATE LANDS ASSISTANCE**

Many state agencies request GFC assistance each year 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 FY09, there were 32 timber sales on other state agency lands all with a total value of \$3,607,748 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 recovery of the 2007 Wildfire, known as the “2007 Georgia Bay Complex Fire”, the largest wildfire in Georgia’s history. Over 19,000 acres of state forest land was consumed by this wildfire, of which 4,802 acres was in commercial pine timber. Accomplishments for FY09 include one emergency timber sale on 85 acres of planted and natural pine, harvesting a total of 1,551.69 tons of pine timber for a total of \$9,853.23. Harvest was completed on Sale # 3 of the 06-07 Annual Timber Sales, totaling 1,396.32 tons of pine timber for a total of \$35,257.08. A total of 1,394.9 tons of pine stumpwood was harvested for \$6,810.80. Other accomplishments include 3,366.08 acres of site preparation and 950.44 acres of tree planting, 35.4 miles of firebreak maintenance; 45.4 miles of road and ditch maintenance, and over 818.21 acres of prescribed burns. Revenues received through the sale of various forest products at Dixon totaled \$59,241.11, and expenses amounted to \$318,140.50.

The Herty Building at Dixon Memorial State Forest hosted over 605 persons attending a total of 18 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. A new section of orange trail was established totaling 2.8 miles for the purpose of removing users from primary access roads. An estimated 3,030 persons used the trail system during the period. There were also an estimated 4,200

hunters, fishermen and birdwatchers that used the Forest during the period. One two-mile section of the trail system was re-graded and enhanced using the GFC dozer.

**Dawson Forest** – Various training programs were conducted on Dawson Forest during the period. These programs included:

- One hand-line construction/wildfire training Incident Command System (ICS) course involving GFC and local Fire Departments,
- One water quality training,
- One prescribed burn training with GFC and Volunteer Firemen,
- One Georgia Civil Air Patrol Search and Rescue program training
- Three local law enforcement search dog trainings.

Inspection of the security fences around the secure areas, including the “hot cell” and “cooling area” was completed thirty-two times. Repairs were made to the fences three times and the access tunnel leading to the underground reactor control room was recovered with soil twice during the period. 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.

**Paulding Forest** – Forest management activities for FY09 included four stands totaling 173 acres where boundaries were marked and area cruised for timber sale. Eight stands comprising 233 acres were evaluated for management needs and access. Three boundary issues and two easement requests were addressed for the City of Atlanta (COA) during the period.

Access/Maintenance included: Gate & lock evaluation at twenty locations across the property. Three gates were replaced through cooperation with GA DNR and Georgia Power Company resulting in no cost to GFC or City of Atlanta. Three locks and 25 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 2,100 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 300 pieces of literature were distributed during FY09 with an estimated 40 emails and 35 phone calls concerning use and access of the property.

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

During fiscal year 2009, the Forest Inventory and Analysis (FIA) Program in Georgia measured or re-measured 913 forested and 332 non-forested plots for a total of 1,245 FIA 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 1,245 FIA plots, 89 were Forest Health Monitoring Plots (or P3 plots). P3 plots take approximately twice as long to complete data collection than a regular plot, since there is much more forest health indicator data to collect than on a regular plot and the P3 plots are widely dispersed across the state.

In addition to the FIA Plots measured, the Felled Tree Study was also completed during FY09. The FIA Foresters completed measurement on 81 Felled Tree Study Plots, which took about two months to complete. These plots take about as long as a P3 plot (1 per day) including the time to find active logging sites. The Felled Tree Study is done every five years (once per FIA five- year cycle). The data collection involves finding active logging sites and measuring what the loggers are cutting, how much they are taking to the mill and how much they are leaving behind. The data for this project is compiled by Tony Johnson and James Bentley with the USFS in Knoxville. The funding for this project is included in the FIA grant received by Georgia each year.

A certain percentage of completed FIA plots 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 FY09 of 97% 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 do plots in their name.

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 panels. Each panel consists of approximately 20% of the total number of plots. Each panel should take about one year to complete.

- Georgia began Cycle 9 in late October, 2004 with panel 2
- Cycle 9, panel 2 was completed August 2005
- Cycle 9, panel 3 data collection was completed August 28, 2006
- Cycle 9, panel 4 data was completed August 28, 2007
- Cycle 9, panel 5 was completed in August, 2008
- Cycle 9, panel 1 should be completed in August 2009
- Cycle 10 began September 2009

Georgia's data collection is two months ahead over the full cycle of data collection, which should be completed well within the five year goal. Georgia is finishing the last weeks of Cycle 9 work now and is scheduled to receive Cycle 10 work folders shortly.

The FIA Federal Grant continues to decline, with Georgia receiving \$481,381 on which to operate. \$641,841 is the total FIA operating budget with the 25% state match. The Federal portion of the FIA Grant has been reduced by \$105,000 over the past three years. We have already dropped from seven crews to six crews. For FY2009 and FY2010, we will continue to operate with six two-person crews, but depending on the grant amount for 2010 we may have to reduce positions further to meet budget.



# Forest Protection

Georgia lost over 4,700 acres to woods arson this year, accounting for approximately 17% of the total number of fires.

This year, Senate Bill 400 by Senator Ross Tolleson, R-Perry, amended existing law to allow Georgia Forestry Commission P.O.S.T. Certified Investigators to issue citations or tickets for misdemeanor offenses of burning without permits. Georgia Code as previously written allowed only for the physical arrest of offenders, which more often than not hindered law enforcement.

Legislation also amended arson laws to include a new offense – Arson of Lands. A person is guilty of this offense if the person, with the intent to damage, starts a fire in any woodlands, brush or field that he does not own or for which he does not have the owner's permission. A person who commits this offense will be guilty of Arson of Lands in the third degree. A person who is guilty of Arson of Lands that results in a fire that burns more than five acres will be guilty of arson of lands in the second degree. Arson of Lands in the first degree is committed by anyone who starts a fire when it was reasonably foreseeable that human life might be endangered. This offense carries a penalty of imprisonment for up to 20 years and a fine of \$50,000 or both.

## WILDFIRE ACTIVITY 2009

Georgia lost over 21,000 acres to wildfire in FY09, bringing the 10-year average acreage burned to 48,385 annually. Waycross District had the highest acreage burned with approximately 3,585 acres lost to 642 fires. Debris Burning was the number one cause and accounted for 2,230 acres. Rome District had the second highest acreage burned, with approximately 3,479 acres lost to 589 fires. Incendiary causes contributed to over 2,470 of

these acres. Camilla District ranked third highest with approximately 2,437 acres lost to 595 fires. Debris Burning contributed to more than 1,500 of the acres burned.

Statewide, there were 5,398 fires in this fiscal year. McRae District had the most fires, totaling 1,027 fires that burned 2,271 acres. Debris Burning continues to be the number one cause of Georgia's wildfires, accounting for 45% of the total fires. Woods arson or incendiary causes were responsible for 917 wildfires or 17% of the total number of fires statewide.

## COUNTY & DISTRICT OFFICE OPERATIONS

The strength of the GFC Forest Protection Program is the focused operations of ten district offices and 131 county units. Response to wildfires, issuing burn permits, presuppression 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 2009, Forest Rangers serviced 6,346 requests, installing an estimated 32,882 miles of presuppression firebreaks.

Online permits, which began in 2004, allow homeowners to receive permits via the Internet for burning small piles of yard debris. The GFC highly promotes the use of the internet to obtain permits to help alleviate more than 381,000 telephone requests for such burning. During FY09, 686,206 burning permits were issued in Georgia. Of that total, 78,559 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 10 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 program in the field continued through the use of grant funds to purchase Smokey Bear and GFC-created materials with specific fire prevention messages. These materials are utilized in school programs, fairs, and festivals. Fire prevention efforts are presented in programs and 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 try to key our programs during the times of the year where we experience an increase in wildfires.

GFC offices again used National Fire Plan funding to target the top 32 counties in Georgia having the most wildfires. These counties each have an average of more than 90 wildfires per year. A very successful Fire Prevention Campaign aggressively targets the root cause of wildfires. Each county is then able to target the situation and analyze prevention strategies that best address their individual problem areas. The counties purchase fire prevention advertising in the form of billboards, news articles, ads, and fire prevention literature for programs aimed at the adult audience.

Audiences of some of Georgia's major sporting events were targeted with a full page ad in the University of Georgia and Georgia Institute of Technology football programs and a banner on their sports program web sites.

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

The Forest Protection Department received redirection grant money from the USDA Forest Service to promote Community Wildfire Protection Plans (CWPP's). The Forestry Commission has hired specialists to focus a program geared towards developing countywide CWPP's using the Southern Wildfire Risk Assessment to locate communities with the highest risk for wildfire. The CWPP's develop an action plan to help mitigate the wildfire risk to each of the high risk communities. 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 States Hazard Mitigation Plan required by FEMA. This three year Grant will be used to develop plans for 143 of Georgia's counties.

## **FIREWISE & FIREWISE COMMUNITIES/USA**

The Firewise & Firewise Communities/USA Programs were very active in Georgia during FY09. Last year there were four recognized Firewise Communities/USA and now there are twelve. These communities encompass over 4,100 structures with more than 10,200 residents 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 twenty-two communities have been contacted and are in the process of deciding whether to pursue Firewise Communities/USA.

The mobile Firewise Exhibit has been on the road again this year, stopping at 15 events around the state.

## **TYPE II INCIDENT MANAGEMENT TEAM**

The GFC Type II Team, established in 2004, has worked many assignments and has grown with each incident they have been deployed to, and this year was no different. The Type II Team was called on a federal assignment right here

in the state of Georgia, where it was deployed to Cumberland Island National Seashore. The Team and its resources successfully extinguished the 2000+ acre wildfire and protected the estimated \$10 billion worth of natural resources. In the fall of the year the team was called by the state of Texas to respond to the approaching Hurricane Ike. The call came through the Emergency Management System and the team was pre-positioned in Houston, Texas for the impending landfall. Working together with the Lone Star Incident Management Team they managed a Logistical Staging Area that held over 1,000 tractor trailer trucks with essential commodities for Recovery efforts in the Southeastern Texas area. The team worked together for two weeks distributing tractor trailer loads of Water and food to locations across the devastated area. The incident was visited on a national level by Homeland Security Secretary Michael Chertoff, who praised the team for their effort and support.

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 team membership, building a Multi-Agency All-Hazards Team for Georgia. Each year the Team builds on its experience and is making a good name for the Team and the State of Georgia.

## **LAW ENFORCEMENT**

The Georgia Forestry Commission Law Enforcement Program was revitalized at the end of 2008. The reorganized program was the result of increased focus on Georgia's wildland arson problem. HB 400, which was passed during the 2008 Session of the General Assembly, stiffened penalties for wildland arson and updated the authority of GFC Investigators.

Essential equipment, such as cameras and GPS units, was acquired to facilitate the law enforcement investigations as well as fire scene examination and evidence collection. Policies were written and adopted to establish general operating guidelines.

Standardized investigative reports were developed and implemented, along with a computerized database to track cases.

A training program for investigators was 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 is planned for implementation in late 2009.

Increased focus was also 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. 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, either by a warrant or a citation.

From January 1 through June 30, 2009, GFC Investigators investigated 153 fires. Those investigations resulted in 28 criminal charges being filed against suspects. Investigations revealed 109 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 917 incendiary fires GFC reported for fiscal year 2008-2009.

Future plans include the acquisition of more up-to-date equipment and increased training with an emphasis on arson and general criminal investigations. Expansion of the program is also needed to allow more suspected arson fires to be investigated.

## **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 1,633,590 acres treated with prescribed fire in Georgia. The GFC gave on-the-ground assistance with 150,703 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 today's increasingly urbanized Georgia environment. One way Forest Protection supports this practice is with a Georgia Prescribed Fire Manager Certification Program. The program guarantees a basic level of knowledge and experience for those who practice prescribed burning. This year the class was extended from a one day course into 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 the course. In FY09 there were four certification sessions conducted with 131 Georgia land managers becoming certified burners. Since inception of the certification program in 1993, 2,734 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 this year has written a ten-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 that uses fire had a voice in this plan. The plan in Georgia is already in action and will map the way for better burning and public understanding for 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 their low tolerance of its smoke. From this a new and different way of educating the public on the use of fire will soon be unveiled. The theme of this outreach program is *One Message, Many Voices* and is being adapted by all thirteen southern states.

## **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 there are 21 states with councils, as well as British Columbia. Fifteen other states are developing councils and the work is not over yet.

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 been successful 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 attendance over one hundred. The agenda for the year's meeting included subjects on addressing the media, managing smoke, code of ethics for burners, and much more. For more information on the Georgia Prescribed Fire Council visit [garxfire.com](http://garxfire.com)

The Georgia Prescribed Fire Council is a very important part of fire use in Georgia, and helps to educate the public, promote the safe use of fire, share information on new and better technology used by burn practitioners, and is very active in the development and implementation of 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 where 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 by the Forest Protection meteorologist daily and posted on the web [GaTrees.org](http://GaTrees.org).

Valuable tools and information are available on the fire weather website for forest managers intending to conduct prescribed burning. 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.

At the beginning of FY09, the Web-based V-smoke application failed to work as we upgraded our weather web-server on which the application resided. After a few months of investigations, we were able to revive this application.

NOAA port/LEADS software continues to generate informative weather maps for us. We also performed annual maintenance on our 19 weather stations to meet NFDRS standards on weather stations.

## **FABRICATION SHOP**

The Fabrication Shop equipped 12 crawler tractors with reconditioned fire plows and tool boxes. Ten transport beds were built for carrying dozers. Ten road tractors were fitted with racks for emergency lights. The shop produced 11 new large offset harrows to replace obsolete harrows in the field. Our shop fabricated 15 large water tanks for the RFD Program. We fabricated six 150 gallon water tanks for Chief Rangers and four lowboy trailer axles were overhauled. In all, including new fabrication, repairs, and painting a total of 350 projects were completed this year by the GFC Fabrication Shop.

## **RURAL FIRE DEFENSE**

The RFD Program consists of five state employees and three federally funded TDL employees.

RFD lease equipment provided for rural fire departments during FY09 totaled 10 units with

the most requested type being the new Super Fire Knocker. Another 22 Type 6/7 wildland fire engines were produced for internal use by GFC county units. In addition, 18 work orders for repairs of pumping equipment for internal GFC customers were processed. Five work orders were processed for repairs of RFD equipment such as vehicles, pumps, tanks, and plumbing.

Volunteer Fire Assistance funds managed by RFD were dispersed as 50/50 grants to 26 Government entities to purchase structural fire gear, hoses, nozzles and other items needed to make fire trucks operational. VFA funding was provided to GFC Training to support thirteen Georgia Basic Wildland Firefighter courses, covering more than 3,360 training hours.

Through the GFC "Helping Hands" Program, \$99,310 of wildland firefighter clothing was provided to fire departments, forest industry cooperators, and other state agencies involved with prescribed and wildland fires.

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 17 years.



# Communications

The Communications Department was understaffed during much of Fiscal Year 2009 due to the retirement of the Chief of Communications. Because of the economic downturn and agency budget cuts, the Chief's position remained vacant from October 2008-June 2009. Communications staff consisted of an interim chief, an administrative assistant, a graphic artist, a conservation education coordinator and a contracted writer.

During the year 27 press releases were produced and 874 news articles appeared in print. In addition, 41 magazine articles appeared in publications as diverse as *Georgia Forestry Today*, *Georgia's Cities*, *Journal of the Society of Municipal Arborists*, and *Timberlines*, among others. Various radio and television appearances were made, with topics ranging from fire prevention to Arbor Day, and even an interview about Wildfire the Cat at a county GFC office.

## **SUSTAINABLE COMMUNITY FORESTRY PROGRAM (SCFP)**

As a program within the Communications Department, the Sustainable Community Forestry program (SCFP) provides communities with resources to increase awareness of the benefits provided by a healthy and sustainable forest. SCFP also suffered staffing shortages, as two positions vacated by retirement remained unfilled due to agency budget cuts.

To encourage citizen involvement in building long-term sustainable community forestry programs, the SCFP Grant Program provided federal cost-share funding for 30 community-based projects. The 2008 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 \$310,212 was allocated to grant recipients, who matched this money with \$200,430 in cash and \$375,973 in in-kind services and contributions. Six grant workshops were held in Gainesville, Marietta, Atlanta, Macon, Statesboro and LaGrange.

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](http://GeorgiaGrove.org)) was developed as one of the first "green" social networking websites in the country. Third, SCFP funded the contract for development of the State Assessment (including the Etowah Watershed) that will assist in identifying conditions and issues to be addressed in a future State Response Plan for the U.S. Forest Service.

The statewide Arbor Day Ceremony was held at Macon State College, where recent tornado damage on campus brought attention to the benefits of community trees and the importance of proper selection, planting and maintenance. The Mayors of Georgia's new Tree City USA communities and Georgia's Arbor Day Poster Contest winner were recognized. Fifth grade student Rebecca Daniel of Tunnel Hill Elementary School in Whitfield County received the State Arbor Day Poster Contest Award. More than 1,650 students participated in the contest across the

state. Communities posted 76 Arbor Day events on the Georgia Forestry Commission Arbor Day website.

Tim Womick presented the Trail of Trees program at ten different schools or community centers in the Albany, Columbus, LaGrange, Macon, Athens, Gainesville and Atlanta areas. 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 2,200 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 third 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. U&CF grant funding totaling \$26,110 was awarded to five elementary schools – Mansfield in Newton County, Mt Vernon in Hall County, North Hart in Hart County, St. Teresa's in Dougherty County and Heritage in Bibb County. Almost 2,500 students will benefit from the installation of 195 trees at these participating schools.

The cities of Hazlehurst, Kennesaw, Monroe, Pine Lake, and Sharpsburg received first-time Tree City USA certifications for outstanding accomplishments. There were 120 communities recertified, for a total of 125 Tree City USA's in Georgia. Eighteen 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, iTree software, the best trees for the urban landscape

and how to work with developers. The annual conference and awards program was held in Augusta in October. 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 Grove as a way for people to plant a legacy for future generations and help build capacity for GUFC.

Overall, SCFP personnel participated in more than 558 public education events, including 143 programs, 383 exhibits and 32 field days. SCFP foresters continued to provide technical assistance to Georgia communities and non-profits with tree ordinance development, project management, cultural practices and partnership development. In addition, the Educational Forest Coordinators at Spirit Creek and Hightower provided natural resource programs, at the forests and in the community, to approximately 13,456 people during the year.



# Forest Products Utilization, Marketing & Development

The Forest Products Utilization, Marketing and Development program provided technical and marketing assistance to the existing forest products community, while providing leadership to expand the value of Georgia's forests by pursuing forestry economic development projects for the traditional and bioenergy industry, and continuing to provide assistance to forest landowners through the carbon sequestration registry program. These services, combined with the traditional industry assistance program, 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 of climate change and carbon emissions are addressed through encouragement to participate in Georgia's Carbon Sequestration Registry. These combined efforts are vital to the state's overall effort to maintain a strong economy, healthy forests, and a sustainable environment.

## **ECONOMIC DEVELOPMENT OF FORESTRY RELATED PROJECTS**

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

- Thirteen projects involved biomass-to-electricity.
- Five projects involved biomass-to-liquid fuels.
- Ten projects involved pellet production.
- Twenty-two 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 where the project type was confidential.

Fifty-seven resource reports regarding timber and biomass availability were provided to firms by the Marketing staff as part of their feasibility analyses. In addition, information on potential industrial development sites was incorporated into reports and other information provided to firms involved with the projects listed above.

The announcement of biomass-to-electricity plants by Oglethorpe Power Company (2) and Georgia Power Company (1) were of particular significance. All of these are in the 100 MW range and plan to utilize approximately 1 million green tons of wood chips each. In addition, several independent power producers announced plans to build biomass facilities. Multitrade Corporation will start the first stand-alone biopower facility in Georgia in September 2009 in Rabun Gap. The marketing staff continued work on the poultry house heating research project that demonstrated significant advantages in using wood pellets within these agricultural operations.

## **TECHNICAL ASSISTANCE AND MARKETING**

The Commission's Forest Products Marketing Directory database was updated through contacts

with 190 industry facilities. The 2009 Directory was made available on [GaTrees.org](http://GaTrees.org) in a variety of formats and was printed to be used during marketing events. Requests for the published directory continued with requests originating throughout the United States and foreign countries.

The GFC marketing staff responded to 692 individual requests for technical and marketing assistance. Formal presentations were provided to sixty-one groups during meetings, workshops, or conferences with a total audience of 3,012 persons. The topics of these presentations included: forest biomass energy (37 presentations), the potential of carbon sequestration in Georgia forests (8 presentations), and other general timber utilization topics (16 presentations). A total of 3,625 literature items were distributed.

The staff developed a variety of marketing tools for new and existing forest products, including tools to increase forest product exports to emerging global markets. The marketing staff established and manned exhibits at six trade shows or meetings including the International Woodworkers Fair in Atlanta, the SE Bioenergy Conference in Tifton, the Georgia Forestry Association annual meeting in Fernandina, FL, and others.

The staff developed and distributed thirty-seven information packets and other marketing tools for media.

## **NEW FOREST PRODUCTS AND VALUES**

The Biomass Program Manager continued to support the development of a forest bioenergy industry in Georgia. The bioenergy-related activities are quantified above within the Technical Assistance and Marketing section. The GFC provided support regarding biomass energy for many activities with particular emphasis being 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 Bioenergy Working Team'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 283 landowners who needed information on obtaining carbon credit values. The Carbon Sequestration Registry had one project entered for a 1,600 acre forest in Jones County. The GFC expects the Registry to be continually developed in concert with new federal legislation being established during 2010.

The GFC utilization staff facilitated a carbon sequestration project partnership with a local utility company. This project will reforest and restore approximately 400 acres of state forestland devastated in the 2007 wildfires. This project is to be registered on the Carbon Sequestration Registry and is a first of its kind partnership for the state of Georgia.

The GFC Utilization staff participated in several statewide and national groups to support the development of the forestry-offsets carbon market, including leading the development of Guiding Principles for a Practical and Sustainable Approach to Forest Carbon Sequestration Projects in the Southern United States. This is a comprehensive policy and technical guidance document for the southern United States.

The department continues to be active as an advisor to Georgia Tech's Advanced Wood Products Laboratory, on the Traditional Industries Program research committee, a member of the Georgia Economic Developers Association, a member of the Southeast Agriculture and Forestry Energy Resources Alliance (SAFER), a member of the Hardwood States Export Group, and actively coordinating with the U. S. Forest Service in interpreting forest inventory and analysis data for reports.



# Reforestation

The 2008-09 year was challenging for the GFC nursery, seed orchards, and tree improvement program. Personnel losses, restricted budgets, and aging equipment made FY09 very difficult, but extraordinary efforts from a committed and diligent staff made the year successful.

Low sawtimber stumpage prices and recessionary pressures limited reforestation practices in Georgia in 2008-09. Nevertheless, over 12 million trees were sold from the Flint River Nursery, providing economic, environmental, and aesthetic benefits directly to nearly 4500 customers and reforesting about 21,000 acres in Georgia. While the gate value of these seedlings is about one million dollars, in 12-15 years these trees will conservatively represent a commercial value of \$12,000,000 or more. During that time they will remove one and one-half million tons of carbon dioxide from the atmosphere, protect Georgia's watersheds and wildlife habitat, and offer a multitude of recreational benefits.

Georgia's valuable forests depend on a reliable, productive source of high quality seeds and the Georgia Forestry Commission's two seed orchards were up to the task. Enough seeds were produced to meet nursery demands for Premium and Select Premium Slash Pine seedlings. The Slash orchard at Flint River also provided sufficient seeds to sow a sizeable crop of Pitch Canker Resistant Slash Pine seedlings in 2009. Fast-growing, rust-resistant, and able to resist infection from the troublesome pitch canker fungus that periodically decimates slash pine forests, these seedlings sold briskly to GFC customers. 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 funding and staffing issues plague the tree improvement program, results 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 25 percent in FY09. The ability to grow 25 percent more fiber on the same number of acres should be very attractive to bioenergy companies considering expansion to Georgia. To further increase genetic improvement, the Georgia Forestry Commission has undertaken a "crown replacement" strategy at the Arrowhead Seed Orchard near Cochran. This process will allow for the production of 4<sup>th</sup> cycle loblolly pine seedlings five to seven years earlier than conventional methods and further accelerate the transfer of genetic gains to Georgia landowners.

Taken together, tree improvement gains added to the benefits of tree planting puts the present value of the GFC Reforestation Department at close to \$5,000,000 annually. With expenses representing less than five percent of that number, Reforestation may be one of the most effective and efficient services the state offers.



# Administration

<b>INCOME AND EXPENDITURES</b>			
	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>
<b>FUNDING SOURCE</b>			
FEDERAL FUNDS	8,444,672.00	8,266,970.00	13,576,799.00
OTHER FUNDS	8,105,289.00	8,578,388.00	6,898,309.00
STATE GENERAL FUNDS	33,914,092.00	37,290,677.00	32,730,123.00
GOVERNOR'S Emergency Funds	9,494,411.00		
FEMA-FIRE MANAGEMENT GRANT	21,534,204.00	1,859,230.00	348,441.00
PRIOR YEAR INVENTORY	460,553.00	120,000.00	
<b>TOTAL FUNDS</b>	<b>81,953,221.00</b>	<b>56,115,265.00</b>	<b>53,553,672.00</b>
<b>EXPENDITURES BY OBJECT CLASS</b>			
TOTAL PERSONAL SERVICES	33,450,824.00	34,536,416.00	31,238,638.00
TOTAL REGULAR OPERATING EXPENSES	10,127,897.00	12,644,605.00	8,509,629.00
TRAVEL	245,755.00	380,935.00	201,819.00
MOTOR VEHICLE EQUIPMENT PURCHASES	709,492.00	795,213.00	397,768.00
EQUIPMENT PURCHASES	868,760.00	1,023,953.00	1,498,820.00
COMPUTER CHARGES	683,166.00	1,508,987.00	989,910.00
REAL ESTATE RENTALS	28,511.00	32,028.00	33,503.00
TELECOMMUNICATIONS	1,220,554.00	963,319.00	1,022,106.00
PER DIEM & FEES	396,500.00	406,881.00	277,672.00
CONTRACTS	33,680,654.00	3,702,638.00	9,234,982.00
WARE COUNTY TAX - RD. MAINT.	60,000.00	60,000.00	60,000.00
WARE COUNTY TAX - S. FOREST	28,500.00	20,000.00	20,000.00
<b>TOTAL EXPENDITURES</b>	<b>81,500,613.00</b>	<b>56,074,975.00</b>	<b>53,484,847.00</b>
<b>EXPENDITURES BY PROGRAM</b>			
REFORESTATION	1,379,764.00	1,493,800.00	1,267,632.00
PROTECTION	65,503,935.00	38,240,778.00	33,321,415.00
MANAGEMENT	10,141,038.00	11,753,929.00	14,767,213.00
GENERAL ADMINISTRATION AND SUPPORT	4,475,876.00	4,586,466.00	4,128,587.00
<b>BONDS</b>			
EQUIPMENT BONDS	1,500,000.00	2,500,000.00	2,500,000.00
CAPITAL OUTLAY BONDS	1,000,000.00	860,000.00	1,000,000.00
NUMBER OF EMPLOYEES	687	687	682



GEORGIA FORESTRY  
COMMISSION



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