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Southern Region

FY2000
Monitoring and Evaluation Report
Chattahoochee-Oconee National Forests

August 31, 2001

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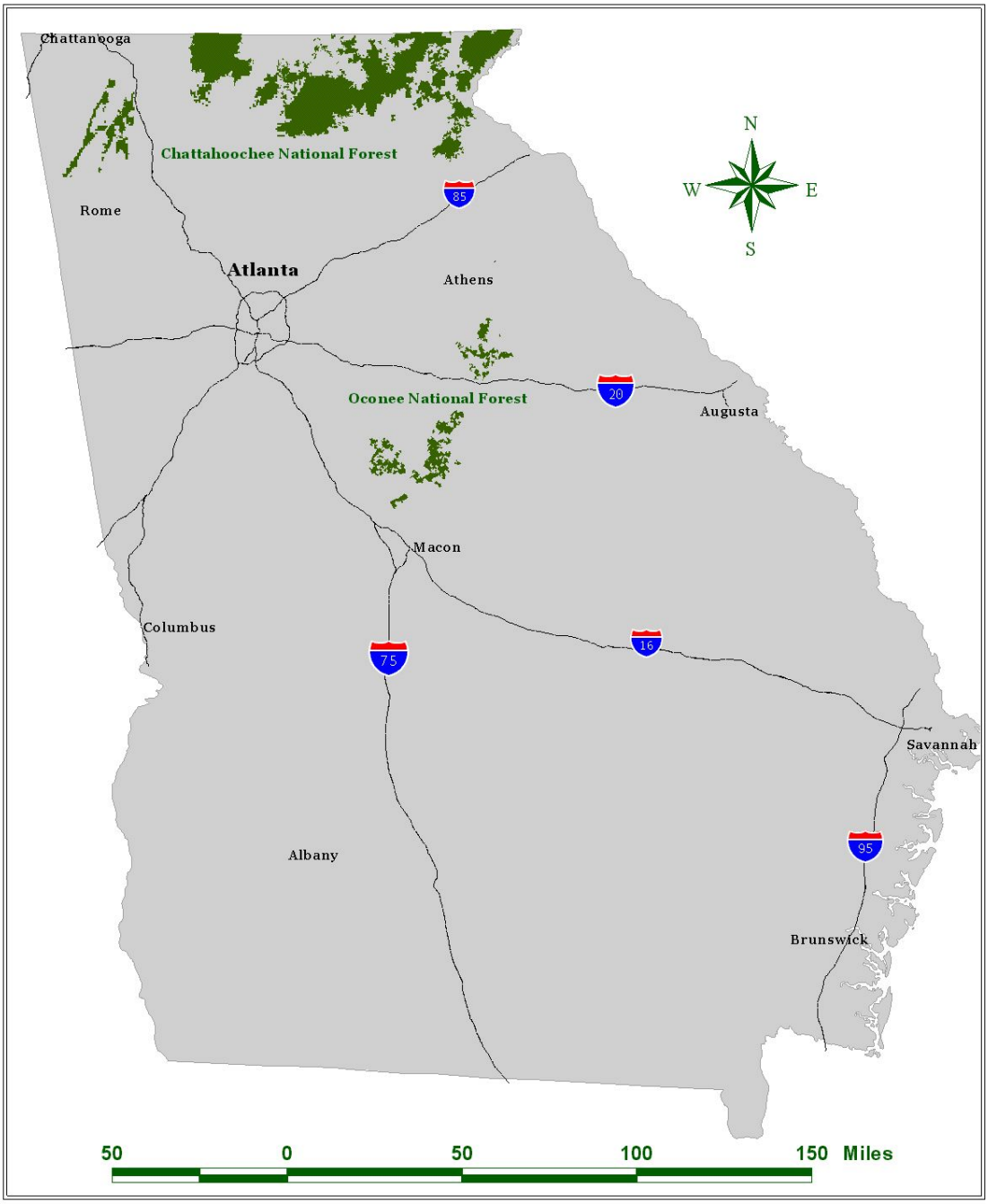
FOREST SUPERVISOR'S ADEQUACY STATEMENT

I have evaluated the monitoring results and recommendations in this report. The Action Plan developed to respond to these recommendations will be implemented, unless new information or changed resource conditions justify a change. I have considered funding requirements in the budget necessary to implement these actions.

With these completed changes, the Forest Plan is sufficient to guide management of the Chattahoochee-Oconee National Forests for Fiscal Year 2000, unless ongoing monitoring and evaluation identify further needs for change.

/s/ Clara J. Johnson 10/30/01

CLARA J. JOHNSON Date
Forest Supervisor


Chattanooga
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Oconee National Forest
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INTRODUCTION

This report documents the results of the Chattahoochee-Oconee National Forests Monitoring and Evaluation (M&E) program for Fiscal Year (FY) 2000. Monitoring and evaluation is defined as periodic evaluation on a sample basis of Forest Plan management practices to determine how fully objectives have been met and how closely management standards have been applied. Three types of monitoring are recognized:

- **Implementation monitoring** - checks that actions were carried out as planned.
- **Effectiveness monitoring** - checks that actions as carried out did what they were suppose to do.
- **Validation monitoring** - checks whether any assumptions made in planning remain valid in actual experience.

M&E documents progress and results of implementing the Forest Plan. This report is for the administrative unit of the Chattahoochee National Forest and the Oconee National Forest considered together as the Chattahoochee-Oconee National Forests.

MONITORING AND EVALUATION PROCESS

This is the twelfth year of this annual report. Only those monitoring items listed in Table 5-1 of the Forest Plan that have a reporting period of annually and 2, 5, and 10 years, or where the Forest Monitoring & Evaluation Team had sufficient data to discern trend patterns were evaluated for this report. Some items are covered in later reports depending on their reporting periods. See page 5-2 of the Forest Plan for the goals of monitoring and evaluation.

The Process

Forest Plan monitoring is an ongoing task. Examples of formal monitoring are reviews, functional assistance trips, integrated resource reviews (also called monitoring/quality reviews), and specific data collection and analysis. Examples of informal monitoring include daily site visits to projects and visits, telephone calls, and letters to or from the public.

Integrated Resource Review

The Integrated Resource Review (IRR) is a primary formal monitoring tool.

Timing: IRRs are scheduled for three or four ranger districts each year, which means that each ranger district is reviewed biannually.

Participants:

From the Forest Supervisor's Office	From the Ranger District office:
Forest Supervisor or Deputy Forest Supervisor	District Ranger
Pertinent Resource Staff	District staff as needed
Staff Officers – optional	Invited public
Region 8 specialists	

Objectives

Objectives are (1) to field examine a sample of activities associated with implementation of the Forest Plan with a full interdisciplinary team and (2) to document resource-specific and activity-specific monitoring results. Monitoring involved is both implementation monitoring and effectiveness monitoring. The reviews focus on answering such questions as:

- Were activities as planned consistent with the Forest Plan?
- Were the activities implemented according to what was planned?
- Upon completion of the activities, were the assumptions correct in both the planning of the project and the Forest Plan?
- Are Standards and Guidelines (S&Gs) being applied appropriately, and are they doing what they are expected to do?
- Are mitigations being applied appropriately and working?

Evaluation

The Monitoring & Evaluation Team evaluates the findings of each IRR and decides if action is needed, what the action would be, and how to go about it. Needed actions might include training of personnel and writing letters of clarification and a Forest Plan amendment. Even if items are in compliance, monitoring may lead to changes in implementation of future projects.

Functional Assistance Trips

Within a function (such as wilderness, soil and water, or reforestation), Staff Officers and assistants from the Supervisor's Office or Regional Office conduct their own reviews of their areas. These reviews are carried out very much like IRRs and checked for consistency with the Forest Plan. The results are documented and used in Forest Plan monitoring.

Specific Data Collection and Analysis

A great deal of routine data collection and analysis is done on the forests. Examples are mentioned in the detailed monitoring discussions of this report. Shown next are mostly

additional examples by resource areas. These are only examples and are not intended to be a complete listing of data collection efforts on the forests. Keep in mind that to monitor you first must have baseline data (inventories) to which to make comparisons.

Archaeological/Cultural/Historic Resources

Forest personnel carry out archaeological investigations year-round at any forest location that has the possibility of ground disturbance; plus, they perform formal excavations at some previously discovered historic or prehistoric sites.

Recreation

Fee Collections – Fee collections at developed recreation sites are valuable to monitor recreation-use levels.

Inventories – Mapping of dispersed (concentrated streamside camping, not informal campgrounds) recreation sites and collecting data on their characteristics is getting increasing attention across the forests. Inventories are used to plan and carry out rehabilitation work and use patterns.

Traffic Counts – Annual, routine traffic counting on forest roads is an indicator of use patterns, destinations, seasons of use, numbers of visitors, and types of use. Traffic counts prioritize road maintenance needs.

Visitor Contacts – Conversations with forest visitors at campgrounds, at Wildlife Management Area check stations, at trailheads, at visitor centers, at district offices, and through telephone calls help to quantify and qualify use in situations where fees and trail registers do not give all the information needed to improve the condition of the forest recreation sites.

Soil, Water, and Air

Air Quality – Forest personnel are sampling the effects of ozone and atmospheric deposition on forest resources—such as vegetation, water, and soils—in the vicinity of the Cohutta Wilderness. They have collected and analyzed water samples from the Jacks River to assess effects of pollutants. Permanent plots with annual vegetation assessment are used to monitor ozone impacts.

Ecological Classification – Forest personnel conduct integrated resource sampling on several areas on the forests to develop a multiresource classification for ecosystem management. Examples of parameters sampled include aquatics, climate, geology, landform, soils, and vegetation.

Inventories – Forest personnel complete soil surveys on the forests to identify soil types and their properties. They use survey data to develop alternatives for management actions and implement appropriate mitigation techniques to minimize impacts.

Soil Productivity – Forest personnel examine areas with management activities—that is, timber harvest, prescribed burning, road construction, and recreation uses—during the life of projects to assess impacts on productivity. Surveys provide indication of the amount of area in degraded conditions in need of restoration.

Vegetation

Forest Cover – Each year forest personnel inventory approximately 8–10 percent of the forests for forest cover composition and condition and the information stored in a computer database. In the future, this information will be matched with NTMB survey results, PETS species results, and fish/aquatic habitat conditions.

Reforestation – Forest personnel examine each area reforested at least twice in the first 5 years to ensure that it has been successfully reforested. The results are formally reported to the Secretary of Agriculture.

Wildlife

Bear Surveys - Forest personnel cooperate with the Georgia Wildlife Resources Division (GAWRD) in an annual bait station survey for bears. Visitation has shown a steady increase from 1981 through 2000. At the same time, nuisance bear reports to Georgia wildlife officials have begun to increase.

Breeding Bird – Personnel count Neotropical migratory birds and resident birds across the forests annually. They monitor about 350 points annually.

Fisheries/Stream Aquatics Inventory and Monitoring – Forest personnel monitor several streams across the forests for fish populations and conditions each year. In addition, streams that were originally sampled in the 1950s and 1960s are resampled for fish populations and habitat condition. They monitor streams that are scheduled for, or have had, fish habitat improvement work for fish response to these efforts.

Hunting Check Stations – Forest personnel cooperate with GAWRD in staffing check stations on Wildlife Management Areas across the forests. They collect data on animal conditions, hunter success ratios, and age structure of game species populations. This is used in Forest Plan monitoring.

Neotropical Migrant Birds (NTMB) – Wildlife Staff collect and evaluate population and occurrence data as it relates to habitats, abundance, numbers of species, and effects of management on the Neotropical migrants. In recent years, these birds have been a focus of concern because of population declines in various parts of the nation.

Proposed, Endangered, Threatened, or Sensitive (PETS) Species Surveys – Forest personnel have surveyed thousands of acres of the forests for PETS species; and they survey more acres each year. The knowledge gained from these surveys has been used to develop risk assessments for parts of the forests. This data is being integrated onto Geo-

graphic Information System (GIS) mapping coverage—such as forest cover, PETS species, and soils—to develop predictive models throughout the forests and to show where further inventories are necessary across the forests.

Threatened & Endangered (T&E) Species – Forest personnel annually inventory and monitor populations of T&E plant species listed under the Endangered Species Act of 1973. This type of data, which shows population variation in the absence of management change, is baseline data to understand natural variations.

SUMMARY OF RESULTS

Table 1 summarizes forest compliance by monitoring item and the nature of any non-compliance. Following the table is a narrative that gives a more detailed description of what the team found and its recommendation.

Table 1—Summary of Forest Plan Compliance by Monitoring Item - FY2000

Monitoring Item No.	In Compliance	Not In Compliance					
		Prescription	Standard & Guideline	Management Direction	Allocate	Outputs	Costs
A2-2	X						
A4	X						
A5	X						
A6	*		X	X			
A7	X						
A8	X						
B1	X						
C1	X						
C3	X						
E2	X						
E3	X						
E4	X						
E5	X						
E6	X						
F1	X						
F2	X						
G1	X						
K2	X						
L2	X						
P1	X						
P2	X						
P3	X						
P4	X						
P5	X						
P6	X						

*See narrative section on this item. Some portion of this item needs additional work.

The following is a list of potential recommendations.

- No changes needed; monitoring indicates that goals, objectives, management area (MA) direction, standards and guidelines are being achieved.

- Refer recommended action to the appropriate line officer for improvement in application of management area direction and standards and guideline interpretation.
- No Forest Plan Amendment required.
- Modify the management area prescriptions by Forest Plan amendment.
- Revise the schedule of outputs with a Forest Plan amendment.
- Revise the cost per unit of output with a Forest Plan amendment.
- Forest Plan direction has been changed or clarified by amendment.

DETAILED MONITORING AND EVALUATION REPORT

A2-2 – Developed Recreation

- Water Quality at Swim Sites - Ensure compliance with Federal, State, and local standards for water quality.

Forest personnel collect water samples weekly at six national forest public swim beaches and from Lake Conasauga, Lake Russell, Lake Sinclair, Lake Winfield Scott, Morganton Point (Lake Blue Ridge), and Rabun Beach (Lake Rabun). Each sample collected is analyzed for pH, air temperature, water temperature, and fecal coliform. The sampling season includes the period from Memorial Day to Labor Day, coinciding with the public-use season. With the exception of two weekly samples, all samples collected complied with State and Federal water quality regulations. The two noncomplying samples were collected at Lake Russell and Lake Winfield Scott. To further check water quality on these samples, personnel collected follow-up samples the next day. The sampling found the water in compliance with regulations. Bad samples are typically attributed to high levels of visitor use of the beach and reduced inflow of freshwater during low flow periods or drought conditions.

Recommendation: No changes needed; monitoring indicates that goals, objectives, management area direction, and standards and guidelines are being achieved.

A4 – Management Area 4

- Ensure that MA-4 management direction is followed**.**

Recommendation: No changes needed; monitoring indicates that goals, objectives, management area direction, and standards and guidelines are being met. No additional MA-4 plans have been completed in FY2000. These areas will be addressed during the ongoing Forest Plan Revision (draft 12-2002).

A5 – Visual Quality

- Ensure that visual quality objectives (VQOs) are being applied according to standards and guidelines.

During FY2000, a landscape architect reviewed projects for visual impact. Input was given to keep projects within the Forest Plan-designated VQO and the new Scenery Management System (SMS). The architect pointed out any potential adverse impact and suggested changes. Forest personnel reviewed projects with a VQO of Retention (R) or Partial Retention (PR) for compliance on the ground

We continue to evaluate Forest Plan VQOs in response to the public's increasing sensitivity to visual character of the forests. We are designing projects within areas with a VQO of Maximum Modification (MM) for no more than the Modification (M) VQO. We have completed the inventory for SMS, which is replacing the VQO system. We anticipate complete implementation to occur with revision of the current Forest Plan.

Recommendation: Monitoring indicates that all aspects of the plan are being met.

A6 – Off-Road Vehicles (Roads and Trails)

- Compare uses, problems, and solutions to off-road vehicles (ORV) use, abuse, and overuse.

Recommendations: Priority for closure of illegal trails should be given to those trails that are directly impacting water quality or aquatic habitat. Close all other illegal trails.

A7 – Off-Road Vehicle Use (Areas)

- Compare use, problems, and solutions to ORV use, abuse, and overuse.

There are no ORV areas on the forests. All areas have been converted to trails riding only. Other use is then considered illegal.

A8 – Cultural Resources (Heritage Resources)

- Evaluate the progress and success of cultural heritage activities in relation to national forest management**.**

During FY2000, Heritage Program personnel conducted surveys on other functions' planned land-disturbing activities. The 81 surveys and office inventories covered 40,360 acres with and without physical survey, as permitted under the categorical exclusion of the Programmatic Agreement and Memorandum of Understanding with the Georgia State Historic Preservation Officer and the Advisory Council on Historic Preservation. In all, 30 new sites were recorded, 10 of which were recommended for protection and further investigation. These were marked on the ground and are noted in the project files. Most

of the 40,000 acres inventoried were large blocks of prescribed burning, and most of these were on the Oconee Ranger District. Personnel surveyed plowlines; any known sites within the blocks that could be harmed from burning were excluded from the burn.

The curated (preserved, or archived) archaeological and record collections continued to grow, at the rate of 10–12 cubic feet each year. There are now about 213 cubic feet of collections. These are stored in the Supervisor's Office in Gainesville, though a few boxes are held on the Toccoa and Oconee Ranger District offices, where the zone and district archaeologists are stationed. We are still planning to move the collections to the University of Georgia, Department of Anthropology, which maintains a federally approved curation facility, and whose managers are willing and able to accept our collections for permanent curation.

There was one case of looting on the Oconee during the fiscal year, no one was caught or arrested. Archaeologists and law enforcement personnel investigated the site, but no disposition was made of them since the person responsible for it was never found.

During FY2000, the Heritage Program manager retired near the end of the fiscal year. The zone archaeologist who covers the Chattahoochee also continued to serve as acting Toccoa Ranger District resource assistant, managing the diverse recreation program on the district. The archaeologist on the Oconee also serves as the District National Environmental Policy Act (NEPA)/GIS coordinator. While we do have a small team of Heritage Resource technicians on four ranger districts (Armuchee, Cohutta, Oconee, and Toccoa), they have not been very active as such this year, since funding has had them working on other projects most of the year. During part of the year, the program manager completed writing an integrated cultural resources management plan (ICRPM) for the U.S. Army at Fort Jackson, South Carolina, through a cooperative arrangement with Forest Service State and Private Forestry.

The summer of FY2000 found the Oconee Ranger District covered in southern pine beetle infestations. The three archeologists on staff helped with the surveys prior to suppression efforts. Also one detailer from National Resource Conservation Service (NRCS) in Alabama was brought in to help with the surveys.

Heritage personnel conducted slide shows and other presentations at schools and to civic groups throughout the year. They participated in Georgia Archaeology Awareness Week with six well-attended guided tours at Scull Shoals Historic Mill Village from November 1999 to May 2000. Forest personnel attended the Society for Georgia Archeology meetings at Unicoi State Park and the Southeastern Archeological Conference in Pensacola. They continued to make presentations to the Friends of Scull Shoals and residents of Reynolds Plantation on Lake Oconee about the Scull Shoals project.

We have had four nonprofit partners cooperating with the Heritage Program. They are the Georgia Mountains Archaeological Society (GMAS), Friends of Scull Shoals, Inc. (FoSS), Chenocetah Conservations Corps (CCC), and Faded Footprints of Families and Friends of the Lake Russell Wildlife Management Area (4-F). Each one makes its own special contributions to the Heritage Program.

The Georgia Mountains Archaeological Society meets in the Supervisor's Office monthly for programs and training sessions and assists in field surveys and laboratory analysis. GMAS and Friends of Scull Shoals cosponsored the Passport In Time archaeological test project weekends at Scull Shoals one weekend a month from November 1999 to May 2000. As well as the work weekends, a 2-hour guided tour twice a day was given on Saturdays. This was a great success; tours prices were $6/person. This money goes back to the Scull Shoals village for future enhancements. We had a total of 42 volunteers, plus additional short-term volunteers who worked for a day or less; and all together put in 1,542 hours on the project, in the field and laboratory. There were more than a 100 visitors to the project. Friends of Scull Shoals provided support by furnishing a portable toilet on-site for the volunteers and visitors and T-shirts for the full-time volunteers.

We completed repairs on the Chenocetah Tower. These repairs included installing a security system, window, and doors, and reroofing the tower.

The ninth annual reunion of the Lake Russell volunteers was held at Fern Springs, a Civil Conservation Corps-built picnic area, in Habersham County in June. These senior volunteers provided oral and written history and photographs of the houses and other sites we had recorded in the Lake Russell Wildlife Management Area during 1991–1992. They have formed a club (4-F) that has published the results of the historic survey of that area. They continue to monitor it on a weekly basis, with monthly tours for their members during the cold weather months. These free tours, which they guide, draw families and descendants, regularly bringing in 12–20 people each month to visit old house places, clean cemeteries, and the like. This has continued throughout FY2000.

Recommendation: Continue to evaluate and update the program and measure the success of cultural/heritage resources management activities in relation to national forest management. Make sure that the Heritage Program continues to guide, locate, monitor, evaluate, protect, educate, and enhance the cultural/heritage resources on the Chattahoochee-Oconee National Forests.

Figure 1 - Guided Tours of Scull Shoals

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Figure 2 - Scull Shoals Volunteers Hard at Work Uncovering the Past

©USDA – Forest Service

Figure 3 - Scull Shoals Volunteers Analyzing Artifacts

B1 – Wilderness

- Determine if overuse problems are being eliminated.

Trail corridors such as the Appalachian Trail (AT) receive heavy use.

Big Frog in Georgia receives little use, as only 83 acres of this wilderness is located in Georgia. One trail system leading from the Cohutta Wilderness adjacent to Big Frog (Hemp Top) leads the southwest corner of the Big Frog.

Blood Mountain trail receive heavy use. This use could be perceived as overuse. Thirty campsites have been inventoried within this wilderness area. Heavy use concentrations are apparent at Slaughter Gap with the convergence of the Appalachian Trail, Coosa, Duncan Ridge, and Slaughter Creek. Plans are being discussed with the Georgia Appalachian Trail Club to address the overuse problem at Slaughter Gap. Jarrard Gap and the summit of Blood Mountain in the vicinity of the Blood Mountain Trail shelter are equally heavily impacted. Use at Blood Mountain is primarily day use, with the hikers departing from the parking area at Neel's Gap on U.S. Highway 129 and traversing the Appalachian Trail to Blood Mountain. The no fire zone initiated on Blood Mountain to protect the character of the area and to discourage overnight camping continues to be partially effective. Intensive efforts are required by volunteers and administrative personnel to remove any illegal fire rings. One limiting factor in this ongoing issue of illegal campfires is the lack of both administrative and enforcement personnel to cover the area in a timely manner. Day use on the portion of the Appalachian Trail and the Blood Mountain Wilderness is increasing. Parking at Neel's Gap continues to be a problem on weekends and holidays. Parking at the Byron Herbert Reece trailhead continues to be a concern as well due to increased user trends.

Brasstown Wilderness continues to receive illegal mountain bike use on the Wagon Train Road. Annual boundary line monitoring around Bald Mountain Park on the eastern side of the wilderness is ongoing with respect the continued development of private lands adjacent to the wilderness and the possibility of encroachment on this federally managed land. Thirty campsites have been inventoried within the Brasstown Wilderness.

Cohutta Wilderness continues to receive very intense overuse. District personnel have inventoried more than 350 campsites. Ground cover loss and/or soil compaction is prevalent at a major portion of these inventoried sites. Overused areas in the Cohutta Wilderness include Beech Bottom and Jacks River Falls; Brayfield, above Panther Creek Falls, segments of Jacks River and Conasauga River trail corridors; and portions of the Hickory Creek Trail corridor.

Heavy visitor presence, along with improper disposal and storage of food items, has resulted in increased interaction between humans and bears, which led to a temporary closure of Beech Bottoms in the spring/summer of 2000.

The district has continued to increase efforts to correct overuse problems and minimize potential bear/human interactions. This has been achieved through an expended informa-

tion and education program aimed at the infrequent forest user, with the use of volunteers and increased wilderness patrols. Trail volunteers and Forest Service personnel are continually rehabilitating heavily used campsites. A wilderness and backcountry "Leave No Trace" message is conveyed through newspaper articles, Recreational Equipment, Inc. (REI) in Atlanta, district volunteer newsletter, signing, bulletin board posting, wilderness visitor contacts, Regional and district brochures, formal presentations at schools, clubs, and organizational meetings.

Ellicott Rock Wilderness in Georgia receives little use. This is due in part to the lack of a formal trail system in place within the Georgia side of the wilderness.

Mark Trail Wilderness continues to receive heavy use along the AT corridor and within the Bear Den Creek drainage. Thirty campsites have been inventoried within this wilderness area.

Raven Cliffs Wilderness continues to be intensively used on the Raven Cliffs Trail. Camping is being allowed only above the trail away from the cliffs, and the actual cliffs are closed to rappelling/climbing activities. Increased law enforcement and administrative presence continue to be limiting factors with respect to limiting, monitoring, and dispersing site use within this area.

Rich Mountain Wilderness continues to receive minimal use with most occurring during the big game hunts. Illegal all-terrain vehicle (ATV) use in the area long with litter on the north boundary (county road) still poses viable concerns. Additionally, the south end of Rich Mountain Wilderness has experienced a lot of residential development on the adjoining private lands. On a timely basis, Forest Service administrative personnel must monitor encroachment in terms of both development and illegal motorized vehicles into the wilderness.

Southern Nantahala in Georgia receives little use. The Appalachian Trail traverses this wilderness. There are no associated spur trails to the AT within the Georgia portion, which would increase use or create interest within this section of the wilderness.

Tray Mountain Wilderness receives moderate use. The Appalachian Trail runs through this area with no associated spur trails. Thirty campsites have been inventoried within this wilderness area.

> *Recommendation:* While monitoring indicates that goals, objectives, management area direction, and standards and guidelines are being achieved, an increase in law enforcement is still needed in the areas of illegal OHV, bicycle use, poaching, and looters.

C1 – Wildlife and Fisheries

- Ensure proper application of management standards and guidelines.

The Forest Plan and planning regulations contain 121 guiding statements that refer to biological resources. Compliance is determined through continued field visits and ongoing feedback from Forest Service and Georgia Department of Natural Resources Biologists who serve on IDTs throughout the forests.

Fisheries surveys in 2000 focused on brook trout streams. Streams were measured by habitat types (pools, riffles, cascades, waterfalls) for width, length, and depth. These streams were later surveyed by electrofishing to determine species present, population numbers, and individual lengths. These surveys aid in determining stream structure placement. Structures were installed in these streams with the help of partners from numerous agencies and private groups.

Figure 4 - Aquatic Insects on Submerged Log

Amphibian surveys occurred on a number of streams across the forests by forest personnel and others such as Dr. Wilson from Fernbank Museum is conducting life history work on hellbenders.

Figure 5 - Trying to Capture Amphibians

Forest personnel and Dr. Ken Fahey continue surveys for the bog turtle. These have taken place in areas of known occurrence and for possible occurrences. In addition, mussels have been surveyed in the Conasauga River by Tennessee Aquarium biologists. Forest Service personnel, universities, and Conservation Fisheries are studying aquatic PETS in the Conasauga River Watershed to understand the distribution and their life history traits. These are multiyear surveys.

Streambank restoration occurred on national forest, as well as adjacent private lands, in 2000 with the aid of partners and grant monies. Educational efforts included teaching at numerous schools and hosting tours for Best Management Practices (BMPs) and streambank restoration work.

Efforts were also made through field inventories for listed sensitive and locally rare plant species within some planned project areas. More than 2,800 acres were surveyed in 1999. These surveys result in important new information involving species occurrences, and when any of these species are found, modifications are made to project proposals.

Recommendation: No changes are needed. Goals, objectives, management area direction, and standards and guidelines are being met.

C3 – Management Indicator Species and Their Habitats

- Ensure maintenance of plant and animal species diversity and viable populations of all existing vertebrate species.

The forest selected management indicator species (MIS) to be used as appropriate on a forestwide basis. The implementation process requires the selection of all forestwide MIS that geographically occur within a project area. This procedure ensures that special habitat considerations are taken into account in meeting viability objectives. Habitat condition is a primary factor influencing population levels for these species. A valuable tool for evaluating habitat conditions is the Continuous Inventory of Stand Conditions (CISC) database, which is compiled from periodic field inventories throughout the forests.

Other sources of information that are utilized to monitor and evaluate MIS include, but are not limited to, annual harvest records of game species; statewide hunter surveys from Georgia Department of Natural Resources (GADNR), population estimates for various WMA provided by GADNR; bait station surveys for bears; bog turtle surveys in appropriate habitats; various occurrence records and references; electrofishing surveys; water quality monitoring; and red-cockaded woodpecker annual monitoring by roost checks at clusters.

Forest personnel continue to gather songbird data for trend analysis. Data on occurrences of Neotropical migratory and resident land birds is collected annually during the breeding season. This data is helping to build a nation-wide database that will detect changes in populations over time. Forest Service biologists have been active in the "Partners in Flight" program and continue to maintain close contact with professional ornithologists (GADNR, Cornell University) and other bird experts to keep current and knowledgeable on management of these species.

Mountain purple pitcher plants were monitored throughout 2000. It was noted that these plants had flowered and produced seed as a result of recent habitat improvement efforts. Posters with a picture of the bog turtle are displayed as a "wanted" poster in various locations near suitable habitat to inform forest visitors about this rare reptile. If they suspect seeing one, they are encouraged to report their findings to Forest Service or GADNR at once.

Population trends for each of the 20 MIS follows. The MIS are acadian flycatcher (*Empidonax virescens*), indigo bunting (*Passerina cyanea*), pileated woodpecker (*Dryocopus pileatus*), pileated woodpecker (*Dryocopus pileatus*), red-cockaded woodpecker (*Picoides boreali*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), brook trout (*Salvelinus fontinalis*), redeye bass (*Micropterus coosae*), yellowfin shiner (*Notropis lutipinnis*), turquoise darter (*Etheostoma inscriptum*), Coosa darter (*Etheostoma coosae*), white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), eastern wild turkey (*Meleagris gallopavo*), ruffed grouse (Bonasa umbellus), bobwhite quail (*Colinus virginianus*), gray squirrel (*Sciurus carolinensis*), bog turtle (*Clemmy muhlenbergii*), yellow lady's slipper (*Cypripedium calceolus*), and mountain pitcher plant (*Sarracenia purpurea*)

Acadian Flycatcher

©Ohio Department of Natural Resources

Point count surveys conducted during the year 2000 showed a slight decrease in Acadian flycatchers heard and/or seen during the survey (0.16 birds per point compared to 0.21 birds during the 1999 survey). This slight decline does not represent a significant change during the past 9 years; survey numbers have been relatively stable on the Chattahoochee and Oconee National Forests. The acres of riparian habitat are expected to remain constant over time. The use of streamside standards and guidelines on all projects, as well as designation of special protected areas, will maintain the quality and integrity of existing riparian corridors. These measures will ensure the continued viability of the Acadian flycatcher on the forest. We recommend no management change.

Indigo Bunting

©Chuck Jordan, Cornell Laboratory of Ornithology

Populations continue to be relatively stable on the Chattahoochee and Oconee National Forests according to bird point count survey. The mean number of indigo buntings reported per point during the year 2000 survey shows 0.73 birds per point. This was not a significant change from 1999, which were 0.72 buntings per point.

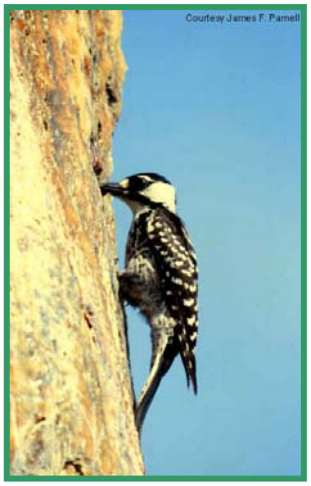
This species is closely tied to areas that are fairly open, usually along woodland edges and often associated with young forests, which are becoming more infrequent on the forests. Monitoring of this species will continue, but for now, viability of the indigo bunting is not a concern. We recommend no management change at this time.

Pileated Woodpecker

©U.S. Army Corps of Engineers

The pileated woodpecker population on the Chattahoochee and Oconee National Forests has remained relatively stable. During the past 15 years, the acres of older hardwood forests have increased on the overall forest, which helps maintain habitat for this mature forest associated species. This trend to have abundant older forest age structure is expected to continue. Therefore, viability of the pileated woodpecker is not a concern; and we recommend no management change.

Red-cockaded Woodpecker



U.S. Fish & Wildlife Service
Photo by ©James F. Parnell

During the 2000 monitoring season, red-cockaded woodpecker numbers increased slightly on the Oconee National Forest. The number of active cluster sites went from 16 in 1999 to 19 in 2000, with the total number of individuals rising from 32 to 42. Annual monitoring of the population will continue, along with continued habitat maintenance and structural and nonstructural habitat improvements. An ongoing commitment to management of this species will help ensure its viability on the Oconee National Forest. We recommend no management direction change at this time.

Brook Trout

©Tennessee Aquarium

Overall, annual surveys indicate brook trout populations are stable. Stream conditions on the forest are good to excellent, providing adequate habitat for this fish. Brook trout have not been stocked in recent years. The majority of the headwaters hold brook trout. These are self-sustaining populations providing an excellent fishery. The brook trout is also a game fish in the Georgia mountains, so viability is not a concern. We recommend no management change.

Brown Trout


©Tennessee Aquarium

This trout is a game fish harvested throughout north Georgia. Although this trout is primarily stocked, some streams support a self-sustaining population. Brown trout are the dominant trout in the Chattooga River and from yearly samples populations of this fish are stable. Therefore, viability is not a concern. We recommend no management change.

Coosa Darter

The Coosa darter is restricted to the Coosa drainage system, where it is relatively common. Viability is not a concern for this fish. We recommend no management change.

Rainbow Trout


©U.S. Department of Agriculture
Photo by Ken Hammond

From yearly samples of rainbow trout taken in several streams on the Chattahoochee NF, population levels remain healthy with fluctuations normally occurring from time to time. Although rainbow trout were initially stocked, the majority of streams on the Chattahoochee carry self-sustaining populations. Reproduction indicates that the water quality is good to excellent for trout and therefore, viability is not a concern. Rainbow trout is a game fish that is harvested throughout north Georgia, supporting an excellent fishery. We recommend no management change.

Redeye Bass

U.S. Geological Survey
Photo by ©Noel M. Burkhead

Redeye bass are common is waters where they occur. It is a game fish and is well known in some forest streams for its fishery, therefore viability is not a concern. We recommend no management change.

Yellowfin Shiner and Turquoise Darter

©U.S. Geological Survey
Photo by ©Noel M. Burkhead

Although restricted to specific drainages on the forest, populations of these two fish species are common in the waters where they occur. Viability is not a concern for these fish. We recommend no management change.

White-tailed Deer

Credit: Unknown

Deer harvest data collected and provided by GADNR indicate that populations in the mountain Physiographic region are stable to increasing slightly. Piedmont and Ridge and Valley Region harvest data show higher overall deer densities with stable to slightly declining populations since hunting regulations have been liberalized to reduce population numbers to carrying capacity of the habitat. Overall, viability is well sustained for white-tailed deer on the Chattahoochee-Oconee National Forests. We recommend no need for change.

Black Bear

©GarLyn Zoological Park
Naubinway, MI.

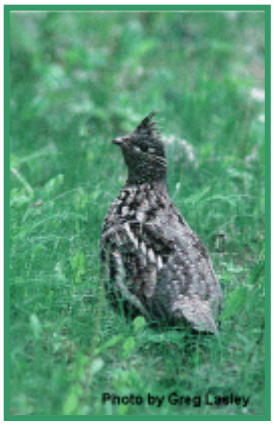
Black bear numbers continue to increase in Georgia. During 2000, bait station surveys conducted by GADNR and Forest Service personnel showed the highest percent of bait visits by black bear since the survey routes have been conducted (50.4% of the baits were taken by bear). Biologists are concluding that black bears are at or very near carrying capacity on the Chattahoochee National Forest. Information from GADNR harvest records, bait station visitation rates and the increasing number of problems associated with bear-human encounters all indicate that the black bear population is healthy and viable on the Chattahoochee National Forest. We recommend no management change.

Eastern Wild Turkey

©U.S. Department of Agriculture

Eastern wild turkey populations continue to increase or at least remain stable on the Chattahoochee and Oconee National Forests. Data from the GADNR shows a reduction in the number of hours spent per number of gobblers harvested during the 2000 season. Slight fluctuations occur from year to year with no significant upward or downward trends evident. Viability is ensured on the forest, and we recommend no need for management change at this time.

Ruffed Grouse



U.S. Geological Survey
Photo by ©Greg Lasley

According to GADNR surveys, ruffed grouse populations on the Chattahoochee National Forest continue to show a slight decline based on the number of grouse flushed per hour and the number of grouse harvested per hour for the 1999–2000 hunting season. Other sources of information also show a slight decline throughout the Southern Appalachians during the last 2 decades. Viability is still being maintained; however, if this trend continues, it may be necessary to create some early successional habitat to help increase ruffed grouse population numbers on the Chattahoochee National Forest.

Bobwhite Quail


Credit Unknown

The bobwhite quail population remains relatively low on the Chattahoochee and Oconee National Forests. Breeding bird surveys, GADNR hunting data and information provided by the Southern Appalachian Assessment reveal regionwide declines, mainly due to loss of agricultural land, changes in farming practices, reductions in prescribed fires, and a reduction in early successional habitat through the range of this species. The bobwhite quail remains a game species in Georgia, which means viability of the species is not as concern at this time. Creation of more favorable habitat should be continued through timber management, controlled fire, and ongoing red-cockaded woodpecker habitat management on the Oconee National Forest.

Gray Squirrel


©Microsoft Corporation

Gray squirrel habitat remains abundant on both the Chattahoochee and Oconee National Forests. Upland and cove hardwoods that are 50 years old and older continue to increase according to Continuous Inventory of Stand Conditions Data. No significant changes are expected in the future and an increase in habitat capability remains likely due to continued maturation of the forest. Viability is being maintained, so we recommend no need for management change.

Bog Turtle


©U.S. Fish and Wildlife Service

The bog turtle is extremely limited in distribution and range in northern Georgia. There is only one population on the Chattahoochee National Forest and sampling and monitoring efforts have resulted in the marking of six individuals. The site where this one small population occurs, along

other sites with potential bog turtle habitat, is being managed specifically for the species. Potential new sites are sampled periodically to obtain ongoing population trend data. Additional habitat manipulation and monitoring of the know site and some potential sites are planned for FY2001. Although bog turtle populations on the forest are so low it may doubtful that it could be considered viable, evidence of reproduction is encouraging. We will continue to improve and maintain existing and potential habitat in hopes of establishing a viable bog turtle population in the future. For now, we recommend to continue habitat work and monitoring with no management change.

Mountain Pitcher Plant

©North Carolina Department of Agriculture and Consumer Services

Inventories for the mountain pitcher plant continue to occur on the Chattahoochee National Forest. Currently, there still is only one location where these pitcher plants have been found. At this site, as well as the two established sites where plants were transplanted, there continues to be monitoring and habitat restoration work completed as needed. Recent monitoring information show the total number of plants has increased during the last decade. In April of 2000, mountain pitcher plants were noted to be producing fruit and seed for the first time in at least 12 years. The Forest Service and Georgia Plant Conservation Alliance are working together to further increase the number of plants and expand their suitable habitat. Our goal is to eventually establish a more viable population of the mountain pitcher plant on the Chattahoochee National Forest. We recommend no change in management direction.

Yellow Lady's Slipper

©University of Vermont

As a result of botanical surveys on the Chattahoochee National Forest, the number of known yellow lady's slipper populations continues to increase. New populations have been and will continue to be documented and mapped. Management of this species consists of protection of all populations consisting of 10 or more individuals from all direct or indirect impacts. This will ensure continued viability for the yellow lady's slipper on the forest. We recommend no further management change for this species.

E2 – Reforestation and Timber Stand Improvements

- Ensure that harvested areas are adequately restocked within 5 years and that scheduled reforestation and Timber Stand Improvements (TSI) are accomplished.

During FY 2000, the 5-year restocking requirement was met, as were the TSI and reforestation targets.

Recommendation: No changes are needed. The possibility of salvage operations associated with both catastrophic events and southern pine beetle epidemics as well as the potential incidence of appeals or litigation continue to disrupt scheduled reforestation and TSI work in FY 2000.

E3 – Management Prescriptions and Silvicultural Standards

- Ensure that the following items are in compliance with the Forest Plan: size of openings, dispersal and shape of openings, timing of reentry, restocking standards, and systems of silviculture.

During FY2000 no planned regeneration harvests occurred, all other planned activities were well dispersed, timing of reentry was within bounds, and restocking standards were met.

There were some areas where southern pine beetle infestations have occurred. A number of these natural occurring "clear-cuts" were harvested to utilize the timber resource, reduce the possibility of catastrophic wildland fire, and prevent further spread of the insects.

Recommendation: No changes needed; monitoring should focus on the effects of alternative methods of cut (i.e., group selection or single-tree selection) and their compatibility with ecosystem management.

E4 – Effects of Implementing management practices

During the last 3 fiscal years (1998, 1999, and 2000) there have not been any planned timber removals; therefore projections have not been within the 20 percent of planned goals as stated within the Forest Plan.

Recommendation: New management plans are required that include inventory and monitoring information.

E5 – Suitability of Silvicultural Systems, Especially Group Selection and Shelterwood Cutting Methods

None were implemented in the last 3 fiscal years. See E4.

E6 – Forest-type conversions

No forest-type conversions have occurred in the last three fiscal years. *See* E4.

F1 – Water Quality

- Ensure compliance with Federal, State, and local standards.

Water quality monitoring in FY2000 (other than swimming water) consisted mainly of implementation monitoring of ongoing projects and forest management activities. The focus of monitoring continues to be erosion and sedimentation, which can cause impacts to the stream system, aquatic habitats, and riparian areas. Primary methods used include visual inspections of project areas and evaluations of nearby streams and adjacent riparian areas. A short list of typical projects evaluated includes road maintenance, recreation trail maintenance, and prescribed burning. The emphasis of monitoring was to assess the implementation of Georgia's Best Management Practices for Forestry, which is designed primarily for timber harvest and silvicultural activities. Monitoring was conducted on several road maintenance projects undertaken as part of the Chattooga River Large-Scale Watershed Project. Roads were evaluated to identify specific problem segments prior to maintenance work.

Inventory of several streams was initiated in the Chattooga River Watershed to establish baseline conditions. Inventory methods include characterization of stream channels, collection of aquatic insects, and classification of habitats. This information will also be used in addressing water quality issues on various stream segments within the watershed.

As in prior years, field visits were again conducted with water quality specialists from the Georgia Forestry Commission and U.S. Environmental Protection Agency (EPA) during FY2000. The focus of the visits was to review implementation of the BMPs and any needed changes. Sizing of culverts and fish passage at stream crossings were a specific focus of these visits.

Recommendations: No changes needed; monitoring indicates that goals, objectives, management area direction, and standard and guideline implementation is being achieved.

F2 – Riparian Area Management

- Ensure compliance on wetlands, floodplains, and watercourse protection strips.

A review of potential impacts of projects in proximity to stream channels, 100-year floodplains, riparian areas, and wetlands was conducted on a small sample of projects. Forest management activities (e.g.: road maintenance, prescribed burning, or trail construction) are evaluated during the planning phase, construction phase, and after project completion. Projects are designed to minimize or mitigate impacts.

Particular emphasis was placed on proper function of stream crossings (e.g.: culvert sizing and protection of riparian areas from sedimentation off roads). Roads scheduled for maintenance in the Chattooga River Watershed in FY2000 were evaluated for impacts to stream systems. Examples of treatments implemented to reduce the threat of erosion and sedimentation include armoring fill slopes at crossings, installation of cross drainage dips in road surfaces, the addition of surface gravel to stabilize surfaces and reduce erosion, and revegetation of exposed soils.

Coweeta Hydrologic Laboratory also installed several field monitoring sites along a Forest Service System road in the Chattooga River Watershed. Evaluation of the movement of sediment and the methods used to minimize this impact are included in the study. Results of this study are anticipated in FY2001.

Recommendation: No changes needed; monitoring indicates that goals, objectives of management area direction, and standards and guidelines are being achieved.

G1 – Minerals

- Evaluate effects of minerals and energy activity.

Mineral activity remained at a low level on the forests during FY2000. The demand for oil and gas leases is nonexistent. Most activity is recreational-type mineral exploration (gold panning) and common variety mineral sales.

Recommendation: No changes are needed; monitoring indicates that goals, objectives, management area direction, and standards and guidelines are being achieved.

K2 – Erosion Control Compliance

- Ensure success of erosion control practices on timber sale areas, roads, wildlife improvements, and construction sites.

Field evaluations of soil disturbance areas were conducted to assess the installation and effectiveness of erosion control practices in use. Evaluations were conducted mainly on road maintenance projects, watershed restoration projects, and prescribed burns. No significant problems were noted.

As an example of field monitoring the report for John Roland Branch (on the Tallulah Ranger District) soil and water improvement project, is attached. (See page 32.)

Recommendation: No changes are needed; monitoring indicates that goals and objectives are being achieved.

L2 – Road Standards Compliance

- Ensure road construction, reconstruction, and maintenance complies with standards.

All road construction, reconstruction, and maintenance activities comply with Forest Plan standards throughout all project phases. Supervisory personnel monitor compliance during field inspections as part of project acceptance.

Recommendation: No changes needed; monitoring indicates that goals, objectives, management are direction, and standards and guidelines are being achieved.

Figure 6 – Erosion on Ex-Forest Road 182 on the Chattooga Ranger District

Erosion had been so bad that the roadbed was 8 feet below ground level.

©USDA – Forest Service

©USDA – Forest Service

Figure 7 - Ex-Forest Road 182 Completely Closed

Road completely closed by strategically placing cut trees, earth berms, and ripped and reseeded the roadbed. After one year, no erosion or illegal use has occurred.

P-1 – Wildland Fire

- Acres and number of wildland fires by cause. Evaluate the extent and effects of wildland fires on national forest lands.

©USDA – Forest Service

In 2000, there were 68 fires on the forest burning 1,874 acres of national forest lands and 131 acres of private lands. Environmental consequences were not severe and do not demonstrate a need to change wildland fire policy or procedures. Nevertheless, the fire presuppression and suppression job is becoming more complex and difficult.

Fire in the urban interface with threats to structures is a growing concern as mountain home development continues and increases with preference for locating adjacent to national forest and on sites that give scenic vistas; that is, on ridge crests or upper slopes. This combination of factors makes these homes very difficult to protect from uphill fire runs. The risk of human-caused ignition below them in and near the valley bottoms is relatively high because private land, roads, and recreation sites; thus human activities are concentrated there. The water supply for mountain homes is normally from wells, so adequate water for structure protection is not available. Roads and bridges may not permit the passage of water tenders or buses for hand tool crews. Mountain real estate is also tending to become more expensive. See attached Annual Fire Report.

Fuel loadings are on a trend of increase both locally and around the Southern Region. Windstorms, ice storms, individual tree mortality, and southern pine beetle-caused mortality are each contributing down woody biomass to the fuel bed. In calendar year 2000, 23 of the total 25 counties of the Chattahoochee and Oconee National Forests had one or more southern pine beetle spots for each 1,000 acres of pine and pine-hardwood host; that is, they were in outbreak status. The forecast for southern pine beetle activity in 2001 is for greater mortality than in 2000. A major contributing factor to this situation has been the lack of suppression by cut-and-remove (timber harvest) methods. Environmental groups have effectively stopped this form of suppression because of litigation.

The forest work force is aging, and budgets remain tight. Fire fighters are being lost to retirement and are not being replaced with permanent full-time employees. A current recruitment effort nationwide as part of a fire initiative should begin to turn this situation around by the end of FY2001.

It is highly probable that the Forest Plan revision will result in the congressional designation of additional wilderness and wild and scenic river areas where fire suppression access will be by foot. Additional areas will have restricted access as a Regional Forester's decision under the plan. Future road building will occur rarely, if at all, in currently partially roaded areas. Some roads are likely to be targeted for obliteration as a result of a newly required roads analysis process.

The cumulative effect of the identified trends will be likely larger fires than in the past. Fires in the 50-to-100-acre range are likely to become more common.

The forest has established a prevention team and is using national fire initiative money in part to fund fire prevention technicians. A prevention team has also been established with existing personnel to assist in both wildland and prescribed fires education efforts.

Recommendation: Goals, objectives, and standards and guidelines continue to be achieved, but the Forest Plan revision needs to thoroughly reassess fire and its use so as not to require infeasible or undesirable results.

P-2 – Prescribed Fire

- Acres burned with prescribed fire. Evaluate the extent and effects of prescribed fire on national forest lands.

- In 2000, 30,502 acres were prescribe burned on the Chattahoochee and the Oconee National Forests combined. There were 29,056 acres burned to reduce hazardous fuels and 1,446 acres burned to improve wildlife habitat. Eighty-six percent of this burning was on the Oconee and was about 23 percent of the Armuchee Ranger District, which would result in a 4.4-year return cycle assuming all acres of the district were to be burned, which would not happen. Burning on the Chattahoochee was only 0.6 percent for a 175.5-year return cycle, again assuming all acres were to be burned, which would not happen.

Figure 8 - Eastern White Pine (*Pinus strobus*) Encroachment within Upland Hardwoods

Post-burn evaluations showed that most burns fully achieved and all burns at least partially achieved burning plan objectives. Negative effects such as fireline erosion or overstory mortality were minor and do not show a need for major operational changes. However, there appears to be growing views, both internally and externally, that additional monitoring measures and public reporting forums are needed for the prescribed fire program, but these have not yet been defined.

Figure 9 - Encroaching Eastern White Pine Killed by Prescribed Fire

Burning in hardwoods has surfaced as a concern on both the Chattahoochee and Oconee as the acres prescribed burned have risen. Public concern about burning in hardwoods seems to revolve around a belief that fire is not normally part of hardwood ecosystems. Specifically on the Oconee, the concern is in part because the average amount of burning in the past 3 years would result in an approximately 5-year burning cycle for the entire district. Some personnel of the Georgia Wildlife Resources Division are concerned about the effects to wildlife food supply of mortality to small woody vines, such as muscadine, and mortality of oaks. Within the Forest Service, we have the concern that the existing forest composition is shifting away from oaks altogether. Forest Inventory and Analysis (FIA) data, vegetation data collected as part of the Chattooga River Ecosystem Demonstration Project, and observations all show that the understory of both hardwood and pine cover types on the Chattahoochee and Oconee National Forests are dominated by other woody species in the mid-canopy and shrub layers. These understory species are typically tolerant of the modified environment under a canopy but intolerant of fire. Their current abundance is due to about seventy years of fire and grazing exclusion. Removal of the current canopy by natural causes or timber harvest will, without additional work, release these stems to become the new, but much different, forest.

Figure 10 - Encroaching Mountain Laurel (*Kalmia latifolia*) and Eastern White Pine Killed by a Carefully Applied Prescribe Burn

The 1999 changes to the State of Georgia BMPs have affected fire line construction in and near riparian areas by adding more restrictions. Riparian area direction in preparation as part of Forest Plan revision will add even more restrictions. The effect likely will be to reduce or even eliminate burning in riparian areas in the future.

Recommendation: Plan burning strategically with public involvement as a program per district or zone to address locations to include or exclude, burning cycle length, burn timing within calendar year, monitoring items, and project-specific mitigations needed. Enter post-burn evaluation data in a corporate database for long-term and large-scale analysis. Use the ongoing Forest Plan revision effort to engage the public in crafting a forest monitoring plan that is responsive to their concerns while meeting the demonstrated need for management. Strengthen partnerships with State agencies,

Forest Service Research, and the private sector in addressing monitoring items. Conduct analysis of historic fire and fire weather data to guide the use of prescribed fire.

P-3 – Air Quality

- Report on Air Quality Management Program and assure compliance with air quality standards and guidelines for prescribed burning.

All prescribed burn plans identify acceptable values for mixing heights and transport winds. Acceptable transport wind directions are those that avoid carrying smoke toward identified smoke-sensitive areas. Predicted mixing heights and transport winds in the weather forecast for the day of the burn are compared to the acceptable values of the burning plan. When parameters are in range, a burning permit number is requested from the Georgia Forestry Commission prior to ignition. This permit is granted or denied primarily on the basis of air quality. Ignition does not occur without this permit.

Air quality has assumed greater importance recently due to US EPA considering new and more restrictive particulate matter air quality standards nationwide. In Georgia, the State Air Quality Plan prepared by the Environmental Protection Division (EPD) has been litigated largely due to specific problems with air quality in the Atlanta metro counties. During FY2000, the Oconee hosted a group from US EPA who concluded after observing a typical prescribed burn that they (EPA) needed to do further work on their modeling of prescribed fire effects on air quality in the South. A total burning ban was proposed by the Georgia Environmental Protection Division for 45 counties around Atlanta. The Georgia Forestry Commission (GFC) worked with Georgia EPD to reduce the counties with a proposed burning ban from 45 to 7 by alleviating their concerns about the effects of prescribed burning on air quality. Satellite imagery has also been used to assess smoke at a regional scale and evaluate individual smoke plume movement.

Recommendation: Begin burning earlier in the dormant season when burning on private lands is less likely in order to avoid cumulative smoke problems. Begin burning earlier in the day to reduce the amount of smoldering material contributing smokes as humidity rises with darkness. Continue to work cooperatively with regulatory agencies, cooperating agencies, and the public on smoke management issues. Continue and increase the use of fire information personnel contacting the public prior to and during large burns to explain the use of prescribed fire and answer questions.

P4 – Insect and Disease

- Determine acres and volumes of timber affected, and assess effect of forest management on insect and disease occurrence.

Southern pine beetle activity remained at a moderate level of activity during FY2000 on the Chattahoochee but at epidemic levels on the Oconee. Close coordination continues with forest pest management in determining the best strategy for control of the beetle. Districts continue to monitor and remove infested timber by sale when appropriate. Cut and leave, whereby trees are felled and left in place, are generally being restricted to

young plantations. These trees with their thin bark tend to dry out quickly when exposed to the sun. The combination of high temperatures and drying of the inner bark reduce the viability of developing broods.

It should be noted that gypsy moth was detected in the Chattooga River Watershed in FY1999, control methods were applied and as of this writing, no further outbreaks have occurred.

Recommendation: No changes needed; monitoring continues to meet goals as well as close coordination with forest pest management experts. Goals, objectives, management area direction, and standards and guidelines are being achieved.

P5 – Status of Law Enforcement Problems at Parking Areas near Wilderness

- Determine if concerns of personal safety and property security are improving.

Parking areas at most wilderness sites on the forest have continued to have a low level of law enforcement problems. However, several of the trailhead parking lots at some of the most popular wildernesses continue to experience high levels of vandalism and theft. Law enforcement officers (LEOs) have conducted extensive investigations and increased surveillance at these parking areas.

Chattahoochee-Oconee Recreation Fee Demo Program involves adding fee stations. These have created additional vandalism or theft of monies deposited in the fee tubes

Recommendations: No changes are needed; monitoring indicates that goals, objectives, management area direction, and standards and guidelines are being achieved. Increased surveillance will continue at the problem areas until the break-ins subside. More law enforcement presence will is needed. The forest should consider closing some parking areas and redirecting visitor traffic or have volunteers in the lot as a host to deter break-ins.

P6 – Status of Total Law Enforcement Program

- Evaluate effectiveness of law enforcement efforts in resolving concerns identified in Plan issues.

The forest law enforcement program operates under three primary emphasis areas:

1. Public safety;

2. Property protection, including protection of resources, personal and government property, marijuana detection and eradication; and

3. Occupancy enforcement, including trespass cases.

In FY2000, the forest reported approximately 3 million recreation visitor-days (RVDs). Law enforcement levels and priorities are meeting the needs of the visiting public to the extent possible with current level of LEOs/Agents.

Recommendations: Monitoring indicates that goals, objectives, area direction, and standards and guidelines are being achieved within manpower capabilities. The continued cooperation with county, State of Georgia, and other Federal law enforcement agencies has helped to reduce the burden of enforcement.

RESEARCH

Forest Monitoring Studies and Research

The forest has numerous on-going projects either designed specifically to give answers to monitoring questions or which provide monitoring data as part of wider objectives. Most, if not all are multiyear research projects. We have no data in the interpretive stage at the present time.

Monitoring Report for the John Roland Branch Soil and Water Project

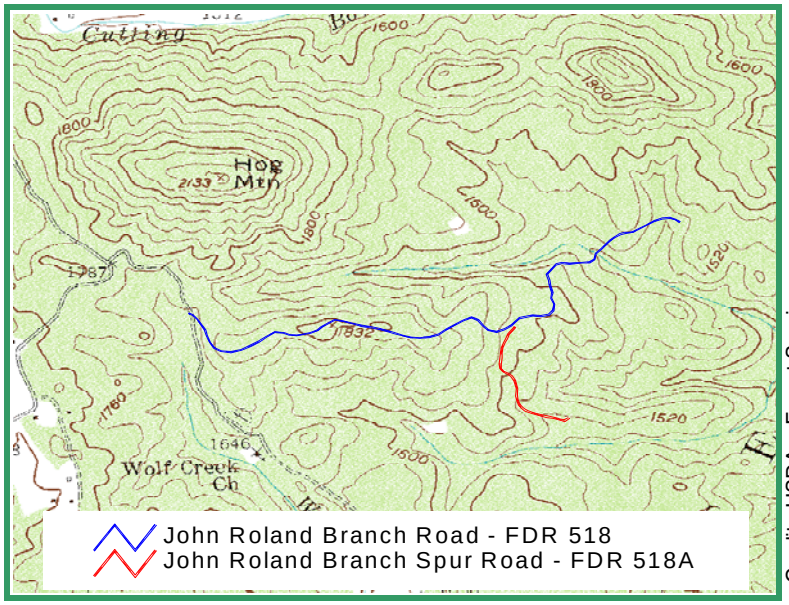
During late summer, 2000 Pat Hopton of the Tallulah Ranger District was given the responsibility of performing the inventory and overseeing the John Roland Branch Soil and Water Project. It was conducted with funding from the Chattooga River Watershed Project. The purpose was to eliminate erosion sources in order to protect and enhance the water quality within the Chattooga River Watershed.

Specific tasks within this project included

- Reconstruct the old woods road that begins at John Roland Branch Road (FDR 518) and ends at the private property line.
- Block and obliterate the old woods road that begins at the John Roland Branch Road and ends at the Wolf Creek Road (FDR 515).
- Block numerous woods roads leading off of John Roland Branch Road.
- Do spot seeding and mulching of bare spots on temporary road in Unit 4, John Roland Branch Timber Sale.
- Install erosion control devices at the live stream crossing on the John Roland Branch Road.

On September 11 and 12, 2000, this work was completed.

On November 29, 2000, the project area was revisited to check the effectiveness of the work. In addition to monitoring, the road was ascertained its exact location through GPS. It was added to the forest's roads inventory (Transportation Inventory System) and recorded as John Roland Branch Spur Road (FDR 518A).



Credit: USDA – Forest Service

Figure 11 - Project Map: Tallulah Ranger District, Chattahoochee National Forest, Georgia

The following are monitoring results of the specific tasks**.**

All work done on reconstructing the old woods road, now John Roland Branch Spur Road, is effective. There are two areas that need follow-up treatment: A culvert for cross drainage must be installed at top of curve (Figure 12), which is in center of photo; and mud hole in center of road (Figure 13) must be drained and #4 gravel placed in its location.

©USDA – Forest Service

Figure 12 - Cross Drainage Culvert Needs to Be Install

©USDA – Forest Service

Figure 13 - Mud Hole on Road

The work done is effective on the old woods road that runs between FDR 518A and FDR 515 (Figure 14 and Figure 15). However, 4-wheeler vehicles have breached the earthen berms, which are used to block the road. Berms must be reworked.

Credit: USDA – Forest Service

Figure 14 - Blocked Temporary Use Road That Has Been Breached

Figure 15 - Side Roads Blocked and Breached

All other work done in this project, the spot seeding in Unit 4 and the erosion control devices at the stream crossing were effective and require no follow-up work. We estimated that it would take 1 day of work with the dozer and operator to perform the follow-up work listed above.

This project was successful and accomplished the objectives of meeting state BMPs and forest soil and water standards and guidelines. Figure 16 shows the new gravel base that was added to the freshly drained and recrowned road. Figure 17 shows new wing-ditch with hay bales (background) installed to catch silt. The bales deteriorate with time and new vegetation will stop any further silt from running off the road.

Figure 16 - New Gravel Base on Drained and Recrowned Road

Figure 17 - New Wing-Ditch with Hay Bales (Background) Installed to Catch Silt

RESPONSE/FEEDBACK

Attached is a form you can use to give us your thoughts or comments on this report or on the subject of Forest Plan monitoring in general. Your comments can help us to do a better job. Send to: *Forest Supervisor, 1755 Cleveland Highway, Gainesville, GA 30501*. To reach us, you may call telephone number **770/297-3000**.

Please visit our web site at: http://www.fs.fed.us/conf for further information and forest news.

MONITORING AND QUALITY REVIEW

Response/Feedback

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