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Department of
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Forest Service
Southern Region

Fiscal Year 2004
Monitoring and Evaluation Report
Chattahoochee-Oconee National Forests

September 30, 2005

2004
Monitoring and Evaluation Report
Chattahoochee-Oconee National Forests

Exact observations and demonstrated truths.

September 30, 2005

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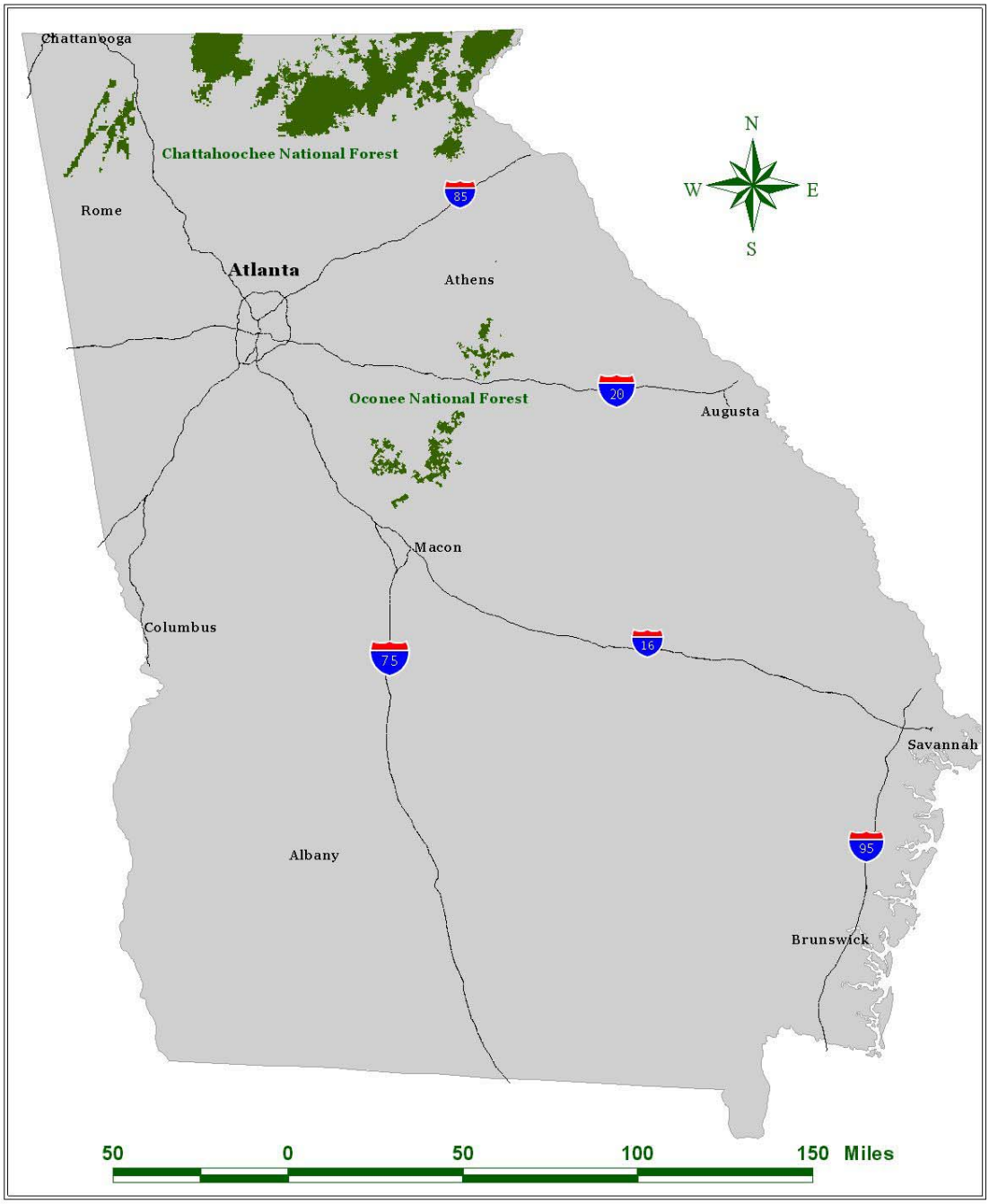
FOREST SUPERVISOR'S ADEQUACY STATEMENT

I have evaluated the monitoring results and recommendations in this report. The recommendations will be implemented, unless new information or changed resource conditions justify a change. I have considered and am making funding shifts in the budget necessary to implement these actions. In addition, additional funding has been requested from the Regional Office in response to these recommendations.

We have begun using portions of the monitoring and evaluation requirements associated with our revised Forest Plan as new projects are being implemented. However, some of the monitoring and evaluation recommendations made in this document are still based upon the older Plan, but will continue to guide our priorities until we completely integrate all of our projects under the new approved revised Forest Plan.

/s/ Kathleen Atkinson

KATHLEEN ATKINSON **Date**
Forest Supervisor **September 30, 2005**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INTRODUCTION

Monitoring and evaluation provides information to determine whether programs and projects are meeting Forest Plan direction, and whether the cost anticipated to implement the Forest Plan coincides with actual costs. Monitoring and evaluation is required by NFMA implementing regulations *(36 CFR 219.12(k))* to determine whether requirements of the regulations and Forest Plan are being met.

The Forest Plan Chapter 5 establishes Monitoring Questions that are to be answered over the course of Forest Plan implementation. Monitoring questions address whether the desired conditions, goals and objectives of the Forest Plan are being met and whether Forest Plan standards are effective. Monitoring Questions are part of the Forest Plan and are stated in terms that will direct what will be monitored, but are not so specific as to address how monitoring will be accomplished.

Monitoring Questions will be further refined during Forest Plan implementation into Monitoring Elements and Task Sheets, which are more detailed, specific and measurable than the Monitoring Questions themselves. Monitoring Elements and Task Sheets may be modified and prioritized to guide monitoring activities over the course of Forest Plan implementation. The Monitoring Summary Table and sample Task Sheet (Appendix G) demonstrate the relationships between Forest Plan Goals, Objectives, Standards and Monitoring Questions, and indicate the nature of Monitoring Elements and monitoring details that are to be further developed during Forest Plan implementation. The Monitoring Summary Table and sample Task Sheet are presented here only for information and may be modified as needed to address changes in needs, priorities, availability of personnel and funding.

The concept of adaptive management is foundational for planning and Forest Plan implementation in a dynamic environment. Regulations require that Forest Plans be revised periodically *(36 CFR 219.10(g)).* However, Forest Plans may need to be more dynamic to account for changed resource conditions (such as large storms or insect outbreaks), new information or findings of science, or new regulations or policies. An effective monitoring and evaluation program is essential for determining when these needs may exist and facilitating quick resolution of a need for change.

The Monitoring Questions were developed to address three types of monitoring:

- Implementation monitoring – addressing whether the Forest Plan is being carried out
- Effectiveness monitoring – dealing with whether desired conditions are resulting
- Validation monitoring – to determine if information used in developing the Forest Plan has changed

Monitoring and evaluation provide information that can be used to keep Forest Plans current. Key results and findings will be used to determine if changes are needed in goals, objectives, standards, the monitoring questions themselves or research needs.

Monitoring and evaluation are distinct activities. The monitoring phase generally includes the collection of data and information, either by observation, direct measurement or compiling data from appropriate sources. Evaluation is the analysis of this data and information, and is used to assess if the Forest Plan is being implemented correctly and whether it needs to be changed. Forest Plan monitoring and evaluations (M&E) will be reported annually in the 'Forest Monitoring and Evaluation Report'.

Monitoring and evaluation may lead to adjustments of programs, projects, or activities or to changes or amendment to the Forest Plan itself. Alternatively, they may be used to recommend changes in laws, regulations, and policies that affect both the Forest Plan and project implementation (FSM 1922.7).

Forest Plan amendments and revisions should be responsive to changes that affect the Forest Plan, and may be needed at any time if a Forest Plan becomes out of date in some way. Within an adaptive management framework, the need to amend or revise the Forest Plan may result from:

- Recommendations of an interdisciplinary team, based on evaluation and monitoring results
- Changes in agency policy and regulations
- Planning errors found during Forest Plan implementation
- Changes in physical, biological, social, or economic conditions

The evaluation of findings under the following Monitoring Questions will lead forest managers to these determinations.

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.

The Process

Forest Plan monitoring is an ongoing task. Examples of formal monitoring are reviews, functional assistance trips, 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.

Objectives

Objectives of Quality Reviews 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 being applied appropriately, and are they doing what they are expected to do?
- Are mitigations being applied appropriately and working?

Evaluation

- The M&E Team evaluates the findings 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 or 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 recreation), Staff Officers and specialists from the Supervisor's Office or Regional Office conduct their own reviews of their resource specialty. These reviews are carried out and checked for consistency with the Forest Plan. The results are documented and used in Forest Plan monitoring.

Plan in Hand

- The Forest has begun to implement these reviews beginning in the latter part of 2004. What they consist of is going out on the ground and looking and discussing with the implementing Ranger District an approved project plan, prior to final implementation.

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 multi-resource 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 a portion of the forests for forest cover composition and condition and the information is updated 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 1983 through 2002. Likewise, legally harvested black bear numbers have increased (a record 245 bears harvested in 2000) and the population has probably reached carrying capacity. At the same time, nuisance bear reports to Georgia wildlife officials have begun to increase.

- Fisheries/Stream Aquatics– Forest personnel monitor several streams across the forests for fish populations and conditions each year. A subset of the streams sampled have been originally sampled in the 1950s and 1960s. In addition, some streams that are sampled have had, or will have, fish habitat improvement structures constructed to measure the fish response to these efforts.

- Hunting Check Stations – Forest personnel cooperate with Georgia Department of Natural Resources – Wildlife Resources Division (GAWRD) in staffing check stations on Wildlife Management Areas (WMA's) across the forests. They collect data on animal condi-

tions, hunter success ratios, and age structure of game species populations. This is used in Forest Plan monitoring.

- Neotropical Migratory Birds (NTMB) and Breeding Bird Surveys – Wildlife Staff and qualified bird identification personnel collect and evaluate population and occurrence data as it relates to habitats, abundance, numbers of species, and effects of management on all birds that breed within the Forests. In recent years, these birds have been a focus of concern because of population declines in various parts of the nation. We currently are monitoring 200 permanent bird points annually, not including occurrence bird data which is collected all year at any location in or near the forests.

- 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 and Biological Evaluations for parts of the forests and for projects. This data is being integrated into the Geographic 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.

SUMMARY OF RESULTS

Following the table is a narrative that gives a more detailed description of what the team found and its recommendation.

Summary of Forest Plan Compliance by Monitoring Item
Year 2004

Monitoring Question.	Brief Description	Meeting Plan Intent	Need clarification/ improvement					
			Management Prescription	Standard	Management Direction	Allocations	Outputs	Goals Identified
1	Rare Communities	Yes						
2	Landscape level composition	Yes						
3	Key Successional Habitats	Yes						
4	Terrestrial Habitats	Yes						
5	Aquatic Habitats	Yes						
6	Forest Health Threats	Yes						
7	Federally listed and Viability Concerns	Yes						
8	Demand Species	Yes						
9	Recreation Experience	Mostly						31, 32 34
10	Recreation Impacts on Environment	Yes						
11	Wilderness Character	Yes						
12	Wild and Scenic River Condition	Yes						
13	Scenery and Recreation Settings	Mostly						29, 33
14	Heritage Sites	Yes						
15	Watersheds: Maintained and Restored	Yes						
16	Conditions: Wetland, Floodplain, Riparian	Yes						
17	Outputs Compare with Projected	Yes						
18	Silvicultural Requirements	Yes						
19	Plan Objectives and Standards Meeting Purpose	Most						Above, see #9 and #13

The following are possible recommendations:

- No changes needed; monitoring indicates that goals, objectives, management prescriptions, and standards are being achieved.
- Refer recommended action to the appropriate line officer for improvement in application of management area direction and standards interpretation.
- Forest Plan Objectives not being met.
- Forest Plan Amendment required.
- Modify or clarify the goals, objectives, standards or management prescriptions.
- Revise the schedule of outputs.

DETAILED MONITORING AND EVALUATION REPORT

The evaluation of findings under the following Monitoring Questions will lead forest managers to these determinations.

1. Are rare ecological communities being protected, maintained, and restored?

A Forest Plan goal, along with related objectives and standards, are designed to maintain and restore rare communities. To monitor accomplishment of these provisions and the effects that overall Forest Plan implementation will have on rare communities, trends in number of occurrences, locations, and conditions and effects of maintenance and restoration activities will be tracked.

At landscape scale, the short answer is 'no' for the Chattahoochee and 'yes' for the Oconee. On the Chattahoochee, the most common fire regime condition class is a '3' meaning significant departure from historic fire regimes and a high risk of loss of key ecosystem components. Forest communities typically have a dense midstory of shade tolerant and fire intolerant species that preclude the natural regeneration of the existing overstory. Pine mortality caused by southern pine beetle has altered composition and structure on upland sites and hemlock mortality caused by hemlock woolly adelgid is now in the process of altering composition and structure of riparian forest communities.

Element : Trends in the conditions of each known rare community type.

1. Three mountain bogs are being managed by the Georgia Plant Conservation Alliance to maintain the open character and hydrology of the sites. Encroaching vegetation is being removed by hand tools, and in some cases augmentation of the sphagnum mats is being accomplished with the help of the Atlanta and the State Botanical Gardens. Two additional bogs, containing the rare bog turtle, are being maintained by prescribed burning and girdling of trees to admit more sunlight into the area. A sixth bog was planted with the federally listed green pitcher plant in 1985. The site is not ideal for this pitcher plant, and the encroachment of competing vegetation such as various Eupatoriums and sedges is a constant management problem. With this management, the condition of all of the bogs is steadily improving.

2. The condition of cliffs and rock outcrops, and caves and mines is being maintained by following the associated standards in the Forest Plan.

3. The best examples of canebrakes and restorations are located on the Oconee. The District has plans to prescribe burn the sites in FY 2006.

4. Table mountain pine restoration is an ongoing project on the Tallulah Ranger District. In 2005, the District conducted prescribed burns in the Roach Mill Creek area to improve and expand table mountain pine sites. Thinning of a table mountain pine stand was implemented to reduce the risk of southern pine beetle infestation and to maintain overall health of the pines. Table mountain pine seed was collected and processed to start a seed bank for the southern Appalachians.

Due to management described above and Forest Plan standards, the trend in the conditions of the communities is one of improvement.

Element : Acres and/or number of occurrences of rare communities treated to maintain or restore desired conditions.

1. As stated above, 6 mountain bogs are receiving treatment to improve and restore their bog characteristics.

2. Rock outcrops, cliffs, caves and mines are fixed features on the Forest landscape. It would be difficult to estimate the acreage or number of sites of this habitat. However, protection through Forest Plan standards is maintaining the desired condition in all of these communities.

3. The Oconee District plans to burn 100 acres of canebrakes in FY 2006 to restore and expand the sites.

4. 550 acres of table mountain pine were burned on the Tallulah Ranger District to restore desired conditions. Seventeen acres were thinned to improve tree health, and 3 bushels of seed were collected for seed banking.

2. Are landscape- and stand-level composition, structure, and function of major forest communities within desirable ranges of variability?

Success in maintaining and restoring composition, structure, and function of forest ecosystems within desired ranges of variability is reflected by both changes in forest condition and by levels of management and other effects that are shaping these communities. Monitoring will include tracking the abundance of major forest cover/community types and levels of management activities conducted to maintain and restore desired conditions. Population trends and habitats of Management Indicator Species will be monitored to help indicate effects of national forest management within selected communities.

There were 18,000 acres prescribe burned on the Oconee and 1,861 acres prescribe burned on the Chattahoochee.

Population Trends and Habitats of MIS to be monitored

Indicator	Reasons for Selection
Hooded Warbler (Wlsonia citrina)	Changes in presence and abundance of hooded warblers in mature mesic deciduous forests will be used to help indicate the effectiveness of management at providing dense understory and midstory structure within these forest communities.
Red-cockaded Woodpecker (Picoides borealis)	Trends in populations of this species will be used to help indicate the effectiveness of management at maintaining mature pine forests in open, fire-maintained conditions. (See also Monitoring Question 7.)
Red-cockaded Woodpecker (Picoides borealis)	Trends in presence and abundance of these species in mature pine forest will be used to help indicate effectiveness of management at maintaining these communities in open fire-maintained conditions.
Field Sparrow (Spizella pusilla)	Trends in presence and abundance of these species in areas restored to woodlands, savannas, and grasslands would be used to help indicate effectiveness of management at establishing desired conditions in these restoration areas.

Element : Trends in hooded warbler occurrence in relationship to mature mesic, deciduous forests.

Bird monitoring data suggests that the hooded warbler population has slightly increased on the forest. The overall amount of preferred habitat (older, mesic hardwoods) has increased over the past decade, making sure that the hooded warbler have suitable habitat. The structure of the mature deciduous hardwood community that this species represents is within a desirable rate of variability, with plenty of that habitat available.

Element : Trends in red-cockaded woodpecker (RCW) populations in relationship to mature pine forests.

Red-cockaded woodpecker active cluster numbers have risen from 11 in 1985 to 16 in 2005, with some increases and minor fluctuations over the past two decades. The total acres of preferred 60 year old pine and pine-hardwood habitat that the RCW needs to prosper continue to increase on the Oconee National Forest. Therefore, the overall composition and structure of the mature pine forest on the Oconee is within the desirable rate of variability for the landscape and the RCW.

Element : Trends in field sparrow occurrence in relationship to woodlands, savannas, and grasslands.

The field sparrow prefers old fields, brushy woodlots with deciduous edge and it is associated with early successional habitat. This habitat is somewhat limited on the Chattahoochee National Forest. Bird monitoring surveys show population trends to fluctuate on the Oconee, with some slight increases occurring over the past few years. However, total abundance numbers are relatively low, indicating that some early successional habitat improvement opportunities identified in the plan should enhance future habitat conditions. Since the overall composition and structure of woodlands, savannas and grasslands is low, increases in this type of habitat should be seriously considered and continue to increase in the future.

3. Are key successional stage habitats being provided?

Forest goals, objectives, and standards have been established for maintaining a balance between the early, mid-, and late-successional habitat conditions. Some wildlife species depend on early- successional forests, while others depend on late-successional forests. Trends in successional conditions and abundance of key successional habitats, such as high-elevation early-successional habitat, mature forest interiors, old growth, and permanent wildlife openings, will be monitored. Population trends of Management Indicator Species selected to help indicate effects of management on successional habitats will be monitored.

Element: Trends in abundance and conditions of high elevation early successional habitats.

Progress is being made at restoring the historic early-successional habitat (ESH) component on the Forest. In particular ESH at elevations > 2500 feet on the Chattahoochee is being provided and the bird response has been very quick. On the Oconee mid-story removal work has resulted in a response by the RCW with new cavity starts. However, the amount being provided yet lags the need. Localized areas, typically 6th level watersheds, have great improvement but large areas of the forest continue to have little or no early-successional habitat.

Population Trends of MIS Monitored for Successional Habitat Status

Indicator	Reasons for Selection
Prairie Warbler (Dendroica discolor)	Trends in presence and abundance of this species in early-successional forests will be used to help indicate the effectiveness of management in achieving desired conditions within these habitats.
Chestnut-sided Warbler (Dendroica pensylvanica)	Changes in presence of this species in areas that provide high elevation early-successional habitats will be used to indicate effectiveness of management in achieving desired conditions within these sites.
Acadian flycatcher (Empidonax virescens)	Trends in presence and abundance of this species in mature riparian forests will be used to help indicate the effectiveness of management in achieving desired conditions within these habitats.
Ovenbird (Seiurus aurocapillus)-Chattahoochee NF; Wood Thrush (Hylocichla mustelina)-Oconee NF	Trends in presence and abundance of this species in mature deciduous forests will be used to help indicate the effectiveness of management in maintaining desired condition relative to forest interior habitats.
Scarlet Tanager (Piranga olivacea)	To indicate trends in presence and abundance of this species in the upland oak community, the scarlet tanager is selected to help indicate the effectiveness of management.
Swainson's Warbler (*Limnothlypis swainsonii*)	To indicate trends in early-successional riparian areas, the Swainson's warbler is selected to represent early-successional riparian habitats in the Piedmont (Oconee NF). It is strongly associated with canebrakes, tangles, and thick shrubby understories of open bottomland hardwoods and mixed forests.
Pine Warbler (*Dendroica pinus*)	The pine warbler is closely associated with pine and pine-oak forests, generally occurring only where some pine component is present. It therefore is an appropriate indicator of the effects of management in restoring and maintaining pine forests

Element : Trends in prairie warbler occurrence in relationship to early successional habitat.

Bird monitoring survey data for the forest suggests that abundance trends for this bird are relatively stable with some fluctuations from year to year. Prairie warbler populations have slightly declined recently according statewide Breeding Bird Survey Data for Georgia. Since this bird is closely associated with early successional habitat, it will be important for the forest to continue to strive for habitat enhancement projects that create such habitat. Red-cockaded Woodpecker habitat restorations benefit this species.

Element : Trends in chestnut-sided warbler occurrence in relationship to high elevation early successional habitat.

The chestnut-sided warbler is associated with early successional habitat that typically occurs above 2,000 feet elevation. The forest plan addresses the need for creating some of this limited habitat, and wildlife-habitat generated timber stand improvements on the Chattahoochee are being planned. Overall trends in abundance are relatively low on the forest and this warbler is also experiencing some declines statewide over the past several decades, according to the Breeding Bird Survey conducted throughout Georgia.

Element : Trends in Acadian flycatcher occurrence in relationship to mature riparian forests.

Riparian habitat is the key area that the Acadian flycatcher is strongly tied to. According to monitoring data for the forest, Acadian flycatcher populations have remained fairly stable with some slight increases in abundance during the last 4 years. As provided for in the forest plan, riparian habitat is expected to remain fairly constant in the future, and streamside and riparian area protection standards will help ensure that riparian areas utilized by the Acadian flycatchers will continue to be available as key habitat areas.

Element : Trends in ovenbird occurrence in relationship to mountain forest interior communities.

The ovenbird is strongly associated with mature forests that contain interior forest habitat. It is commonly found on the Chattahoochee National Forest. Relative abundance trends form bird point monitoring data indicates a high number of occurrences for this bird species. This indicates that mature, forest interior habitat is abundant on the forest. Therefore, the overall composition and structure of mountain forest interior communities are within a desirable rate of variability.

Element : Trends in wood thrush occurrence in relationship to Piedmont forest interior communities.

The wood thrush occurs more frequently on the Oconee National Forest than it does on the Chattahoochee National Forest. It is closely associated with forest interior. Overall, its occurrence trends have remained fairly stable. No significant increases or declines are evident over the past decade. The forest plan standards should continue to maintain or enhance suitable habitat of moist deciduous and mixed interior communities within the Piedmont and on the Oconee National Forest.

Element : Trends in scarlet tanager occurrence in relationship to upland oak communities.

The scarlet tanager is found mainly in upland oak habitat types. Bird monitoring data shows this species to be not very common on the Oconee, but it has a relatively high level of occurrence on the Chattahoochee National Forest. Forest plan standards are in place to make sure that upland communities will be maintained on the forest in the future.

Element : Trends in Swainson's warbler occurrence in relationship to Piedmont riparian habitat, canebrakes and thickets.

The Swainson's warbler is mainly associated with canebrakes and thick understories in bottomland habitats on the Oconee National Forest. The total number of occurrences reported by monitoring surveys over past decade is very low, with only 4 occurrences total. Because of such a low number of occurrences for this species, an abundance trend has not been established. There currently is about 10 acres of canebrake habitat restoration planned for the Oconee National Forest. It is hoped that the Swainson's warbler will respond to that habitat treatment in the near future.

Element : Trends in pine warbler occurrence in relationship to pine and pine-oak forests.

The pine warbler is more abundant on the Armuchee/Cohutta Ranger District and the Oconee National Forest, mainly because these areas provide more pine and pine-oak stands in general. Annual bird monitoring data for the forest shows its numbers to be relatively stable since 1997. Little change in pine forest habitat is expected overall, but pine management for the RCW on the Oconee is expected to continue and actually increase in the future. Monitoring and controlling southern pine beetle infestations in the future will also be helpful to ensure the continuation of this key habitat type.

Element : Trends in acres of wildlife openings.

There are about 1,300 acres of openings on the Chattahoochee National Forest, and 350 acres of permanent openings on the Oconee National Forest. Of this total of 1,650 acres, approximately 1,175 acres are on Georgia DNR Wildlife Management Areas (WMAs) and are maintained in cooperation with the DNR. There are 475 acres of opening outside the WMAs that are maintained by the Forest Service. This key habitat type is being maintained, and my even be increasing slightly due to some linear wildlife opening and "daylighting" projects that are currently underway on the Chattahoochee National Forest.

Element : Trends in abundance and distribution of landscapes important for forest interior birds.

Interior forest is plentiful on the forest and it is unlikely that this key habitat type will ever be reduced in abundance during the life of the current plan. All of the bird MIS that are linked to interior habitat needs are increasing or stable in occurrence and abundance.

Element: Trends in other permanent openings.
None to report, status quo.

4. How well are key terrestrial habitat attributes being provided?

Special habitat attributes such as hard and soft mast, den trees, snags, and downed wood are necessary elements for certain species. A variety of Forest Plan goals, objectives, and standards provide for the protection, restoration, and maintenance of these elements. Trends in the abundance and condition of key terrestrial habitat attributes and associated Management Indicator Species will be monitored.

MIS Monitored for Key Terrestrial Habitat Attributes

Indicator	Reasons for Selection
Pileated woodpecker (Dryocopus pileatus)	Trends in presence and abundance of this species across the forest will be used to help indicate the effectiveness of management in maintaining desired condition relative to abundance of snags.

Element : Trends in pileated woodpecker occurrence as an indicator of snag abundance.

The pileated woodpecker requires large snags for nesting and foraging. Therefore, the occurrence of this species is correlated with forested habitats with an abundance of dead, standing trees. Bird monitoring survey data on the forest shows that this large woodpecker is doing well, and is stable with slight increases and fluctuations. Forest plan objectives designed to maintain a good mixture of forest ages and types are in place, and snag retention is also stressed. This key habitat component of the forest is being provided in adequate numbers and size.

Element: Trends in hard mast production.
Status quo

Element: Acres of vegetation management in riparian areas.
None to report

5. What is the status and trend in aquatic habitat conditions in relationship to aquatic communities?

The Forest Plan provides for protection and restoration of riparian ecosystems, wetlands, and aquatic systems and for assuring that aquatic habitat conditions are suitable to maintain native aquatic communities. Water quantity and quality, atmospheric deposition, in-stream large woody debris, and aquatic species passage will be monitored. Population trends for aquatic MIS in relation to the habitat conditions they are selected to represent will monitored.

Element: Overall stream health

Salamander surveys in 8 streams, including those with listings of impairment by EPA demonstrated that the numbers and diversity of salamanders decreased in those streams with low EPA ratings. These lower ratings are a result of streams flowing thru private lands prior to flowing on public lands. In streams where the entire stream reach is on public lands, stream assessments were good to excellent. Another representative of aquatic health was the 2 year study done in 2004 and 2005 to determine if there were any significant differences in salamander number and or diversity on the Oconee and Tallulah Districts in areas of prescribed burning versus those areas with no burning. No significant differences were found, indicating the wet habitats needed for larval development are intact in areas of burned versus non-burned sites. Macroinvertebrates were sampled and identified to genus in 10 streams and the results were consistent with EPA findings that streams that are entirely on public lands had good to excellent ratings whereas those with private influence had lower ratings.

Element: Trends in water quality parameters and physical habitat conditions in relationship to aquatic communities.

Fish samples from 2003 and 2004 in conjunction with water chemistry testing and macroinvertebrate analysis has shown the streams in the Chattooga River basin to be in the range of good to excellent condition. In 2005 fisheries surveys in the Etowah watershed are representative of the stream continuum concept of increased diversity as one moves further downstream. In 2004, 15 stream sites were sampled using the standardized stream sampling annual efforts. In total there are 18 streams across the forest, with most of those being sampled annually since 1991. The average number of trout collected in 2004 is consistent with past years and numbers have relatively remained constant.

6. What are status and trends of forest health threats on the forest?

Measures designed to control or mitigate negative effects of insects, disease; native, non-native invasive species, air pollution, and high fuel levels are important aspects of this Forest Plan. Trends in occurrence and effects will be monitored.

Element: Native and non-native insect occurrence and control.

The hemlock woolly adelgid continues to progress westward across Georgia and is expected to sweep throughout the hemlock range in the southeast. In 2005 the Southern Regional Forester decided to allow suppression throughout the Chattahoochee within about 144 areas encompassing about 20,000 acres to conserve genetic diversity. Pre-commercial and commercial thinning projects in young pine stands have reduced the SPB risk but activity continues to lag the need and one or more SPB outbreaks can be expected before the 'backlog' is caught up.

Non-native invasive species are widespread on both the Chattahoochee and Oconee. A few small scale projects have begun to test eradication tools and techniques for Nepalese brown top grass and Chinese privet. The conversion in FY05 to FSVeg as the Forest Service national vegetation database provides a much greater ability to collection data on these species and to share it widely. Co-operative work is underway with the American Chestnut Foundation to develop blight resistant chestnut for out planting.

Element : Trends in the number of occurrences and/or acreage of selected non-native species.

Japanese stiltgrass (*Microstegium vimineum*) appears to be increasing, primarily along road banks. It is seen in many types of habitat across the Forest and can tolerate shaded conditions, unlike many grass species. It occurs seemingly "in the middle of nowhere" including areas with no recent ground disturbance. Even with a concerted effort to rid areas of this grass, it is so pervasive both on Forest and on private land, it is doubtful this species can be eradicated.

Sericea lespedeza (*Lespedeza cuneata*) is no longer used on the Forest for erosion and revegetation projects. However, it is still commonly used by highway departments and easily invades adjoining Forest Service lands. Occurrences seem to be stable or in some areas, increasing, and will not likely decrease without the use of herbicide.

Japanese knotweed (*Polygonum cuspidatum*) is known only from one site on Forest Service land. It occurs along a road in a 50 ft. x 20 ft. area. This plant is common on private land in the surrounding area, especially around Copperhill, TN.

Chinese Privet is widespread throughout the stream courses (riparian corridors) of streams on the Oconee Ranger District.

Element: Effectiveness of treatments to eliminate or control non-native invasive species.

Projects such as the proposed Davenport Mountain Stewardship Project are specifically addressing treatment to eliminate several non-native invasive species. The project has not yet been implemented. Therefore, effectiveness of treatments is not known at this time. Proposed treatment is by limited herbicide application.

Plans are in progress to attempt to remove the Japanese knotweed by hand, before it spreads further. The knotweed is known to have the ability to grow through asphalt by means of rhizomes, and according to all the literature this plant is very difficult to eradicate. It is best treated with a combination of mechanical and chemical means. If hand removal is not effective, herbicide treatment may be proposed. Cutting, burning and herbicide stump treating of Chinese privet helps in controlling the plant within Scull Shoals Historic site.

7. What are the status and trends of federally listed species and species with viability concerns on the forest?

Contribution to conservation and recovery of federally listed threatened and endangered species is an important goal of this Forest Plan. Trends in occurrence or abundance of these species will be monitored along with levels of management activities implemented for the purpose of achieving recovery. Some threatened and endangered species have been selected as Management Indicator Species because of their critical dependence on national forest management for recovery.

Element: Status and trends of selected aquatic biota.

Annual surveys in 2004 and 2005 have been conducted in all aquatic T&E (mussels and fish) watersheds where T&E are present on Forest Service lands. These surveys have been by visual examination by snorkeling or with view buckets at the sites and counting the T&E. Results from these surveys indicate no significant changes in number of T&E at these sites over time.

Element: Status and trends of other federally listed and viability concern species:

Brook trout surveys in 2004 were conducted in 17 streams in addition to the 36 streams sampled in 2003 and 2004 in the Chattooga watershed. These surveys have resulted in an increase in number of streams known to have brook trout.

Monitoring for Threatened and Endangered Species

Indicator	Reasons for Selection
Red-cockaded Woodpecker (Picoides borealis)	Trends in populations of this species will be used to indicate effectiveness of management activities designed specifically to meet recovery objectives for this species. (See also Monitoring Question 2.)
Smooth coneflower	Trends in populations of this species will be used to indicate effectiveness of management activities designed specifically to meet recovery objectives for this species.
Georgia aster	Trends in populations of this species will be used to indicate effectiveness of management activities designed specifically to meet recovery objectives for this species.

Maintaining habitat capable of supporting viable populations of native and desired non-native species is also an important goal of the Forest Plan. Many objectives and standards are designed to meet this goal. Monitoring will focus on trends for populations

and/or habitats of species of viability concern. Where feasible, species monitoring will often be accomplished by monitoring communities of species (e.g., fish, bats, birds). Individual Management Indicator Species have been selected because their viability is critically dependent on national forest management.

Element: Population trends in red-cockaded woodpecker (RCW) as an indicator of effectiveness of recovery of the species.

The RCW population has increased from 11 active family units (clusters) in 1985 to 16 in 2005. Its preferred habitat is 60 years old or older pine trees for nesting and roosting, but it can forage for insects and arthropods on smaller and younger trees in pine and pine-hardwood stands on the Oconee National Forest. DuringFY2005, around 500 acres of pine thinnings and mid-story removal was carried out on the Oconee National Forest to enhance RCW habitat. Also, 37 new inserts were installed, and 9,600 acres were prescribed burn this past year to help improve and maintain RCW habitat on the Oconee. Recent cooperative meetings and field reviews with the U.S. Fish and Wildlife Service (USFWS) also confirmed that we were making effective progress in managing this important bird for recovery of the species.

Element : Population trends in smooth coneflower as indicator of effectiveness of management on recovery of the species.

The smooth coneflower is a federally listed plant found on the Chattahoochee National Forest, but only on the Chattooga Ranger District. It typically occurs along roadsides and utility rights-of-ways where more sunlight is available. The forest has a long term goal of expanding the coneflower populations to more natural settings. Coneflower sites on the forest are being maintained and expanded by prescribed burning and hand tool removal of encroaching vegetation.

Coneflower populations appeared to be doing well in 2005, with numerous blooms and new vegetation rosettes being present. In 2004, a 5 acre coneflower area was burned and vegetation near existing plants removed with hand tools. In other appropriate areas, additional prescribed burning and vegetation removal was also carried out in 2004-2005 to help expand the coneflower habitat. The forest continues to work with the Georgia DNR and the USFWS to meet forest plan objectives of increasing the number of coneflower populations by improving and/or increasing available habitat for natural recruitment. Several hundred acres of potential coneflower habitat, including existing sites with coneflower populations are currently in the planning stages for prescribed burns. These proposed burns would be completed with the cooperation of Georgia DNR and USFWS.

Element : Status and trends of cerulean warbler.

The cerulean warbler needs canopy gaps in the North Georgia for preferred habitat. Very few cerulean warblers have been recording on the forest in the past. This year (2005), about 200 acres of timber cutting sites that are designed to create forest canopy gaps to attract ceruleans were undertaken on the Brasstown Ranger District. Monitoring indi-

cated several cerulean warblers were heard in some of these areas this year. We expect for more of these birds to visit and nest in these treated areas in the future. Therefore, the status and trend of this species with viability concerns seems to be improving, and should do so as a result of proactive habitat restoration by vegetation management treatments through timber sales on the forest.

Element : Status and trends of golden-winged warbler.

Golden-winged warbler prefer early successional habitat that occurs at higher elevations. The forest is currently planning habitat restoration at Brawley Mountain on the Toccoa Ranger District for this bird and other species that require this type of habitat at higher elevations. The Armuchee/Cohutta Ranger District is analyzing several habitat management projects designed to enhance habitat for the golden-winged warbler.
There were a number of the rare golden-winged warblers heard on the Coopers Creek cerulean habitat areas this year where habitat is currently being improved. These habitat objectives addressed in the forest plan are expected to continue, resulting in an increase of this neo-tropical migrant bird as it visits these habitat enhancement areas in the future. As with the cerulean warbler, we are seeing the status and trend for this bird improving as more preferred habitat becomes available in the future.

Element : Status and trends of selected bat communities.

In 2001, Dr. Susan Loeb with Forest Service Research began conducting bat inventories across the forest. Mist netting and Anabat survey techniques were conduced for 40 nights at 18 different locations. Buildings and bridges were also inventoried. Several species of bats were captured and recorded during these inventories. They were big brown bats, red bats, little brown bats, small-footed bats, northern long-eared bats, evening bats, eastern pipistrelles and 4 male gray bats which ere apparently foraging along a creek. The latter were not far from a known grey bat bachelor cave located on private land. In 2002, after 48 net nights of surveys across the forest, Dr. Loeb netted the mentioned above species, plus 1 Rafinesque's big-eared bat and 1 hoary bat.

Surveys have been conducted on the Oconee Ranger District, too, by the University of Georgia.

No additional surveys were necessary after these outings. The data collected seems to indicate that a healthy, diverse and varied bat population occurs on the forest.

Element : Status and trends of selected plant communities.

Sphagnum bog communities containing the rare purple pitcher plant and sheep laurel are increasing in size due to management discussed in Monitoring Question #1, above. In addition, several of the bog plants have been grown at Atlanta Botanical Garden from local genetic stock, and planted back into the bogs to augment the populations.

A CONF bog restored for bog turtle release, will eventually be planted with the federally threatened swamp pink and the rare sheep laurel and mountain purple pitcher plant.

To maintain and increase the open habitat of these sites, the bogs are being managed through limited prescribed burning, woody vegetation removal and girdling of surrounding trees. It is expected that these communities will increase over the 10-year planning period.

The open woodland habitat containing the federally listed smooth coneflower and other plants rare to Georgia such as Georgia aster, Fraser loosestrife and curlyheads, is being managed to expand the community. Prescribed burning and removal of encroaching vegetation by hand tools has been conducted to maintain and expand sites currently containing these species. Proposals are in progress to increase this habitat and its associated plants and animals. Seeds of plants characteristic of this habitat are being collected for propagation by the State Botanical Gardens, and for outplanting back into appropriate sites. Plots are being established to monitor the effects of management on the habitat and vegetation. It is expected that these communities will increase over the 10-year planning period.

Element: Status and trends of other federally listed and viability concern species.

Swamp Pink -
Helonias bullata, or swamp pink, is only known to occur in one site in Georgia, on private land. The Atlanta Botanical Garden propagated plants from this site, and with the collaboration of USFWS, the plants are being placed on Forest Service land near the original seed source. A second site containing the bog turtle will also be planted with the swamp pink. If transplanting is successful, the trend will be one of an increase for this federally listed plant.

Small-whorled pogonia -
The federally listed small-whorled pogonia (*Isotria medeoloide*s) is known from several sites on the Forest. The plant appears to be a mid-successional species, and research is still being conducted to determine if there are management regimes that would benefit this orchid.

Monitoring results show a fluctuation in numbers and fruiting year to year for the past 10 years:

Small-whorled pogonia (*Isotria medeoloides*) Monitoring1995 Through 2005

	Population* (number of plants) (----- indicates didn't get to site that yr.)									
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2005	34	33	52	-----	6	0	40	4	8	11
2004	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2003	39	45	48	-----	6	1	21	10	4	5
2002	45	-----	-----	5	-----	-----	-----	-----	-----	-----
2001	55	27	70	7	17	0	16	27	11	8
2000	54	32	80	11	13	1	10	27	13	7
1999	76	22	125	14	8	3	24	41	14	10
1998	83	25	137	13	18	4	42	34	22	10
1997	55	34	119	8	23	4	27	44	19	22
1996	83	30	120	6	19	2	15	44	24	10
1995	86	29	114	7	17	2	19	46	27	12

* Population: 1.Blackwell Crk.; 2. Cashes Valley; 3.Bailey Crk.; 4. Keener Crk; 5.Woody Branch; 6.Bushyhead Gap; 7. Peter Knob; 8. Flat Crk.; 9. Cooper Crk.; 10. Long Crk.

Bog turtle

In Georgia, the bog turtle occurs in two bogs on Forest Service land, and several sites on private land. The bogs are being managed as discussed in Question #7, above. One bog contains a natural population of the turtle. Seven captive-raised turtles from eggs of wild, egg-bearing females, were released into the second site in June 2005, with radio transmitters attached to 4 of the turtles to monitor their movements. So far, all turtles are surviving. With maintenance of their bog habitat, it is hoped these turtles will reproduce and increase the population.

Blue shiner

Monitoring for federally listed fish is conducted annually by snorkeling methods in the Conasauga and Etowah watersheds. Monitoring in 2005 has shown that the blue shiner population is stable.

8. What are the trends for demand species and their use?

The Forests provide large public ownership with opportunities for hunting, fishing, wildlife viewing, and collection of special forest products. Monitoring of some game species populations and/or harvest levels are done in coordination with the GA DNR. Some of these species are selected as Management Indicator Species where effects of national forest management are important to meeting public demand. Some species that are collected as special forest products will be monitored through management of the permitting process.

Element: Fish stocking levels by type and location.

In 2004, approximately 545,824 rainbow trout and 24,504 brown trout were stocked in 71 streams and small impoundments across the Chattahoochee National Forest. As of September 1 2005, 513,179 rainbow trout have been stocked in the same 71 streams and small impoundments.

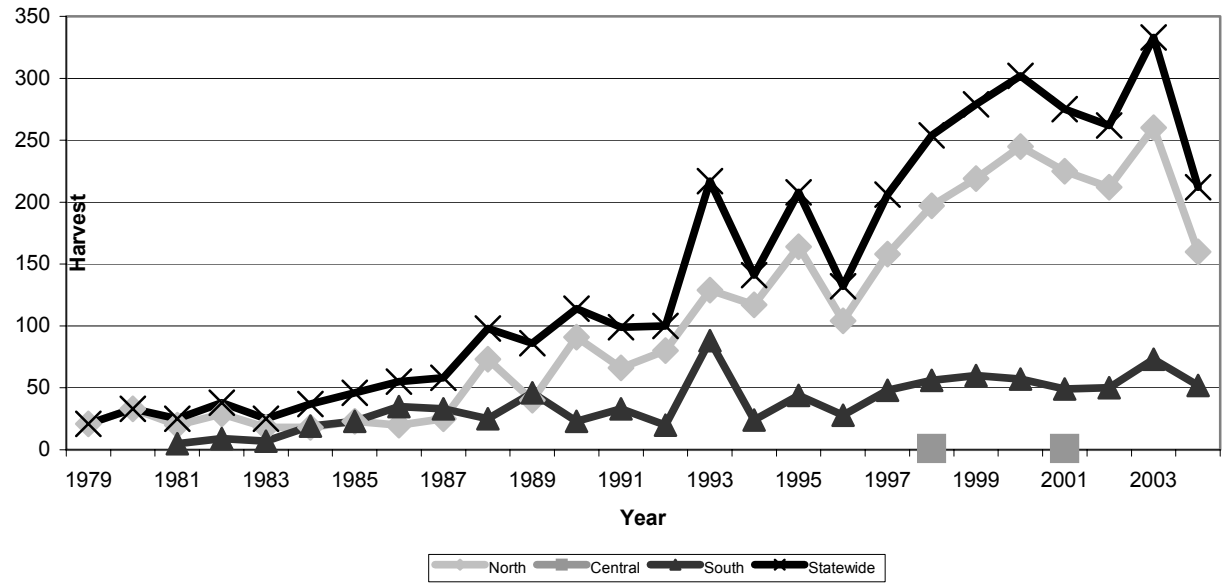
MIS Monitored for Demand Species

Indicator	Reason for Selection
Black Bear, White-Tailed Deer	Trends in harvest levels and hunting demand will be used to help indicate effectiveness of management in meeting public demand for these species.

The bear population in North Georgia has been steadily increasing for the past 25 years according to information provider the Georgia Department of Natural Resources (Cantrell et al. 2005). Most suitable black bear habitat in the mountains of Georgia is presently occupied with bears. We are also seeing a dramatic human population increase in that area. This is contributing to an increase in the bear-human interactions. Improper gar-

bage management is the most common contributor to nuisance bear complaints. The Forest Service and the Georgia Department of Natural Resources (GADNR) are working together to promote bear awareness and education in Georgia. Bear-proof trashcans continue to be installed in camp grounds and recreation areas. Also, trail shelters along the Appalachian Trail are being outfitted with cable storage systems to discourage bear pilfering and minimize human contact.

Table 3 Georgia Statewide Bear Harvest (1979-2004)



White-tailed deer

Estimated deer densities generally range from 10 to 30 deer per square mile in the mountains, and from 20 to 70 deer per square mile in the Piedmont in Georgia (Kammermeyer 2005). The mountain population is limited due to marginal habitats (a lack of early successional forest conditions), poor soil fertility and intermittent mast failures. Early successional habitats, high quality, cool-season agricultural food plots, and areas of hard mast producing trees are all important components of year-round deer habitat (Wentworth et al. 1990, Kammermeyer et al. 1993, Johnson et al. 1995).

White-tailed deer harvest, condition, and population data for the past 26 years (from 1977 through 2002) was analyzed by Kent Kammermeyer, Senior Wildlife Game Biologist with the Georgia Department of Natural Resources (DNR). He found that in the North Georgia physiographic region, there was no significant trend in the mountain Wildlife Management Areas (WMAs) for number of hunters, deer harvest, buck harvest and doe harvest. For Ridge and Valley WMAs, hunters and hunters per square mile were higher, deer harvest per square mile was higher, and hunter success showed no trend. The Piedmont WMAs showed upward trends for hunters, but not hunters per square mile. Deer harvest, harvest per square mile and hunter success showed no significant trends (Kammermeyer 2003).

Table 1 – Estimated Deer Densities per Square Mile for Mountain Wildlife Management Areas, Chattahoochee National Forest

WMA	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Blue Ridge	20	20	N/A	N/A	N/A	23	19	18	25	23	17	31	25	19
Chattahoochee	19	22	N/A	N/A	20	22	N/A	16	18	23	N/A	15	14	12
Chestatee	27	23	N/A	N/A	18	21	N/A	20	16	21	N/A	21	22	13
Cohutta	10	12	11	N/A	12	13	N/A	10	11	13	N/A	9	10	5
Coopers Creek	22	24	N/A	N/A	21	25	16	18	26	26	24	25	25	19
Lake Burton	28	28	N/A	N/A	22	26	N/A	17	N/A	29	18	18	17	17
Rich Mountain	10	12	14	N/A	N/A	13	N/A	16	16	17	19	21	20	22
Swallow Creek	19	19	N/A	N/A	21	24	N/A	N/A	N/A	N/A	12	13	11	8
Warwoman	27	27	25	N/A	35	39	N/A	22	28	24	13	13	16	11
Coleman River	19	21	N/A	N/A	N/A	21	N/A	*	*	*	*	*	-	-

*The Coleman River area was dropped from the Wildlife Management Area System in 1997.
N/A – Not available because of low doe harvest; WMA – Wildlife Management Area

Source: Kent Kammermeyer, 2003, "Deer population characteristics on wildlife management areas in Georgia from 1997 through 2002," P.R. Project W-55-R-3,Georgia Department of Natural Resources, 26 pp. provided by Kammermyer for 2002 and 2003.

Table 2 – Estimated Deer Densities per Square Mile for Piedmont and Ridge and Valley Wildlife Management Areas

Piedmont WMAs	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Cedar Creek	45	41	42	N/A	40	42	N/A	39	40	38	49	48	47	36
Lake Russell	55	58	54	48	49	55	54	59	58	54	58	73	71	68
Redlands	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	N/A	N/A	N/A	N/A	-	-
Ridge and Valley WMA														
Johns Mountain	24	29	29	N/A	31	38	33	34	25	25	24	26	18	19

N/A – Not Available

Source: Kent Kammermeyer, 2003, "Deer population characteristics on wildlife management areas in Georgia from 1997 through 2002," P.R. Project
W-55-R-3, Georgia Department of Natural Resources, 26 pp. provided by Kammermyer for 2002 and 2003.

White-tailed deer harvest regulations and habitat improvement techniques such as forest harvesting and thinning, prescribed burning and wildlife opening development have helped create a fairly healthy deer population throughout Georgia. Deer harvest data seems to indicate that populations in the mountains and ridge and valley are stable, with some fluctuations due to differences in annual mast production. Piedmont harvest data shows a higher overall deer density, and regulations have been liberalized to help reduce population numbers to within habitat capability levels. The Chattahoochee-Oconee National Forest with assistance from the Georgia DNR will continue to monitor deer densities, and the population is expected to remain relatively stable in the near future.

Element: Trends in the number of permits issued and harvest levels for selected special forest products.

The number of permits issued for ginseng digging has been stable. However, the number may decrease in the future due to new requirements that any ginseng exported must be at least 10 years-old. It should be noted that the issuance of permits for ginseng does not reflect the actual amount that is harvested on the Forest. The majority of the digging is conducted illegally, without obtaining a permit. State export data gives some indication of harvest levels, but does not distinguish between that harvested on private land versus out-of-state, or on Forest Service land. Nor does it capture ginseng dug for personal use.

9. Are high quality, nature-based recreation experiences being provided and what are the trends?

The Forests offer a unique combination of nature based dispersed recreation, including undeveloped settings, built environments reinforcing natural character, and wildland settings that complement enjoyment of special places. The Forest Plan attempts to provide for safe, natural, well-designed, accessible, and well-maintained recreational opportunities for all visitors. Monitoring and structured surveys to check visitor experiences within all congressionally des-

ignated areas and in developed campground settings will help gauge the effectiveness in meeting this commitment.

Element: Results and trends in user satisfaction ratings [36 CFR 291.21(a)]

There is no formal method of year to year user satisfaction data collection for the Chattahoochee-Oconee National Forest. Oftentimes, users will leave feedback on the back of fee envelopes or with the Ranger District that they were recreating on. These comments are listed below by the Ranger Districts who were able to compile such data. Currently, Districts are not required to keep or compile this informal feedback so the comments listed below are incomplete thoughts and are statistically inaccurate but do provide a picture of how some National Forest recreationists feel.

- Toccoa Ranger District
    1. Improve facilities at campgrounds
    2. Improve facilities at day-use areas
    3. Improve OHV Trails
    4. Sanitation (bathrooms)
    5. Fees
    6. Season Pass
    7. Volunteering
    8. Accessibility
    9. Longer operating dates
    10. Reservations
    11. Better envelopes
    12. Decommissioning
    13. Maps of areas
    14. Positive feedback

- Armuchee-Cohutta Ranger District
    1. High degree of satisfaction with our developed campgrounds (Pocket, Lake Conasauga).
    2. Picnicking has been very popular this year…more so than in previous few years. Trend toward short day trips?
    3. Same for our trails…public appreciates the variety of trails available, e.g. ATV, mountain bike, horse, and the quality of maintenance. We here on the Armuchee-Cohutta RD have one of the most successful volunteer programs in the East.
    4. Some equestrians are unhappy with the Forest Plan decision to restrict horse riding to designated roads and trails.
    5. The developed ORV area at Houston Valley is extremely popular with cyclists and ATVers. the parking lot has been paved this past winter. There has been a general call for an annual pass for use of the ORV areas.
    6. Last, wilderness use appears to be down somewhat from previous years. This may be in response to our Limits of Acceptable Change

mgt plan. Although, wet weather this summer could be the cause too.

Suggestions for better response to this monitoring question as related to Forest Plan Goals and Objectives are as follows:

Goal 31

- *Objective 31.1* – Use Cordell and San Dimas research to identify new recreation trends yearly and evaluate compatibility with Forest niche and evaluate possible changes. Complete any needed changes within that FY. Work with pubic affairs to create user surveys to be distributed to sites.

Element: Backlog of facility and trail maintenance needs and trends

Through the Infra database operations/applications condition surveys are performed for facilities as they relate to the Forest's developed recreation program of work. The same application of Infra database techniques is also performed with respect to current condition/deferred maintenance backlogs trail maintenance through condition surveys. Condition surveys for developed recreation facilities, and trails are completed on a 5 year interval. F A & O buildings/sites are inspected annually with ongoing maintenance/ improvement needs identified at that time. The resulting maintenance/improvement needs are entered in the Infra database.

As part of the Chattahoochee-Oconee National Forest's trail analysis process for determining new construction criteria, trail maintenance criteria, and development of a policy to support the Forest's " No Net Gain Philosophy " with respect to current Forest trail mileage, all trails on the Forest were inventoried beginning in Fiscal Year 2004 and ending in Fiscal Year 2005. The underlying premise of the field oriented inventorying was to accrue accurate trail mileage in a GPS data dictionary format to for assessing both maintenance needs and to verify actual trail mileage. Based on this inventory and the data dictionary information complied from each trail, maintenance needs have been identified both at a current and deferred maintenance level. Pending development of a revised Infra condition survey process , these trail needs will be tracked in the Infra data base as are the developed recreation sites with their associated features, i.e. fire rings, picnic tables , and building infrastructures.

Developed recreation condition surveys have been completed for Fiscal Year 2005 for two sites- Raven Cliffs and Ocmulgee Bluffs. The completion of these surveys affords the Forest a 100 percent attainment for condition survey reporting with respect to developed recreation sites for five year interval reporting. Beginning in Fiscal Year 2006, condition surveys for developed recreation sites will begin again. Over a five year period, 20 percent of the Forest's 93 developed recreation sites will be inventoried. The condition survey target for Fiscal Year 2006 is 19 developed recreation sites- roughly three sites per District.

Suggestions for better response to this monitoring question as related to Forest Plan Goals and Objectives are as follows:

Goal 34

- Objective 34.1 – Check with Districts about condition surveys – Look at Mike Ritter principles and evaluate possible sites for reroute. Suggest that the Forest Sponsor Mike Ritter trail training for proper personnel.
- Objective 34.2 – Create checklist that follows trail maintenance on the District, doubles as a tracking form relating to the Forest Wide trails maintenance contract.

Element: Trends in health and safety associated with recreation programs

Forest will continue to monitor safety/ security of its' developed recreation sites through the application of Recreation Site Preseason Safety Inspection (Ref. FSM2332.1). Inspection highlights safety emphasis items as follows:

1.) Hazard tree check- snag, spike tops, diseased dying trees, root-sprung/ shallow root, large dead limbs
2.) Entrance-exit(approach signs in place, "Stop" signs at highway exit, adequate sight distance
3.) Fences, barriers, and signing in place to protect public from hazard trees, i.e.
Cliffs, unfinished construction
4.) Foot tripping hazards – check for holes, rocks , exposed roots, in trails or around
camping spurs, picnic tables and pavilions
5.) Fire hazard- no duff or combustibles within 5 feet of fire grates/ fire rings
6.) Water supply – system inspected, flushed, disinfected, and flushed again as applicable. Initial bacteriological test taken and negative tests received prior to opening system to public use
7.) Swimming sites, life ring in place, no lifeguard sign, buoyed to keep boats out of swimming area, signs as required to restrict boaters, no rafts, homemade docks, or diving boards in area, no glass/sharp objects on beach

Dispersed recreation surveys would entail inventory of known recreational activity with emphasis on public safe guards with respect to hazard trees. As dispersed recreation areas are usually areas with no constructed amenities and with an implied resource impact ethic of " Leave no Trace"', there are no on site improvements in which to equate a safety connotation . Trips and falls associated with tree roots, slips along stream banks, among other safety merits will endemically be associated with dispersed recreation where improvements and management principles are not site specific.

Trail condition surveys, as with a developed recreation and general forest areas surveys, should identify and document functional conditions and deficiencies which require maintenance effort for correction. Management objectives, trail experience levels, maintenance levels, and operational status must be considered when identifying trail deficiencies. At the time of the condition survey, a

prescriptive survey would document corrective actions required to remedy deficiencies identified in the condition survey.

The prescription survey would identify maintenance work activities required to satisfy the level of service expected of the trail facility. This basic information when combined with maintenance activity performance standards (specifications) would yield manpower, equipment, and materials cost and scheduling for the maintenance plan. As is the case in current trail condition surveys, the Trimble data dictionary allows for the recording of needed trails improvements (i.e. water bars needing replacement, hazard trees to remove).

Trail safety items to address could be in three categories- 1) those work items which would remove unacceptable hazards to the trail user, i.e. hazard trees, rotten bridge decking; 2) safety work items plus those work items which should be performed to bring the condition of the trail facilities up to the prescribed standard, i.e. repair or refurbishment of existing signs; and 3) which would include 1 and 2 plus the addition of new signs, facilities or structures which would enhance the experience at the prescribed level.

Job hazard analysis in place for use of ATV's and UTV, on OHV system trails. ATV/UTV load analysis calculations in place to support transportation of materials.

<u>Suggestions for better response to this monitoring question as related to Forest Plan Goals and Objectives are as follows:</u>

Goal 32

- *The goal needs to be reworded to reflect psychological well-being of users – making sites "feel" safe for users.*
- Objective 32.1 – Provide districts with a form for techs to record hazard trees removed for each FY, info should include site, tree type, size and date removed.
- Objective 32.2 – Speak with Corky about existing agreements, update yearly and check about local law enforcement cruising non-fee areas with perceived increase in illicit activity.
- Objective 32.3 – Evaluate trash collection for rec sites across the Forest. Check for sites that are converting to dumpsters…dumpsters need to be bear-proof and accessible.
- (NEW) Objective 32.4 – Evaluate Fee sites for perceived safety issues. Start with higher use site. Create a task list/maintenance changes for each site and distribute to districts. Aim to have problems fixed within 10 years. Distribute work across that time period.

Element: Changes in the amount and kind of opportunities provided

The Chattahoochee-Oconee National Forests are qualified as Category 1 Urban National Forests in December 1991, through a letter from the Regional Forester under Special Recreation Designation, 2370. Category 1 includes urban national forests

that are less than 1 hour from more than 1 million people. The Chattahoochee-Oconee National Forests have the capability of being impacted by more than 3 million people just from the Atlanta area alone. Interstate roads systems and divided highways have made it possible to arrive at even the remotest areas of the Forest that are contiguous top roadways within a maximum two hours' drive. A greater amount of user pressure will be placed on these federal recreation sites within the Chattahoochee-Oconee National Forests near the high population areas.

Short day- trip outings for hiking, picnicking, driving for pleasure, observing wildlife, or visiting historic sites fit into the Forest visitor's life -style. Time, money, personal health, and being alone are constraints that recreationalists are dealing with and solving by short day trips. Mountain biking, horseback riding, and OHV use are all increasing on the Chattahoochee- Oconee National Forests. New technology/ development in the area of mountain bikes and different styles of OHVs have been responsible for the direct user increase along the Forest's network of designated trails / roads for such vehicles. Horseback use, rock climbing, canoe/kayaking, walking/ running are all activities that have seen increased population levels. These activities take place in undeveloped environments and on or near trails. The rate of demand will be greatest for some strenuous activities, including swimming, day hiking, backpacking, and mountain biking. Other activities with generally high rates of projected demand growth include driving for pleasure, visiting historic sites, visiting wilderness areas, and developed camping.

The recreating public has increased in numbers and diversity, with numbers of older individuals increasing with the development of retirement communities. The first wave of "baby boomers" retiring will increase older recreationalists who may prefer less physically demanding activities such as leisure driving, sightseeing, studying nature, cultural resources, and developed camping. All these activities favor developed settings. It seems, therefore, that the biggest demand on the Forest will be for developed rather than primitive settings.

The theoretical maximum carrying capacity is based on the assumption that the Forest is used consistently throughout the year by the maximum number of people. This condition is likely to occur, since most of the use is grouped into specific time periods, not spread out over an entire year. For Forest planning purposes, reasonable outdoor recreation carrying capacity provides a more accurate dispersed recreation capacity. The Forest's reasonable dispersed carrying capacity is approximately 1.2 million RVDs (Recreation Visitor Days).

Capabilities for developed recreation sites are based upon the number of people at one time (PAOT) the site can support. The PAOT yearly capacity of all developed recreation sites on the Forest inclusive of day use and overnight developed areas is 12,610.

Recreation demand as outlined above is intrinsic to people's recreational desires, and preference. This is proportional to the recreational visitor's time availability, price, and availability of facilities. Future demand will be based on recent surveys

identifying 1). Estimated number of current recreation visits to the Chattahoochee-Oconee National Forests; 2). Participation rates for recreation activities within the Forest growth market; 3). Future activity demand based on projected population growth; and 4). Activity demand by demographic strata. Baselines for estimating current use of recreation sites on the Chattahoochee-Oconee National forests were outlined through the National Visitor Use Monitoring (NVUM) process. Based on this NVUM data, developed recreation areas on the Chattahoochee-Oconee National Forests accommodate approximately 34 percent of the estimated recreation visits. The remaining 66 percent of recreation visits can be defined as dispersed recreation visits that occur away from developed recreation sites in general forest area and within designated wilderness areas.

Suggestions to assess future recreation trends and user demands may be accomplished as follows:

1). Fee Collections- Fee collections at developed recreation sites are valuable barometers for monitoring recreation- use levels.
2). Inventories- Mapping of dispersed (concentrated streamside camping, not informal campgrounds) recreation sites, and collecting data on their characteristics is getting increasing attention across the Forest. Inventories are used to plan and carry out rehabilitation work and use patterns.
3). Traffic Counts- Annual routine traffic counting on the forest roads is an indicator of recreation user patterns, destinations, seasons of use, number of visitors, and types of use. Traffic counts may also serve a means of prioritizing road maintenance needs.
4). 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 may help to quantify and qualify use in situations where
fees and trail resisters do not provide the information needed to improve the condition of the forest recreation sites.

Element: Changes in accessibility of developed sites and facilities

All newly constructed features on the Forest are designed and built to be accessible as the ADABAAG and Forest Service guidelines require. Existing sites and facilities are brought up to accessibility standards when renovation or extensive maintenances projects are funded. The following list reflects the accessibility accomplishments on the Chattahoochee-Oconee for FY 05:

- Armuchee-Cohutta – The Pocket Campground
  Renovation of existing toilet building to be accessible. Construction of accessible pathway to toilet.

- Brasstown – Brasstown Bald

Renovation of men's and women's restrooms at the Visitor Information Center. Removal and replacement of membrane roof. Removal of warped and cracked walkway allows for better accessibility.

- Chattooga – Mount Yonah Road and Trailhead
  Construction of a 30 car parking area with accessible parking space and 2 unit bus parking. Installation of Accessible CXT toilet.

- Oconee – Ocumulgee Bluffs Equestrian Trailhead
  Construction of 30 space parking area for horse trailers with accessible parking space and accessible pathway connecting accessible site amenities (CXT toilet picnic table and signage).

- Oconee – Roberts Bike Camp Trailhead
  Construction of a 15 space parking area, accessible bike unloading ramp, accessible pathway connecting accessible site amenities (CXT toilet, picnic table and signage).

Element: User impacts, conflicts and effects within the A.T. corridor

Management practices are designed to protect the Appalachian Trail experience, preserve and strengthen the role of volunteers and volunteer organizations, provide for the conservation and enjoyment of the nationally significant, scenic, historic, natural and cultural qualities of the land through which the Appalachian Trail passes.

Certain areas of the Appalachian Trail in Georgia demonstrate impacts to soil and vegetation from overuse. Typically, the impacted areas suffer from "campsite sprawl", where tent sites and fire rings have trampled vegetation and ground cover. Parking areas adjacent to roads also tend to create an increasing sprawl.

The Chattahoochee-Oconee National Forests and Georgia Appalachian Trail Club have taken steps to curb campsite sprawl at many locations. Tent pads have been built into the side of slopes to discourage camping anywhere else in the area. These designated tent sites have been constructed at Springer Mountain, the Gooch Mountain shelter, and at Slaughter Spring (to replace camping at Slaughter Gap, which has been closed and revegetated).

Remaining impacted areas can be divided into three principal categories: riparian areas, roadside areas, and campsites in gaps with relatively flat terrain.

Riparian Areas: Impacts from overuse are clearly visible at Stover Creek near the hiker's shelter (NOTE: This problem will be alleviated in 2006-2007 by a trail relocation away from the flat terrain near the creek and the construction of a new shelter at a different location). Also along Long Creek north of FS 58

at Three Forks, at the Justus Creek crossing, and at Lance Creek (located in the Blood Mountain wilderness).

10. What are the status and trends of recreation use impacts on the environment?

This Forest Plan is committed to providing recreational opportunities that are compatible with stewardship of forest resources. Impacts of motorized uses, site occupancy, and large volumes of users on riparian, stream and aquatic resources, vegetation, and soils will be monitored across all forest settings.

Element: Trends in illegal or unauthorized recreational uses observed and the effects of these uses.

Historically, the Chattahoochee-Oconee National Forest has had its share of problems with incendiary and game violations. Although these problems remain, the Forest has seen a marked increase in other violations. Recreation use offenses, land occupancy and trespasses, theft and vandalism of government and private property, arson, damage to natural resources, mostly caused by illegal use of off road vehicles, possession of marijuana, methamphetamine and cocaine, archaeological resource theft, timber and firewood theft, litter and trash dumping. Violations of Georgia State Law reference to illegal hunting, fishing, under-age drinking, revoked or suspended license are among violations with the greatest increase. These violations represent a growing threat to forest officers enforcing our laws and regulations and can deteriorate the safe, family type environment enjoyed by our visitors.

As Land Resource Managers, we have certain statutory responsibilities for fulfilling and maintaining ample law enforcement personal to handle the increase in law enforcement issues and demands. The Chattahoochee-Oconee Forest consists of over 865, 000 acres, six ranger districts lying within twenty-seven counties, and 12 million visitors annually. This Forest ranks second in number of violations occurring in the Southern Region. Because of the drastic increase in visitor's annually, law enforcement actions are stretched beyond the capacity to deal with the demand. Due to reduction in LE&I budgets, there has been a reduction or lack of LEO positions filled, thus public safety, resource and property protection problems for visitors and employees are of great concern.

The Forest currently has a law enforcement program that consists of one (1) Patrol Captain, two (2) Special Agents (including trainee), one (1) Program Assistant with shared services between the Zone/Forest, seven (7) full-time LEO's. LEOs are currently responsible for patrolling areas that exceed 108,000+ acres each. The large number of acres in each area of responsibility drastically reduces law enforcement's ability to adequately address forest problems and is a serious concern with Forest management.

All costs for the unit's law enforcement program such as salary, scheduled overtime, administratively uncontrollable overtime, availability pay, equipment, program sup-

port, travel, cooperative law enforcement, and other costs are currently handled by the Regional Budget and Finance Specialist, located in the Regional Office

Continued cooperation with State, local, and other Federal agencies has significantly reduced the increased burden on law enforcement staff within the bounds of public recreation and sequential law enforcement intervention to enforce Forest policies.

Monitoring indicates that goals, objectives, area direction, and standards are being achieved within current staffing capabilities. The presence of LEOs (Law Enforcement Officers) and FPOs (Forest Protection Officers) at the District's OHV trail systems has reduced illegal off trail- use. Additional law enforcement attention will directed in the area of educating the recreational visitor user as to the Forest Plan revision delineating equestrian routes solely as designated through signage as it relates to the current network of roads and trails. The prohibition of horses from cross country travel will be a key enforcement action for LEOs and FPOs as they monitor/enforce recreational policy on the Forest. Increased visitation and increased crime statistics on the Forest has created the need for additional law enforcement staff.

The new Federal Lands Recreation Enhancement Act (FLREA) has restructured management of existing recreation areas from a visitor fee use standpoint. For example, some recreation sites (i.e. picnic areas and selected trailheads) are no longer requiring a user fee. There is a concern that now LEOs and FPOs will not enter these areas on a regular patrol basis as there is no longer a compliance entity attached to the site. These areas, when a fee was charged, were checked by LEOs and FPOs from the standpoint of seeing that an element of fee adherence (compliance) was being upheld. The concern exists that undesirable forest visitor cliental will begin frequenting these "free use" areas contributing to the potential for a crime element to ensue. Heightened security needs to be paramount concern from the law enforcement standpoint within all Forest recreation areas whether a fee is charged for the visitor's use and enjoyment or not.

Fee tube vandalism is still a priority concern. Forest-wide, the number of recreation sites where a fee is being charged has been reduced by approximately 38 percent. This reduction in fee sites does not preclude the need for law enforcement presence. More law enforcement is needed both in all the recreation sites – fee or non-fee. Current LEO/ FPO staffing levels have impacted this inherent need. Possible recommendations include using District staff in these recreation areas during high visitation days and collecting fees in a timely manner; additionally older fee tubes could be replaced with more theft – proof designs.

In the past parking areas at the majority of wilderness sites on the Forest have continued to exhibit a low level of law enforcement problems/concerns. Several of the trailhead parking lots continue to experience high levels of vandalism and theft. Law enforcement officers will continue to conduct extensive investigations and increased surveillance at these parking lots.

Historical LEIMARS data indicates that the Chattahoochee-Oconee ranks among the top forests in the region for the number of violations and incidents reports issued. The top six (6) districts with in this Forest for activity are the Chattooga, Brasstown, Tallulah, Armuchee-Cohutta, Toccoa, and Oconee.

Each year officers issue approximately 3,500 incidents, violations and warnings each year (2,300 violation notices, 500 Incident Reports, and 700 warnings. Most offense violations are misdemeanor offenses. Within Region 8, this Forest ranks second out of 15 forests with the highest number of violations. Law enforcement problems, specific to each district, have been discussed with each District Ranger and LEO on the Forest. The Forest Land Management Plan emphasis a fully staffed Law Enforcement program, which enhances our responsibility both to the publics and to our management team. This Forest in cooperation with state, local, and other federal law enforcement agencies that maintain a program, which (1) encourages public compliance with law and regulations; (2) provides for protection and safety of Forest users through cooperative programs; and (3) provides for the protection of government property and National Forest resources. Each district's priorities have been identified based on area specifics and seasonal timeframes. The following information references the trends and effects of illegal or unauthorized recreation uses on the Chattahoochee-Oconee National Forest.

Recreation Violations/Occupancy & Use

With substantial growth in the urban interface, brings more visitors and crime; attracting over eight million visitors yearly to the Forest, which brings more occupancy and use recreation violations. From 2001-2003 failure to pay required recreation fees located at 89 Forest Recreation areas has been one of the most common illegal activities or violations. In 2001-756; 2002-667; 2003-888 violations were written. In 2004-586 violations were written as there was a decrease in violations compared to previous years due to the Recreation Re-alignment Program, elimination of some Recreation Fee Demo sites, less Leo's and FPO's present due to staffing and budget problems.

Violation of State Traffic laws on Forest roads are among some of the most serious problems on the Forest developed roads. Examples include reckless driving, no driver's license, open container and underage possession of alcohol, and motor vehicles to include ATV's on closed roads or not designated for such use. (2001-490; 2002-414; 2003-449; 2004-434 violations written).

Assaults

Assaults on LEOs, and Forest Protection Officers (FPO's) are rare, however, there is a steady consistency in disorderly conduct, obstruction, resisting arrest, threatening, giving false information to LEOs and FPO's. Over 30 such incidents were reported just in 2001, 23 incidents in 2002, 16 incidents in 2003, 25 incidents in 2004. There is

a drastic increase in arrest of convicted felons in possession of firearms. In 2000, one LEO was the recipient of the LEO of the year award, for his bravery, valor, heroic act in risking his life to save another officer when a gunman shot several visitors and another officer.

Sanitation/Trash Dumping

Dumping of household trash, construction trash and litter continue to increase drastically on all districts. There are hundreds of dispersed campsites hunt camps, and associated large volume of litter problems. Lack of public dumpsters and landfills, an increase in urban interface, are major contributing factors for this increase. One area on the Forest has been allotted $35,000 to clean up the area where household debris and other hazardous material are continually dumped. In 2001, 233 violations; in 2002, 186 violations; 2003, 235 violations; and 2004, 279 violations were reported.

Wildlife Violations

There is a tremendous amount of illegal activity associated with the hunting seasons (fall and spring) on the Forest. In 2001, 200 violations; 2002, 186 violations; 2003, 250 violations; 2004, 195 violations reported for poaching, hunting from the road, hunting under the influence of drugs and or alcohol, and illegal fishing related instances continue to be a forest-wide concern.

Fisherman and hunters generate over $40 million in revenue for the State of Georgia, in which 80% of all hunting and fishing occurs on 14 wildlife management areas located on the Chattahoochee-Oconee National Forest.

The illegal use of Off Highway Vehicles (OHV's) on high traffic roads, in closed areas, and in areas previously inaccessible by all but the most dedicated hunter, has lead to conflicts among Forest users.

Illegal Drug Activity

Although cannabis drug activity is still prevalent on the Chattahoochee-Oconee NFs occurring across the entire forest. Drug activity unfortunately is endemic to the developed and dispersed recreation environment. Drug activity has been significantly reduced on lands owned and/or administered by the Forest Service over the past several years. Other federal, state and local agencies have recognized the efforts and expertise of our officers in this field. For several years, Special Agents and LEOs have worked as part of the Governor's Drug Task Force. Currently, due to decrease in funding, we are unable to provide adequate participation with the Governor's Drug Task Force, thus limiting our ability to detect marijuana cultivation forest-wide. In 2000, 1,000 violations for simple possession, manufacture, and distribution of cocaine, crank and methamphetamines; in 2001, 338 violations, in 2002, 398 violations, in

2003, 329 violations, in 2004, 347 violations were written. Hazard materials left on the Forest from illegal methamphetamine labs are on the decrease.

Theft, Property, Resource and/or other Forest Product Damage Violations.

Property theft and vandalism of personal and government property are a continuing problem on the Forest. Between 2000-2001 there has been an increase in breaking and entry into Forest Recreation Demo Fee collection tubes (7-14 B&E's). In 2002-2003, 21 Fee tubes entered, and 2004, 24 Fee tubes vandalized.
Additionally, private vehicles parked at fee areas have been increasingly vandalized resulting in over $100,000 in damage and stolen property. Forest resource damage and stolen also averages over $100,000 each year.

Illegal ATV-OHV Activity

There is an increase in the amount of resource and property damage caused by illegal use of ATV-OHV vehicles in closed areas and on high traffic roads and areas previously inaccessible by all vehicles. This illegal traffic has caused millions of dollars in property and resource damage. In 2001, 275 violations; in 2002, 430 violations; in 2003, 281 violations, and 2004, 339 violations were written for illegal ATV/OHV vehicles use.

Wildfire Violations

The Forest has a history of incendiary problems. Most of these wildfires have occurred during autumn, late Winter/early spring periods. To an extent, some of the wildfires are the result of campfires/ warming fires attribute to hunters. Since 2002, there has been a decrease in number of escape and unattended fires, but a drastic increase in number of arson suspected fires. The Forest experiences approximately 60 fires per year, with half of the fires reported as suspected arson.

Element: Recreation activities contribution to the degradation of terrestrial, aquatic, rare or riparian areas or adversely affecting water quality

Currently mapping of dispersed (concentrated streamside camping-not informal campgrounds) recreation sites is occurring on the Forest. This mapping affords the opportunity to monitor short term/ long term use within these areas with corresponding impacts to the area in terms of soil compaction, vegetation degradation, and where applicable stream-side bank deterioration with resultant increased stream turbidity/ siltation.
Supervisor's Office Outdoor Recreation Planner reviewed one dispersed recreation site along Johns Creek watershed- Armuchee-Cohutta Ranger District on June 14, 2005. Rehabilitation measures had been implemented along this creek with respect to a proliferation of dispersed camping activities and consequent impact upon the stream banks. The construction of a centralized

parking lot with dispersed camping immediately adjacent to it had reduced impacts to the riparian corridor. Camping was restricted from the stream corridor by signing measures.

Current developed recreation condition survey forms allow the opportunity to report on site condition of developmental impacts upon adjacent riparian corridors. As numerous developed recreation areas on the Forest are adjacent to riparian corridors, streamside impacts are directly attributed to the recreational visitor. Through condition surveys, trends of concentrated use may be monitored along these riparian zones. Corrective actions as a result of inventorying may be implemented.

As with developed recreation condition surveys, trail condition surveys are in place to allow for the continued monitoring of riparian impacts attributed to trail use by recreationalists. In the realm of motorized trail use, vehicles are restricted to designated stream crossings only.

Supervisor's Office Outdoor Recreation Planner reviewed a moldering privy site along a portion of the Appalachian Trail at Low Gap on December 3, 2004- Chattooga ranger District. The proper location of the structure away from a nearby riparian corridor was addressed. Additionally on June 7, 2005, a field visit was conducted at Stover Creek on the Appalachian Trail- Toccoa ranger District. The site of a new shelter with privy along with trail to water source was viewed. Riparian issues were outlined to conform to proper distance of trails and structures to water sources.

Future recreational development along riparian corridors will be maintained such as to maintain the ability of the land to filter sediment from upslope disturbances in order to maintain/enhance water quality.

Element: Continued validity of plan decisions regarding OHV use designation and determining whether an area is open or closed to OHV use.

The Forest during Fiscal Year 2005 initiated a trails analysis team with the objective of developing criteria in conjunction with the Forest Land Management Plan to serve as a guide for the Forest to utilize both in trail maintenance and new construction. As part of this analysis process, the issue of OHV use designations was addressed. OHV vehicles (ATVs and motorcycles that are not recognized as licensed vehicle in the State of Georgia) are restricted to the Forest's 133 miles of designated OHV trail systems. New OHV trail construction must adhere to Forest Land Management Plan screening criteria.

This. includes:

1.) Compatibility with Management Prescription Direction
2.) Must be compatible with watershed conditions

3.) Must minimize conflict with wildlife habitat and riparian/ fisheries habitat
4.) Must address potential conflict between user groups
5.) Must minimize conflict with adjacent private landowners
6.) Must be operationally feasible- the emphasis in this criteria setting is for at least 20 miles of route in total, including loops.

Districts managing its' network of OHV trails are closing their trails to the public from January 1st- March 31st each year due to freezing and thawing conditions which are prevalent during this period of time. These trails are also closed during periods of rainy weather associated with hurricane activity that has impacted Georgia during the past several years. Districts are alerting the public through "call before you ride" informational avenues accomplished through the Forest's internet site, voice message on District's automated answering system, and advanced advisory notices on the information- based bulletin boards located at the OHV trailheads.

Illegal OHV trails have been closed across the Forest, implementing the recommendations from the 2002 and 2003 Monitoring and Evaluation Report. Monitoring of these closures indicate that while some of the closures are effective, other have required further work to complete the intended stabilization, erosion control, and impede/ eliminate illegal access. Forest law enforcement presence including extensive surveillance of active illegal trails in some areas as well as recently closed sites has increased effectiveness. The posting of illegal trails with "closed to vehicle" signs has been a detriment to continued illegal OHV usage. Overall, citations issued to violators have provided direct enforcement of the closures and deters other possible violations. The 2005 closure and consequent rehabilitation (seeding/mulching) of 1.3 miles of the "unofficial OHV route", Rich Mountain Road, Toccoa Ranger District, was a decision which has been a plus for protecting and maintaining the natural stability of the road bed.

Despite these closures, new illegal trails continue to become established and some closures are ineffective. Some trails are heavily used while others may be used once or twice and abandoned. Forest law enforcement officers continue to issue violation notices for use of an OHV off of the designated trail location. All the OHV trails on the Forest have been closed this season for excessive rains associated with hurricanes that have impacted Georgia. The North Fork of the Broad River, located on the Chattooga Ranger District, is being impacted by the Locust Stake OHV Trail system. Trail closure actions implemented in Fiscal Year 2005 to remove active trails within this riparian corridor and restore conditions top a natural function are as follows: closed .30 mile of Trestle Loop Trail (148G), closed the .89 mile Valley Cut Through Trail, 1.72 mile North Fork Road Trail, .69 mile Figure 8 Trail. Reroutes were performed on the 4 Toes Trail (148E -.25 mile), Ranger Run Trail (148C-.20 mile), Trestle Loop Trail (148G-.25 mile), and Moon Walk Trail (148F- .35 mile). The total miles of trail closed within Locust Stake with direct impact on Broad River in 2005 was 3.6 miles. The 1.05 miles of newly rerouted trail replaced short sections of trail which were permanently closed. The reroutes resulted in no net gain in trail mileage- a desired trails management directive outlined in the Forest's draft trails analysis.

Anderson Creek OHV Trails (near Ellijay, Georgia) 2005 saw noted improvements within Anderson Creek. This area had been closed to the public since 2003. Originally designated for the OHV enthusiast as a recreational site with 5 miles of trails, illegal trail riding had expanded the trails system to 20 miles of trail – 15 miles of which were illegal. Six miles of illegal trails were closed permanently within the Anderson Creek OHV trail system in Fiscal Year 2005. Anderson Creel OHV trail Systems remains closed to the public as further resource mitigation activities are being performed in the area. Mitigation measures include mapping of illegal trails, rehabilitation including seeding and mulching of existing trails deemed inappropriate in terms of meeting the Forest Plan standards. This is in view of the fact that these illegal trails correlate directly to soil and water land resources integrity concerns.

Recommendation: Close Anderson Creek permanently. Continue the closing of illegal trails that are directly impacting water quality or aquatic habitat. Maintenance will continue at all designated trail systems.

11. What is the status and trend of wilderness character?

Wilderness character is comprised of both human and biophysical elements. Monitoring the human elements requires monitoring trends in the human experiences, i.e. solitude, crowding, etc., as well as trends in the use patterns and visitor impacts. User monitoring and surveys will allow for tracking trends among visitors to wilderness, while trailhead use and identification of sites with impacts will allow us to track movement and activities within wilderness and relationships to biophysical effects. Monitoring physical elements is important for tracking changes to the natural systems due to natural and human influences within and outside the wilderness. Although there are many components to the physical element, air quality is viewed as a basic indicator of wilderness health. Additionally, changes that are occurring in wilderness due to the fire regime, especially in fire dependent communities, will be monitored. Monitoring will also be accomplished as under number 9, previously.

Element: Is wilderness visitor use within limits that do not impair the values for which the wilderness was established? [36 CFR 219.18(a)]

Wilderness areas receive heavy use along the Appalachian Trail corridor and its' associated feeder trails. Forty seven- campsites have been inventoried along the trail corridor within the Blood Mountain Wilderness. Overuse in this wilderness was apparent at Slaughter Gap with the convergence of the Appalachian Trail, Coosa, Duncan Ridge, and Slaughter Creek Trails. A project was untaken beginning in 2002 to reroute these trails out of Slaughter Gap- rehabilitate the large impacted area, and establish campsites in more suitable locations. This project was completed in the fall of 2004 (early Fiscal Year 2005). Jarrard Gap, the summit of Blood Mountain, and the area around Lance Creek are heavily impacted as well. Rehabilitation measures are planned for Jarrard and Lance Creek through a combination of trail reroutes and construction of low impact camping sites in the vicinity of these locations. Use of Blood Mountain is primarily day use in impact, with hikers departing from B.H. Reese

Memorial Trailhead near Neels Gap on U.S. Highway 129 and traversing the Appalachian Trail to Blood Mountain.

A campfire ban is in effect along a portion of the Appalachian Trail corridor across Blood Mountain to protect the character of the area and to discourage some 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 with respect to 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 between Neels Gap and Woody Gap appears to be increasing. Working with the Georgia Department of Transportation , a no- parking area has been established has been established along U.S. Highway 129 between Neels Gap and B.H. Reese Memorial Trail parking area. Plans have been developed to limit the number of vehicles that can park at the trailhead. This action was identified in the Limits of Acceptable Change process for the Blood Mountain Wilderness. The Dicks Creek corridor along Forest Service Road # 34 receives heavy use, and part of this corridor forms the boundary for the Blood Mountain Wilderness. Heavy use of campsites along Dicks Creek due to easy vehicle access and the popularity of the stream and its' associated waterfalls has resulted in the establishment of no – camping zones along the wilderness portion of the streamside. These campsites have been rehabilitated.

Illegal mountain bike use occurs on the Wagon Train Road within the Brasstown Wilderness. Annual boundary line monitoring around Bald Mountain Park and other private developments that adjoin this wilderness is ongoing with respect to the possibility of encroachment and illegal vehicular use. To date, some 18 campsites have been inventoried within the Brasstown Wilderness.

The Chattahoochee National Forest's largest wilderness, Cohutta, continues to receive very intense overuse. District personnel have inventoried over 400 campsites. Ground cover loss and /or soil compaction is prevalent at a major portion of the 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 lead to a temporary closure of Beech Bottoms in the spring/summer of 2000).

The Armuchee–Cohutta Ranger District has completed the Limits of Acceptable Change planning process for the Cohutta Wilderness. The proposed process was developed from the recommendations of a citizen- based wilderness task force. The general description of the proposed action is as follows:

1.) Manage the Cohutta Wilderness as three distinct Opportunity Classes, I, II, and III. These Opportunity Classes will provide a range of experiences from the most primitive, Opportunity Class I to the least primitive, Opportunity Class III.

2.) Within the three Opportunity Classes, apply limits on use to reduce human impacts on the wilderness resource and restore the wilderness environment.
3.) Within the Jacks River Falls area, establish area- specific prohibitions to reverse overuse, to reduce activities contributing to significant resource impacts, and to restore the wilderness environment.
4.) Implement a non- restrictive, mandatory permit system for the purpose of more accurate visitor's counts, wilderness education, and public information.

The purpose of the proposed action is to both preserve the wilderness character and provide for the enjoyment of an unimpaired wilderness for present and future generations of wilderness users. This proposed action was needed to reverse patterns of overuse, reduce human activities contributing to resource impacts, restore the wilderness environment, and provide more opportunities for solitude and a true wilderness experience.

The district has continued to increase efforts to correct overuse problems and minimize potential bear/human interactions. This has been achieved through an expanded information and education program aimed at the infrequent forest user, with the use of volunteers and increased wilderness patrols. Trail volunteers and U.S. Forest Service personnel are continually rehabilitating heavily used campsites. A wilderness and backcountry " Leave No Trace" message is conveyed through newspaper articles, District volunteer newsletter , signing, bulletin board posting, wilderness visitor contacts, Regional and District brochures, formal presentations at schools, clubs, and organizational meetings.

The Mark Trail Wilderness continues to receive heavy use along the Appalachian Trail corridor and along the Chattahoochee River Road. The Bear Den Creek area has seen a drop in use due to the relocation of the Raven cliffs parking lot from along the Richard Russell Scenic Highway 348 to its' current location. A total of 145 campsites have been inventoried within this wilderness area.

Wilderness use with Raven Cliffs has declined slightly due to the closure of the area to rappelling and the relocation and upgrading of the parking area. Before the closure of the area to rappelling, the use was around 15,000 visitors per year. After the closure, use has dropped to about 12,000 visitors per year. A total of 500 campsites have been inventoried within this wilderness area.

Rich Mountain Wilderness continues to receive minimal use with most occurring during big game hunts. Illegal all- terrain vehicle use in the area along with litter on the north boundary (county road) still continues to pose a problem. Additionally, the south end of the Rich Mountain Wilderness has experienced a lot of residential development on the adjoining private lands. Law enforcement personnel have increased patrols in the area and have posted signs closing illegal trails and displaying wilderness boundaries.

Southern Nantahala and Tray Mountain wildernesses receive most of its' use along the Appalachian Trail. There are no associated spur trails with the Appalachian Trail

as it traverses these wilderness areas. If such spur trails were in place, additional interest in these wilderness areas could be generated. A limited amount of campsite inventorying has been performed to date within these areas.

Big Frog and Elliott Rock wilderness areas receive very little use due to limited formal trail development within the Georgia sections of these wildernesses.

Based on estimated wilderness visitor use totals of 245,000/ year on the Chattahoochee-Oconee National Forests, - survey results indicate that males comprise 53 percent while females 47 percent of the individuals seeking wilderness recreational pursuits. The greatest age group seeking a wilderness recreation experience is between 40- 49 years (30.37 percent) of age followed by 30- 39 (15.49 percent), and 20-29 (14.92 percent).

12. What are the status and trend of Wild and Scenic River conditions? (Forest Plan Chapter 2, page 43)

The two main elements in determining the eligibility and suitability of a river for inclusion in the National Wild and Scenic Rivers System are a free-flowing condition and the presence of Outstandingly Remarkable Values. Rivers determined to be eligible, or eligible and suitable that have not yet been designated by Congress must have those elements protected until a further designation is assigned. Monitoring changes to these elements will help us evaluate our management of these rivers on our forests. Monitoring (recreation use) for these streams will also be tied to number 9, previously discussed.

The Chattahoochee- Oconee National Forests continues to manage the Chattooga River to protect and enhance the outstandingly remarkable values of the river and its surroundings. The Sumter National Forest continues to have the lead authority for all boating/ floating use (commercially – guided and self- guided) on the Chattooga River when it involves the main channel from Burrell's Ford to Lake Tugaloo, as well as the West Fork. As part of the Chattooga Watershed Initiative, the Tallulah Ranger District performed road closure on 7 acres of development road including Old Burrells Road, Glade Road and Hicks Tract. The Tallulah Ranger District will continue close/ restore old roads within the Chattooga River watershed corridor in order to mitigate soil and water concerns. Condition surveys initiated through watershed assessment procedures will serve as a way of identifying and performing corrective actions as it relates to the resource management principles affecting the Chattooga Wild and Scenic River.

13. Are the scenery and recreation settings changing and why?

Scenery and recreational settings are managed by establishing Scenic Integrity Objectives (SIO) and Recreation Opportunity Spectrum (ROS) class man-

agement direction. Management of scenery and settings are essential in the management of recreational experiences and the quality of the environment. Changes in scenic quality of the forest and the recreation settings will be monitored.

The recreation settings on the forests are changing. Through lack of vegetative treatments in recreation areas, the developed recreation sites are undergoing an overgrowth problem. A few areas, like Lake Sinclair, have recently been thinned out and this helped the setting tremendously. There is a need to open up the overstory and understory so that a feeling of being in secure surroundings is increased. It is both a psychological and physical security that is acknowledged here.

There is a need to re-evaluate the Recreation Opportunity Spectrum (ROS) settings on the forests. In the fall of 2003, a "National ROS Inventory Mapping Protocol" was recommended for use to all forests. This was finalized after the Plan Revision had been finished. The forest should update its ROS inventory per the National Protocol. Then we could understand if recreation settings are truly changing.

Suggestions for better response to this monitoring question as related to Forest Plan Goals and Objectives:

Goal 29

- Objective 29.1 – Use GIS, update areas where projects might have changed settings, ensure that GIS coverage is up to date.

Element: Amount of National Forest Land that meet or exceed established scenic quality objectives and changes over time [36 CFR 219.27(6), 36 CFR 219.27(d)(1)

The Scenic Quality Objectives (SIOs) are listed in each Management Prescription found in the Plan and every National Forest acre is assigned a SIO. Therefore every project on the forest should have Scenic input on how to continue to achieve scenery settings and landscape character. Because of this input from the Forest Landscape Architect, projects are set up to meet established SIOs through recommended vegetation mitigation measures. Few of these projects have been implemented. These projects should be reviewed over time to see if the mitigation measures recommended are followed and if they are producing the settings desired. The basis for input was the "Scenery Treatment Guide", dated 02-07-2005, and the "Guidelines and Techniques to achieve Scenic Integrity Objectives and Landscape Character in Southern Region National Forests". These guidelines are currently under review by the Regional Office, and are to be reviewed in January 2006 for effectiveness.

An improvement to the current system of requesting input for scenery settings could be to include the Landscape Architect as a member of project teams. Because scenery falls under the broad umbrella of Recreation, it sometimes gets

left out until a project is in the last stages of development. At that point all the scenery resource can do is to be reactive instead of proactive. So while the forests may be achieving SIOs, no projects are being generated specifically for the achievement of scenery settings, just as an afterthought to support wildlife/health/SUP projects.

- **Method of collection: Track changes that result from management activities**

Over twenty-five requests were made from the districts and input was supplied by the Forest Landscape Architect for scenery settings on wildlife, special use permits, forest health, decommissioning road projects, watershed projects and recreation site improvement projects, but very few of the projects have been implemented.

1. Cohutta: Wildlife: High Elev. Early Success. Habitat(ESH): Ongoing
2. Armuchee: SUP: Walker County Water Project: Ongoing
3. Brasstown: Forest Health: Davenport Mountain Stewardship: Ongoing
4. Tallulah: SUP: North Burton Transmission Line: Completed: Meets SIO
5. Tallulah: New Office Location Review
6. Chattooga: Wildlife: Chattahoochee ESH: 10-2004: Input
7. Chattooga: SUP: Black Mountain Road Com Site: 10-2004: Ongoing
8. Tallulah: SUP: N. Burton Substation Landscaping: 10-2004: Meets
9. Brasstown: Wildlife: Coopers Creek ESH: 10-2004: Meets SIO
10. Tallulah: Wildlife: Billingsley Creek ESH: 10-2004: Meets SIO
11. Tallulah: Wildlife: Lake Burton ESH: 10-2004: Meets SIO
12. Tallulah: Wildlife: Coleman River ESH: 10-2004: Meets SIO
13. Cohutta: Wildlife: High Elevation ESH: 03-2005: Ongoing
14. Tallulah: Forest Health: Lower Chattooga River: 03-2005: Ongoing
15. Tallulah: Forest Health: Warwoman HU: 03-2005: Ongoing
16. Tallulah: Bridge Construction: Chattooga Hwy 76 Bridge: 04-2005
17. Forest wide: Forest Health: Hemlock Wooly Adelgid: 05-2005: Ongoing
18. Armuchee: Forest Health: Compartment 18: 5-2005: Ongoing
19. Brasstown: Forest Health: Jonas Mnt/Hurricane Ivan: 7-2005: Ongoing
20. Brasstown: Forest Health: Hunter Knob: 06-2005: Ongoing
21. Brasstown: Forest Health: Jake Mountain: 06-2005: Incomplete
22. Toccoa: Forest Health: Weaver Creek: 06-2005: Ongoing
23. Chattooga: Decommission Road: Shirley Grove Rd: 06-2005: Ongoing
24. Chattooga: Decommission Road: Black Mountain: 08-2005: Ongoing
25. Chattooga: Recreation Site: Panther Creek Bridge: 08-2005: Ongoing

Oconee: Forest Health: Red-Cockaded Woodpecker Thinning: 8-2005: Ongoing

Suggestions for better response to this monitoring question as related to Forest Plan Goals and Objectives:

Goal 29

- Objective 29.2 – Make list of nationally designated trails, evaluate accuracy/completion of GIS coverage and use 3D software to map "seen" areas.

- Objective 29.3 – Written incorrectly, needs to be rewritten, then create a plan for increasing scenic values over the next ten years in areas that have a high scenic class but low existing integrity.
- Objective 29.4 – Rank high use areas, vista points and interpretive trails by level of use and create a list to have amenity improvements. Divide work across 10 years, give district a checklist of things to be improved at their sites for the year at the beginning of the FY.

Goal 33

- Regional Forester Scenic Areas. Work with forest specialists to create a work list for these sites. Distribute to districts and set yearly accomplishment goals for the sites.

14. Are heritage sites being protected? (Forest Plan Chapter 2, pages 62-64)

Compliance with the National Historic Preservation Act is essential during implementation of this Forest Plan. The requirement that sites eligible for the National Register of Historic Places be identified and protected before ground disturbing activities occur must be met. Monitoring will be done to assess how well sites are being identified for protection and whether site protection measures are effective in preventing site loss.

Heritage inventory (survey, review, categorical exclusion) totaled 7,808 acres in fiscal year 2005. The inventories were done prior to project implementation in support of Fire, Recreation, Wildlife, Lands, Fisheries, Engineering, and Forest Health activities. The majority of inventoried acres were accomplished by Forest Service archaeologists. Contract archaeologists surveyed 1,479 or nineteen percent of the total inventory acres in fiscal year 2005.

Forty-six new heritage resources were identified in fiscal year 2005. Eleven of the identified heritage resources are protected and require additional investigation to determine National Register eligibility. Additionally, five heritage resources were evaluated for National Register eligibility. The number of backlogged sites requiring National Register evaluation has increased as it has every year since the inception of the heritage resources program on the Forest in 1976.

Monitoring to evaluate protection measures is taking place on the Oconee Ranger District since the hiring of an archaeologist during fiscal year 2005. Current staffing of one zone archaeologist on the remaining five districts has precluded such monitoring on the rest of the Forest. The same situation applies to monitoring of heritage resources on the Forest as part the management of historic properties.

Looting of heritage resources are a concern on the Forest. On average, three or four reports of looting are investigated per year. The frequency and extent of looting on the Forest is not known due to staffing and Section 106 workload. The Forest's heri-

tage specialists are currently conducting an assessment of damage to a looted archaeological site on the Oconee Ranger District.

The Chattahoochee-Oconee Heritage Program has worked with representatives of three historic preservation and special interest groups concerning historic properties on the Forest during the past fiscal year. Partnerships with the Anthropology Department at UGA and the GIS Department at Gainesville State College are aimed at addressing the need for a balanced heritage program on the Forest. Current staffing, however, severely limits heritage resource management not in support of other resource management.

While heritage resources are identified prior to project implementation, post-project monitoring of protection measures, curation of the archaeological record, data management (INFRA/GIS), and other activities not associated with Forest Plan implementation is largely not taking place.

15. Are watersheds maintained (and where necessary restored) to provide resilient and stable conditions to support the quality and quantity of water necessary to protect ecological functions and support intended beneficial uses?

This Forest Plan provides for management of watersheds to provide resilient and stable conditions to support the quality and quantity of water necessary to protect ecological functions and support intended beneficial water uses. Numerous best management practices are established as standards for practices to be carrying out during implementation of the Forest Plan. Watershed condition, improvement needs, water quality, and implementation of best management practices will be monitored.

16. What are the conditions and trends of riparian areas, wetlands, and floodplain functions and values?

Riparian ecosystems restoration and management is important to maintain aquatic resources and values. Desired conditions, including the composition and structure of vegetation, equipment limitations, maintaining ground cover and stable streambanks are established in the Forest Plan. Floodplains and wetlands are to be protected. Riparian management practices and standards, ground cover, stream-bank stability, wetland and floodplain status will be monitored.

17. How do actual outputs and services compare with projected? [36 CFR 219.12(k)1]

The 1982 NFMA implementing regulations require that outputs and services will be monitored and compared to those projected in the Forest Plan. Trends in forest product, mineral leasing and surface rights, access and road conditions, and Forest

Plan implementation costs will be tracked and compared to projections made at the time the Forest Plan was developed.

Element: Adequacy of constructed roads for the planned uses and revegetation following the completion of use. [36 CFR 219.27 a (10), 36 CFR 219.27 b (7)]

The Chattahoochee-Oconee National Forests implement FSM 7703.1 and 7712.1 which requires that Roads Analysis be completed for road management decisions made after January 2001. The Forests have performed Road Analysis during Fiscal Year 2005 on the following: lands which it has acquired during the fiscal year; special use permits to individuals in which the permit affects the forest road system; decommissioning of roads on national forest system lands, both system roads and non-system roads. The soil that is disturbed during road decommissioning and road construction, have been seeded with native grasses.

Element: Adequacy of designated transportation and utility corridors.

There are several projects located on the Forest which involve special use permits and right of ways. These projects include replacing two state highway bridges, and replacing of culverts and bridges on county roads. The Forests' resource specialists and engineering personnel have been involved in the review of these projects and development of permit stipulations and designs acceptable to all parties concerned.

18. Are silvicultural requirements of the Forest Plan being met?

The 1982 NFMA implementing regulations also require monitoring of specific silvicultural requirements. Silvicultural practices, harvest methods, harvest unit size, regeneration establishment, and land suitability for timber productions will be monitored and evaluated to determine if and when changes may be needed.

The short answer is 'yes'. However, we are being challenged in implementing a plan that has no quantitative timber production objective ***and*** does have restoration objectives that do not include regeneration following a timber harvest; for example, oak woodland. These objectives do not need to be related to traditional silviculture and thus NFMA requirements. The term 'suitablility' as used in NFMA is most directly applicable to volume production to meet a timber output objective and much less easily used when volume production is not the purpose but rather the consequence of pursuing another objective but choosing to use timber harvest as a means. It is unclear if the adjacency constrain for 'even aged harvest units' does or should apply to conducting even aged regeneration harvest within the constraint distance of ESH created without a timber sale such as by prescribed burning, especially if it is also larger than the maximum acreage limit.

19. Are Forest Plan objectives and standards being applied and accomplishing their intended purpose?

Periodic review of objectives and standards established in the Forest Plan is called for to assure that desired condition are being achieved and that these requirements will stay current given Forest Plan modifications, changed conditions and new information that accumulate over time. Implementation and effectiveness of best management practices and other standards will be tracked and periodically evaluated

Site specific projects are just now beginning to take shape out in the Ranger districts of the forests. Woodland restorations, wildlife habitat creation and forest health thinnings have been approved and are in the early phases of implementation. Monitoring is part of each project.

Under monitoring question number 9, there are suggested improvements to be made to help answer whether or not high quality nature based recreation experiences are being provided and what are the trends. Similarly, under monitoring question number 13, suggestions are made to better answer the monitoring question.

These suggestions will be taken into consideration, and possibly incorporated into the Forest Plan .

RESEARCH

Forest Monitoring Studies and Research

The Forests have 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 and thus results are not available at this time.

Hemlock Woolly Adelgid research is on-going.
A Salamander survey has occurred on the Chattahoochee-Oconee Forests from February 2004 to May 2005.

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 FY 2004

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