National Forests in North Carolina

FY 2006 Monitoring and Evaluation Report

Nantahala * Pisgah * Uwharrie * Croatan

Schweinitz's Sunflower – an endangered species found on the Uwharrie National Forest

Forest Supervisor's Office
160A Zillicoa Street
Asheville, North Carolina 28801
(828) 257-4200

April, 2007

CONTENTS

PREFACE

Forest plan monitoring and evaluation reports are essential elements for maintaining valid and effective Land Management Plans. Nantahala and Pisgah National Forests operate under a plan signed in 1987 and significantly amended (Amendment 5) in 1994. Revision of this plan will begin no earlier than FY 2009. The original plan for the Uwharrie National Forest was signed in 1986. Plan revision is currently underway. A revised Croatan National Forest plan went into effect in FY 2003. The various plans are available online at http://www.cs.unca.edu/nfsnc/nepa/nepa.htm.

The Annual Monitoring and Evaluation Report for FY 2006 is organized into broad resource topic areas. A summary of the historical context for management of the four Forests is available online at http://www.cs.unca.edu/nfsnc/me2003/nfsnchistory.pdf.

KEY FINDINGS AND CERTIFICATION

- The National Forests in North Carolina (NFsNC) were identified as the second most visited national forest in the country, behind only the White River National Forest in Colorado. NFsNC visits were more than twice as high as any of the other national forests in the South.

- In FY 2006, $1,577,393 collected in user fees helped to fund numerous recreation projects.

- Early successional habitat (ESH) on the Nantahala and Pisgah National Forests continues to average approximately only 25% of the desired amount set in the Forest Plan.

- Whereas the amount of young forest (ESH) remains low on the Nantahala and Pisgah National Forests, the amount of forest greater than 80 years of age has doubled over the past 16 years, going from 23% TO 56%.

- The slight upward trend in timber sale volume continued into FY 2006, yet remains less than half the allowable sale quantities set in the Forest Plans.

- FY 2006 Threatened and Endangered species monitoring discovered: 6 new subpopulations of various T&E plants; one subpopulation lost of Schweinitz's sunflower but one new population established; and ZERO small whorled pogonia individuals. New populations of nine sensitive plant species were observed as well as 2 new populations of species of concern.

- In FY 2006 there was a 38% increase in special use permits issued on the Uwharrie, and 9%increase on the Nantahala and Pisgah. Permits on the Croatan remained stable.

Forest Supervisor's Certification

I have evaluated the monitoring results and I have directed that the Action Plan be implemented according to the time frames indicated, unless new information or changed resource conditions warrant otherwise. I have considered funding requirements in the budget necessary to implement these actions.

During FY 2007, the Plan for Nantahala and Pisgah National Forests and the revised Croatan National Forest Plan are sufficient to guide forest management for FY 2006 on those Forests. For the Uwharrie National Forest Plan Revision is proceeding in FY 2007.

Any amendments or revisions to the Forest Plans will be made using the appropriate National Environmental Policy Act (NEPA) procedures.

s/s Marisue Hilliard *April 6, 2007*

Forest Supervisor Date

FY 2006 Monitoring Results

Goal or Desired Condition: A wide variety of recreational opportunities are provided with increased opportunities for non-motorized recreation. Activities, facilities, and programs are accessible to the extent possible.

National Visitor Use Monitoring Results: The 1.25 million acre National Forests in North Carolina (NFsNC) have the second highest number of visitors of all national forests in the country! The only national forest with more annual visitors was the 2.3 million acre White River National Forest in Colorado, home to hugely popular ski resorts such as Aspen and Vail. Visits to NFsNC were more than twice as high as any other national forest in the southern region – an area from Texas through Virginia. Given that the population of North Carolina is growing at a rate that is 50% higher than the nation as a whole, and most surrounding states are also growing faster than average, very high recreation use is expected to continue. For complete visitor use figures go to http://www.fs.fed.us/recreation/programs/nvum.

Monitoring Item	Results
To what extent are management activities appropriate for moving areas of the Forest toward the desired conditions for recreation.?	**Croatan**: Improvements, such as bank stabilization adjacent to recreation sites along the Neuse River are very appropriate to retaining desired conditions at these sites and preserving significant capital investments well into the future. New developments, such as the Black Swamp OHV Area and Dixon Fields river access area, are appropriate improvements supporting the desired recreation condition of reducing vegetation loss and providing desirable access for OHV users and non-motorized watercraft users. **Uwharrie**: Development of Kings Mountain Point Day Use Area allowed the relocation of a major picnic area adjacent to a highly used boat launch to Kings Mountain Point, thereby removing picnickers from the water near the launch site and creating a safe, desirable recreation experience for the public. **Nantahala/Pisgah:** Reconstruction of picnic areas in the Davidson River corridor is being done in such a way as to protect major investments from serious flood damage in the future. This will allow much quicker recovery from future storm events and allow this very desirable, high demand activity to continue with minimal interruption. Bank stabilization projects have been completed that will enhance the recreational experience at these sites as well. Numerous trail bridges have been replaced and trails

Monitoring Item	Results
	have been reconstructed or relocated out of unfavorable locations to significantly improve the recreational condition on these forests.
To what extent has accessibility improved?	**Croatan**: All new construction or reconstruction complies with current accessibility standards to the extent possible. For example, on the Croatan, three beach access sites along the Neuse River were stabilized to prevent further serious erosion to the adjacent 10 to 25 foot banks and recreation sites. These sites were not previously accessible. After reconstruction, all three sites now have accessible concrete pathways between the main recreation site and the beach. **Uwharrie**: All new construction or reconstruction complies with current accessibility standards to the extent possible. At the newly completed Kings Mountain Point Day Use Area, all aspects of the site have been made accessible including parking, three toilets, picnic shelter, numerous picnic sites, trash receptacles, water hydrants, perimeter access path and four fishing piers. **N/P**: All new construction or reconstruction complies with current accessibility standards to the extent possible. At the newly reconstructed Sycamore Flats Picnic Area, two new toilets, several picnic sites, trash receptacles and streamside path are accessible. At Cheoah Point Campground, the toilets, six campsites, a camping cabin, trash receptacles and hydrants are accessible. Three new accessible toilets are in place at Jackrabbit Campground. A new addition to Curtis Creek Campground is completely accessible including toilets, four campsites (including three walk-in sites), information board, water hydrants and trash receptacles.
Are Visual Quality Objectives being met? Is the scenery being maintained or enhanced?	**N/P:** In 2006 potential scenery impacts were analyzed for proposed land exchanges, utility corridors, and vegetation management projects across the Nantahala and Pisgah National Forests. Each proposal was designed or modified to meet visual quality objectives assigned through the Land and Resource Management Plan. Some of these projects occurred in visually sensitive areas, others did not. Though some of the activities proposed or implemented in visually sensitive areas may not result in "a more continuous" canopy, they were designed to be "natural-appearing" with a goal of

Monitoring Item	Results
	meeting the assigned visual quality objective.
To what extent are health and safety hazards corrected?	**Croatan, Uwharrie, N/P**: Hazard tree inspections are conducted at least annually and recreation areas or sections of areas are closed until the hazard trees are removed. Safety inspections occur annually on all Forest Service facilities. Any safety hazards identified during these inspections are prioritized and corrected based on priority and funding available. Critical hazards, those where exposure may result in severe injury or death are corrected immediately or the facility is shut down until repairs can be made.

Goal or Desired Condition: A variety of silvicultural treatments are used to provide a continuous supply of wood products, with emphasis on high quality hardwoods (Nantahala/Pisgah).

Monitoring Item	Results
Southern Pine Beetle Restoration & Prevention FY 2006	**Reforestation: Site Prep. for Planting = 391 acres** **Planting & Nat. Regen. = 361 acres** **TSI: Release of Planted Seedlings = 0 acres** **SPB Prevention: Precom. Thinning = 391 acres**
Timber Stand Improvements (TSI), FY 2006	**TOTAL for FY 2006 = 1,849 acres** **PLANS PROJECTED = 2,487 acres**

Monitoring Item	Results
Acres Harvested in FY 2006 by Method, and Plan Projected Harvest	
Timber Sale Volume	

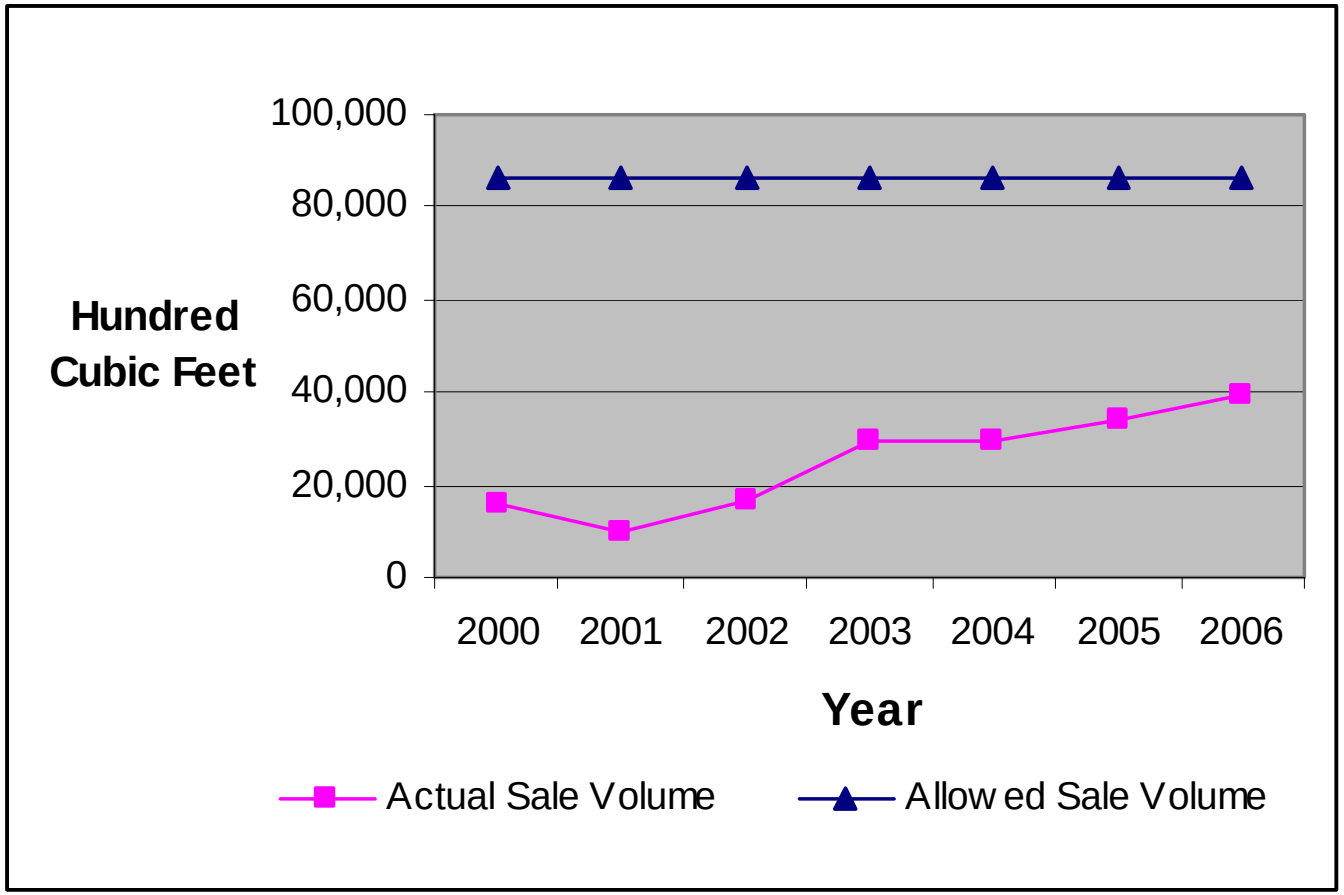
ALL NFsNC FORESTS		
Method	**FY 2006 Harvested Acres**	**Plan Projections**
Even-Aged/ Two-Aged	641	2,767
Uneven-Aged	9	500
Thinning	658	560
Salvage	0	-
Shelterwood Removal	0	-
TOTAL	**1,308**	**3,827**

Allowable Sale Quantity (ASQ)	**Volume Harvested 2006**	**Volume Offered 2006**	**Volume Sold 2006**
TOTAL = 43 MMBF/Year	**26,607 ccf or 13.3 mmbf**	**43,500 ccf or 21.7 mmbf**	**39,219 ccf or 19.6 mmbf**

CCF = hundred cubic feet MMBF = million board feet

FOREST	**VOLUME OFFERED 2006** (CCF)	**VOLUME SOLD 2006** (CCF)	**VOLUME HARVESTED 2006** (CCF)
CROATAN	10,996	10,996	5,804
UWHARRIE	6,653	6,184	1,228
NANTAHALA/PISGAH	25,851	22,039	19,575
TOTAL	43,500	39,219	26,607

Timber Sale Volume on Upward Trend: Still less than Half Allowable Sale Quantity



Goal or Desired Condition: Maintain, and where possible, enhance the diversity of plant and animal communities.

<table>
<tr><th>Monitoring Item</th><th>Results</th></tr>
<tr><td>Creation of early successional habitat (ESH):</td><td>
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<tr><th>Regeneration/Early Successional Habitat (ESH) Created in FY 2005 (acres)</th><th>Desired Annual Amount Established per Plans (acres) (approximation)</th></tr>
<tr><td>Croatan 4500 (Rx burning)
Nantahala/Pisgah 634 (regeneration)
Uwharrie 351 (regeneration & Rx burning)</td><td>Croatan 1550
Nantahala/Pisgah 3270
Uwharrie 400</td></tr>
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ESH in eastern deciduous forests is recognized as a habitat in short supply throughout the nation. It is a habitat characterized by a variety of shrubby vegetation, including very young trees; berry-producing vines such as grapes, blackberries and raspberries; and herbaceous vegetation. This condition is found in very young forests, but is not usually found in either mature forest or land that has been converted for some other use such as private residences.

ESH is produced on Nantahala and Pisgah National Forests primarily through timber harvest and regeneration. Harvested areas provide this habitat for about 10 years while the regrowing trees are still small and the canopy is still open. ESH benefits deer, bear, and wild turkey, as well as numerous songbirds such as golden-winged warbler, yellow-breasted chat, brown thrasher, and prairie warbler.
ESH is produced on the Uwharrie through a combination of prescribed burning along with timber harvest and regeneration.
ESH is produced on the Croatan primarily through burning in high pocosin and low pocosin habitat.

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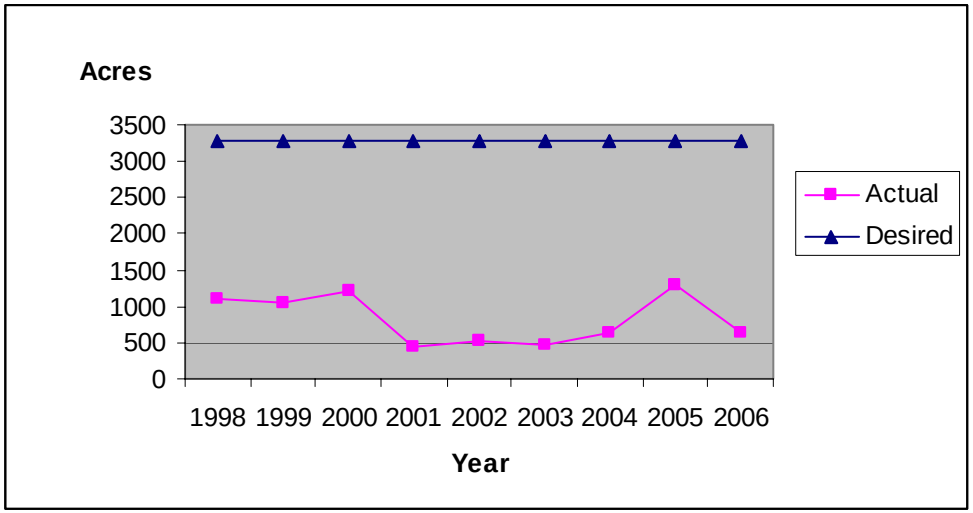
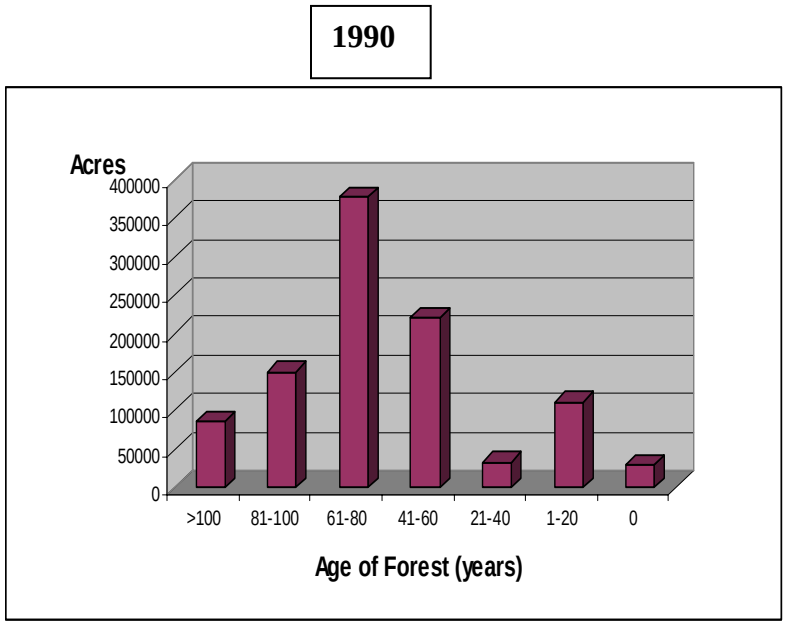
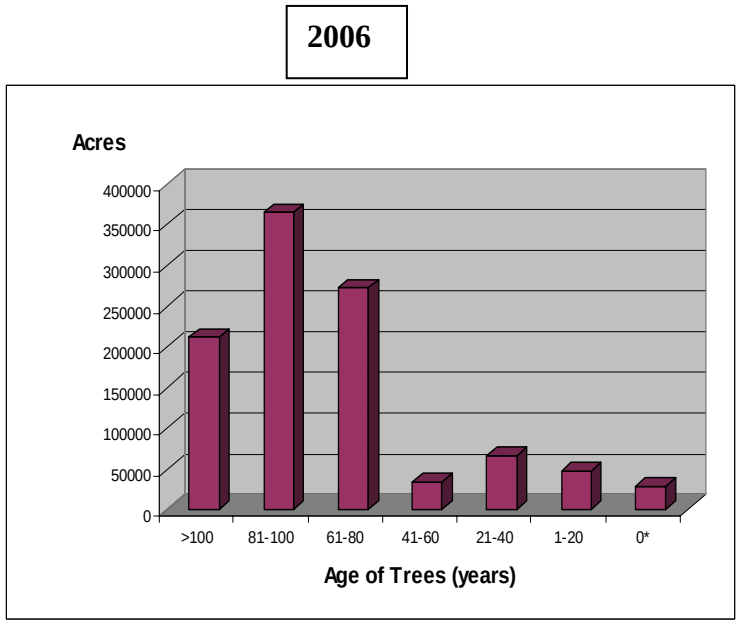
Monitoring Item	Results
	Table 1. 9-Year Trend Indicates Creation of Early Successional Habitat on the Nantahala and Pisgah National Forests is Consistently Much Lower than Land Management Plan Standards 
Reducing Impacts from Invasive Species	In 2006, five mountain ranger districts performed management activities to reduce the extent of non-native invasive species. Specific control projects across 75 acres addressed outbreaks of oriental bittersweet, princess tree, multiflora rose, privet, autumn olive, and Chinese silver grass. The second year of an ongoing volunteer cooperative monitoring project with the Southern Research Station and SAMAB (Southern Appalachian Man and the Biosphere) took place on a portion of the Appalachian Ranger District. As a part of this effort volunteers helped to manually control invasive outbreaks of princess tree, tree-of-heaven, privet, oriental bittersweet, and Japanese stilt grass.

FOREST-WIDE TREND: Amount of Forest Over 80 Years Old on Nantahala and Pisgah National Forests Doubles in 16 Years, from 23% to 56%.





Monitoring Item	Results
Achieving the desired condition for instream large woody debris (approximately 100 pieces per stream mile)?	Natural LWD is more common in streams with older, more diverse riparian areas. Because of variability in riparian stand composition and age, as well as stream channel type, it is not clear that this desired condition meets the needs of the diversity of streams across the Forests. Some stream types do not need, or cannot support, high levels of LWD, while in others, LWD is critical to maintaining hydrologic stability and aquatic habitat diversity. **It is recommended that this desired condition be re-evaluated during the next plan revision process.**

Goal or Desired Condition: Maintain viable populations of existing native wildlife, fish, and plants. Threatened and endangered plant and animal species are protected, managed or recovered consistent with the Endangered Species Act; and sensitive species are conserved.

Habitat and population status of Management Indicator Species (MIS)

Croatan National Forest MIS

Species	Estimated Population Trend 2006
Red-cockaded woodpecker	Increasing
Longleaf pine	Increasing
Wiregrass	Increasing

Uwharrie National Forest MIS

Species	Estimated Population Trend 2006
Black bear	Increasing
White tailed deer	Increasing
Gray Squirrel	Static in Cycles
Turkey	Increasing

Nantahala and Pisgah National Forests:

Species	Estimated Population Trend 2006
Black bear	Increasing
White tailed deer	Decreasing
Pileated woodpecker	Increasing
Ovenbird	Decreasing
Rufous-sided towhee	Decreasing
Pine warbler	Static
Acadian Flycatcher	Increasing
Ruffed grouse	Static
Brook, brown and rainbow trout	Static
Largemouth bass	Static
Blacknose dace	Static

Habitat and population status of Management Indicator Species (MIS) [cont.]

Smallmouth bass	Static
Fraser fir	Static
Carolina hemlock	Decreasing
Ginseng	Static
Ramps	Static

Other Wildlife Monitoring

2006 Regional Landbird Strategy

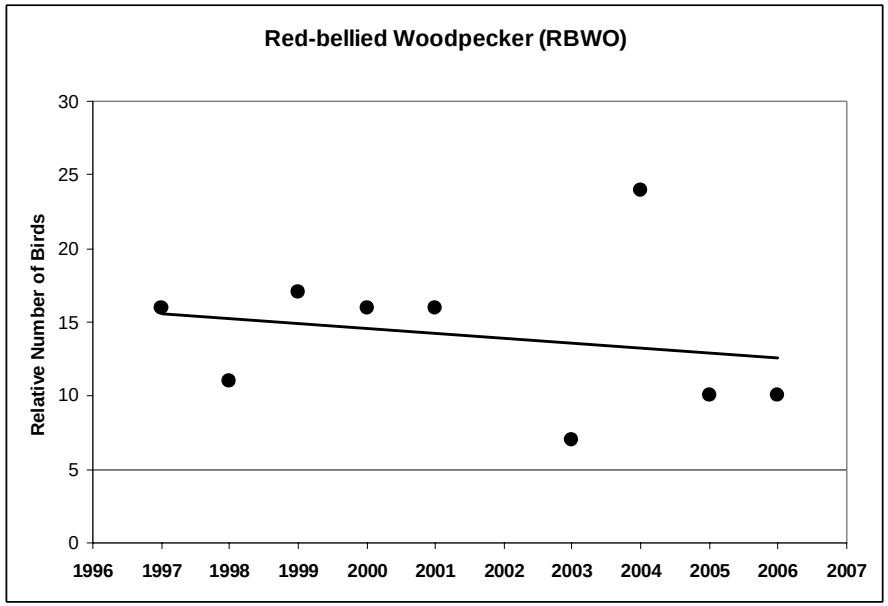
Across the National Forests in North Carolina Forest there are 353 plots established for neotropical migratory bird surveys (114 points on the Nantahala NF, 144 points on the Pisgah NF, 55 points on the Uwharrie NF, and 40 points on the Croatan NF). During the spring of 2006 surveys were completed for all the Croatan and Uwharrie plots. For the Nantahala, 60 of the 114 plots were surveyed. For the Pisgah, all plots were surveyed but the data is not yet available.

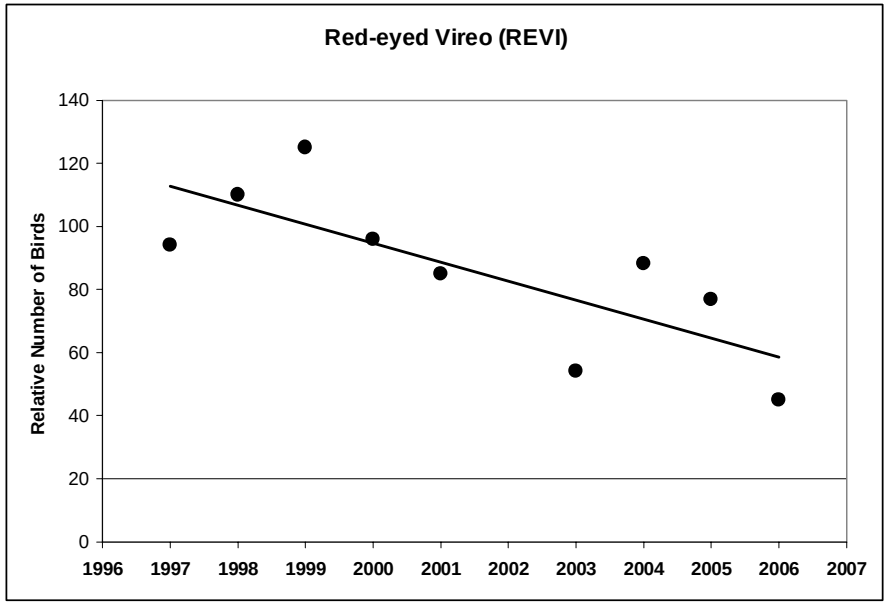
Seventy-two species were detected across the mountain forests (Nantahala and Pisgah). Forty-one species were detected on Uwharrie National Forest (piedmont), and forty-two species were detected on the Croatan National Forest (coast).

Due to incomplete information for the mountain forests, no new trend information is available this year. Trend information for the Croatan and Uwharrie follows.

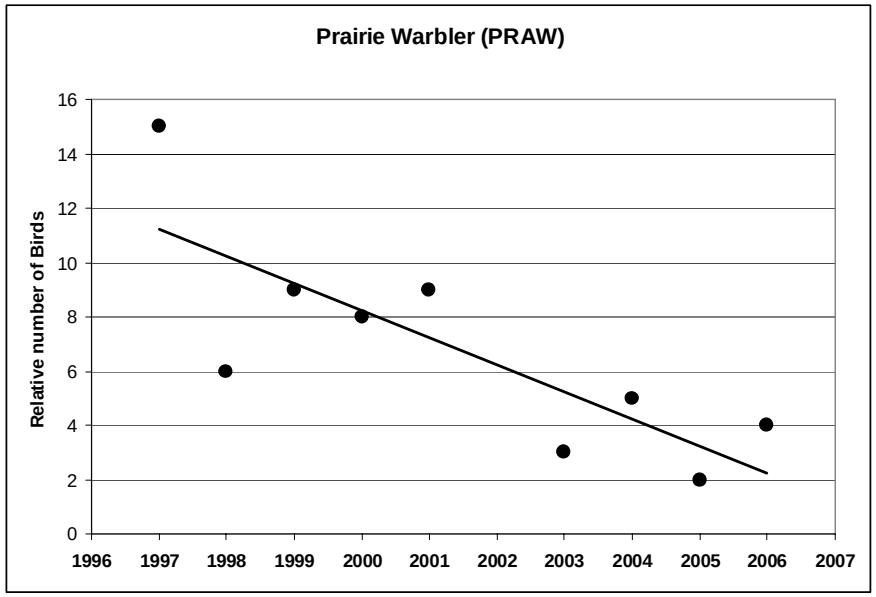
The figures below indicate trends of several birds across the Uwharrie National Forest. Most bird species trends are static to slightly declining. The Uwharrie National Forest lies within a landscape of highly-fragmented ownership, with much of the private land in agriculture or rural/urban development. This may be affecting forest bird populations. It is recommended that this monitoring continue on the Uwharrie National Forest, with an emphasis on identifying limiting factors for declining species.

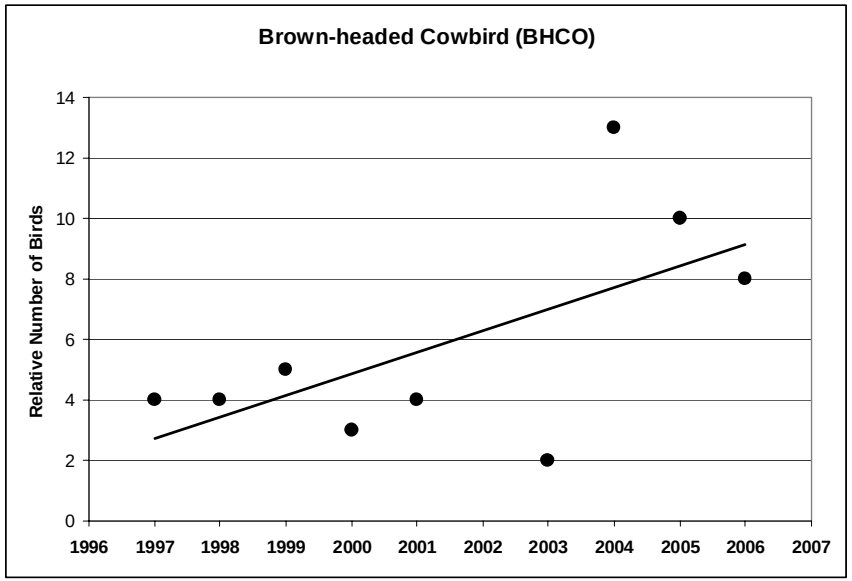
Uwharrie Bird Monitoring

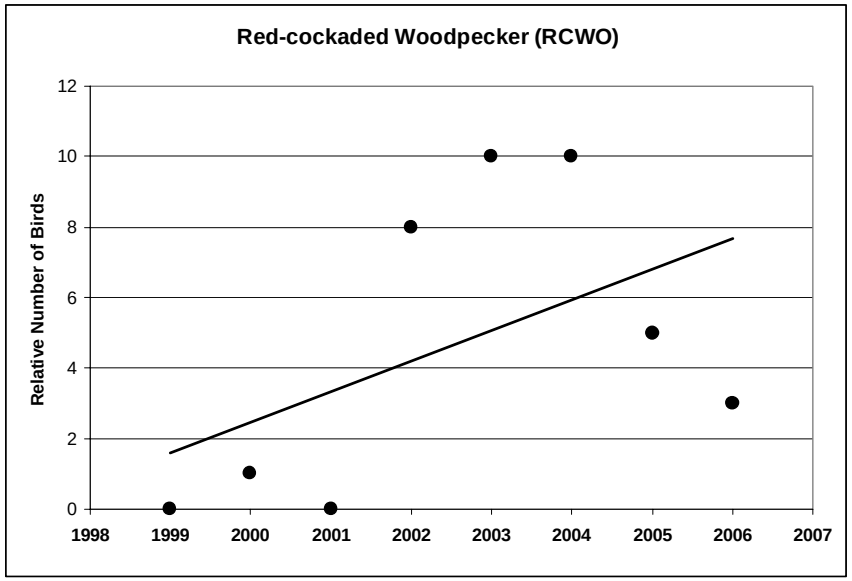




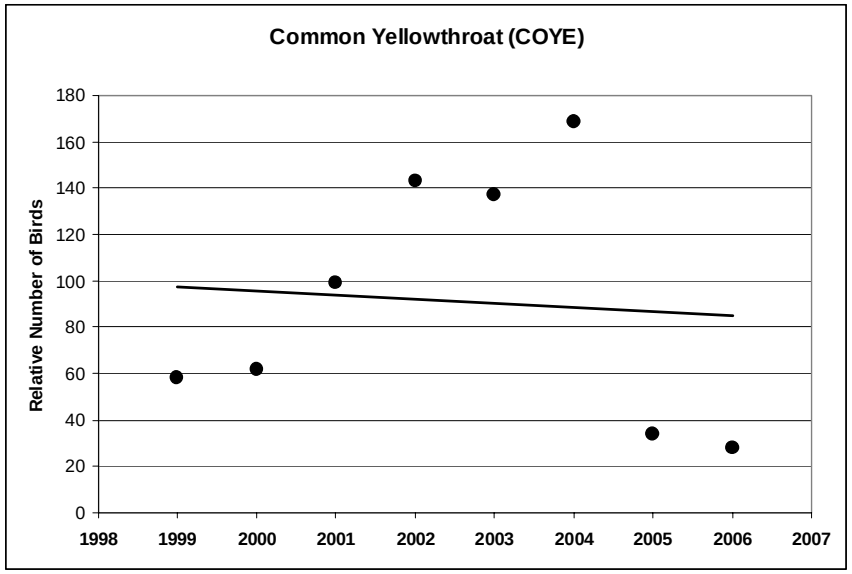
Uwharrie Bird Monitoring

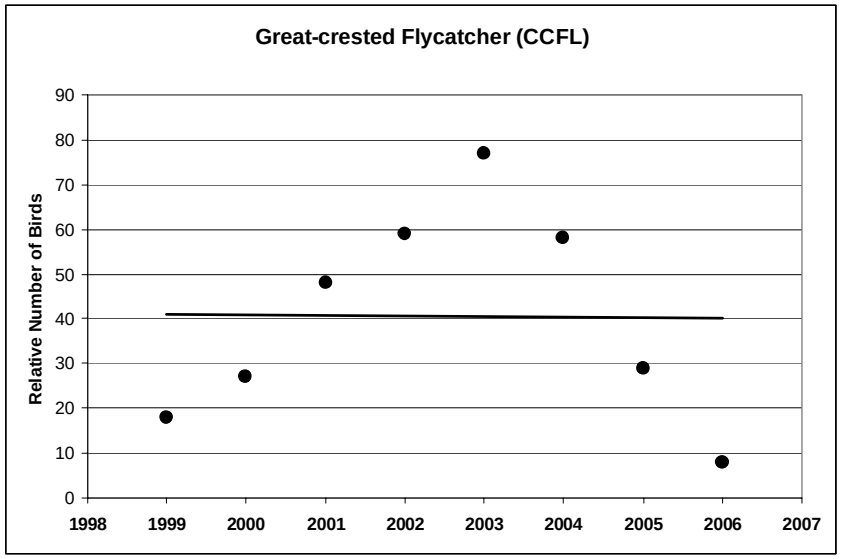




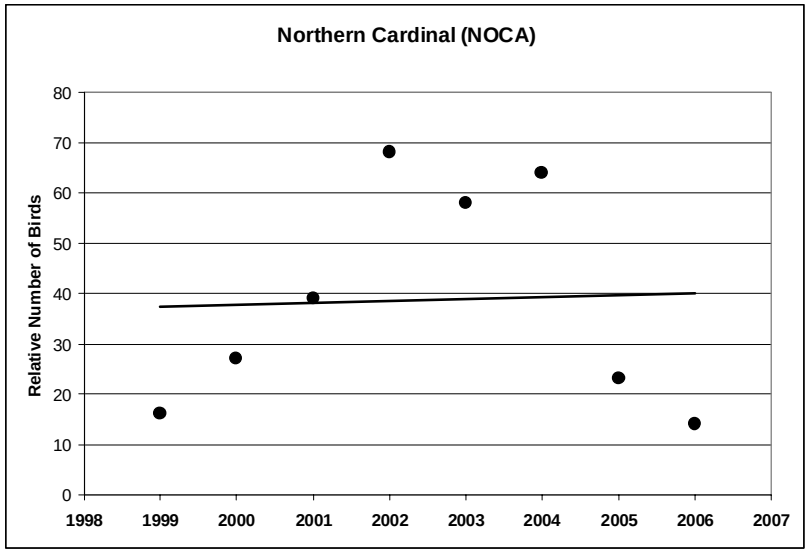
Croatan Bird Monitoring	The figures below indicate trends of several bird species across the Croatan National Forest, including the endangered red-cockaded woodpecker. Most bird species trends are static on the Croatan National Forest. Data shows a notable increase in the population of red-cockaded woodpeckers on the Forest, which coincides with increased habitat restoration efforts underway for the federally-listed species. It is recommended that this monitoring continue on the Croatan National Forest, with an emphasis on improving population trends for native forest species. 

Croatan Bird Monitoring





Croatan Bird Monitoring



Uwharrie Bird Points

UWHARRIE NATIONAL FOREST - # Individuals detected during point counts

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acadian Flycatcher	24	24	23	21	28	S	21	43	29	13
American Crow	48	62	51	55	44	U	28	46	22	21
American Goldfinch	11	14	10	13	8	R	17	6	6	12
American Redstart	7	3	8	11	3	V	2	2	0	0
Black-and-white Warbler	19	9	12	21	11	E	8	7	6	3
Black-capped Chickadee	0	0	0	1	0	Y	0	0	0	0
Barred Owl	0	2	0	0	0	S	0	1	0	0
Blue-gray Gnatcatcher	13	8	23	24	25		13	23	20	6
Brown-headed Cowbird	4	4	5	3	4	N	2	13	10	8
Brown-headed Nuthatch	0	0	1	1	0	O	0	0	0	0
Blue-headed Vireo	0	0	0	3	0	T	0	0	0	0
Blue Grosbeak	0	0	0	0	0		0	0	0	1
Blue Jay	9	15	8	10	11	D	9	9	6	5
Brown Creeper	0	0	0	0	0	O	0	1	0	0
Brown Thrasher	0	1	1	1	3	N	2	1	1	1
Black-throated Blue Warbler	9	0	0	9	0	E	0	0	0	0

Uwharrie Bird Points

Black-throated Green Warbler	7	5	0	1	0	0	1	0	0
Broad-winged Hawk	0	0	1	0	0	0	0	0	0
Blue-winged Warbler	0	3	0	0	0	0	0	0	0
Carolina Chickadee	26	23	27	19	16	16	24	12	7
Canada Goose	14	0	0	0	6	2	5	0	0
Carolina Wren	17	21	39	23	34	11	45	25	13
Chipping Sparrow	1	0	1	1	1	1	3	0	0
Chimney Swift	2	1	4	3	7	6	3	3	1
Common Grackle	0	0	0	1	0	0	1	2	0
Common Raven	0	1	0	0	0	0	0	0	0
Common Yellowthroat	6	2	5	6	6	2	5	2	3
Chestnut-sided Warbler	3	0	0	0	0	0	0	0	0
Chuck-will's-widow	1	1	1	0	0	0	0	0	0
Downy Woodpecker	1	5	3	2	3	4	6	5	1
Eastern Bluebird	0	0	0	0	1	1	4	0	0
Eastern Kingbird	1	0	0	0	0	0	0	0	0
Eastern Phoebe	0	1	1	0	1	1	1	0	0
Eastern Screech-Owl	2	0	0	0	0	0	0	0	0
Eastern Towhee	14	8	6	6	2	4	10	6	4
Eastern Wood-Pewee	10	6	7	4	7	3	2	6	0
Eastern Tufted Titmouse	36	34	39	33	32	14	41	25	13
Fish Crow	5	4	3	2	0	0	1	0	0
Field Sparrow	6	1	2	1	0	1	0	2	0
Great Crested Flycatcher	12	12	15	9	11	0	11	13	5
Great Horned Owl	0	1	0	0	0	0	0	0	0
Gray Catbird	3	1	0	2	0	1	1	1	0
Hairy Woodpecker	3	4	5	2	2	0	3	1	3
House Finch	0	0	0	0	2	0	0	0	0
Hooded Warbler	19	15	18	25	19	17	14	16	8
House Wren	0	1	0	0	0	0	0	0	0
Indigo Bunting	7	13	11	11	13	10	15	9	4
Kentucky Warbler	10	4	0	1	2	3	1	2	1
Louisiana Waterthrush	2	2	0	3	1	1	1	0	1
Magnolia Warbler	0	0	0	1	0	0	0	0	0
Mourning Dove	9	16	10	19	20	3	5	1	7

Uwharrie Bird Points

Northern Bobwhite	3	2	2	3	0	0	1	0	0
Northern Cardinal	14	18	21	18	17	10	16	10	9
Northern Mockingbird	4	0	1	0	0	0	0	0	0
Northern Parula	16	10	12	17	9	5	13	8	2
Ovenbird	39	37	49	54	38	31	50	50	18
Pine Warbler	28	22	41	43	33	17	17	40	0
Pileated Woodpecker	14	12	10	19	19	2	2	0	17
Prairie Warbler	15	6	9	8	9	3	5	2	4
Prothonotary Warbler	0	0	0	1	0	1	2	0	2
Rose-breasted Grosbeak	1	2	0	0	0	0	0	0	0
Red-bellied Woodpecker	16	11	17	16	16	7	24	10	10
Red-eyed Vireo	94	110	125	96	85	54	88	77	45
Red-headed Woodpecker	0	0	3	0	1	9	6	0	0
Red-shouldered Hawk	0	0	0	3	0	0	0	0	0
Red-tailed Hawk	0	0	1	0	0	0	0	0	0
Ruby-throated Hummingbird	3	1	2	2	4	3	6	3	1
Scarlet Tanager	16	12	20	12	16	3	17	4	3
Summer Tanager	35	35	17	31	13	16	12	21	15
Turkey Vulture	0	1	0	0	0	1	0	0	0
Veery	4	0	0	2	1	0	0	0	0
White-breasted Nuthatch	5	5	16	6	12	7	8	5	3
White-eyed Vireo	4	7	7	5	6	2	7	2	2
Worm-eating Warbler	11	10	2	2	1	0	0	0	0
Wild Turkey	2	0	0	3	1	1	0	0	0
Wood Duck	0	0	0	0	0	1	0	0	0
Wood Thrush	29	29	37	30	19	6	28	13	3
Whip-poor-will	0	0	0	1	1	0	0	0	0
White-throated Sparrow	0	0	0	2	0	0	0	0	0
Yellow-breasted Chat	15	13	7	13	12	4	4	5	3
Yellow-billed Cuckoo	2	24	14	7	2	5	18	10	8
Northern (Yellow-shafted) Flicker	1	0	3	2	1	0	1	5	0
Yellow-throated Vireo	6	9	7	4	3	2	4	4	4
Yellow-throated Warbler	4	8	8	12	4	8	11	7	4
Yellow Warbler	2	0	0	0	0	1	1	1	0

Croatan Bird Points

CROATAN NATIONAL FOREST - # Individuals detected during point counts

Species	1999	2000	2001	2002	2003	2004	2005	2006
Acadian Flycatcher	16	18	35	31	43	30	12	4
American Crow	2	3	2	16	13	2	4	0
American Goldfinch	3	2	4	8	5	4	0	0
American Robin	0	1	2	0	0	0	0	2
Bachman's Sparrow	7	0	4	6	5	9	2	0
Barn Swallow	0	0	0	0	1	2	0	0
Black-and-white Warbler	2	0	0	0	2	6	1	0
Black-billed Cuckoo	0	0	0	1	3	0	0	0
Belted Kingfisher	0	0	0	0	0	0	0	1
Blue-gray Gnatcatcher	11	20	29	43	31	23	15	4
Brown-headed Cowbird	7	21	14	30	15	10	12	6
Brown-headed Nuthatch	15	20	13	37	25	10	7	0
Blue Grosbeak	7	4	12	10	2	2	0	0
Blue Jay	2	4	8	0	6	7	0	1
Brown Thrasher	0	0	0	6	6	7	1	0
Black-throated Green Warbler	0	0	0	2	2	4	0	0
Carolina Chickadee	7	15	15	19	22	10	4	4
Carolina Wren	63	78	142	92	125	142	39	32
Cedar Waxwing	0	0	0	0	2	0	0	0
Chipping Sparrow	0	2	0	6	4	0	0	0
Chimney Swift	0	0	0	4	0	7	0	0
Common Grackle	11	6	6	18	13	19	3	10
Common Nighthawk	1	0	0	2	2	5	0	0
Common Yellowthroat	58	62	99	143	137	169	34	28
Chestnut-sided Warbler	0	0	0	0	0	0	0	1
Downy Woodpecker	5	5	9	4	12	6	3	7
Eastern Bluebird	1	1	1	12	1	0	5	0
Eastern Kingbird	6	4	4	14	3	3	4	2
Eastern Towhee	42	66	97	149	168	170	44	34
Eastern Wood-Pewee	8	3	26	17	31	29	8	0

Croatan Bird Points

Eastern Tufted Titmouse	8	16	39	38	40	18	3	2
European Starling	0	0	1	3	2	0	0	0
Fish Crow	1	7	4	2	7	5	0	0
Great Blue Heron	0	0	0	1	0	0	0	0
Great Crested Flycatcher	18	27	48	59	77	58	29	8
Gray Catbird	20	19	28	36	41	52	1	1
Green Heron	0	1	2	0	1	1	0	0
Hairy Woodpecker	0	0	4	4	1	4	0	0
Hooded Warbler	4	0	6	6	8	14	1	7
House Wren	3	10	6	26	32	2	1	0
Indigo Bunting	6	22	20	43	34	20	4	5
Kentucky Warbler	0	3	0	0	0	0	0	0
Louisiana Waterthrush	1	1	0	2	0	0	0	0
Mourning Dove	9	31	28	43	46	29	20	4
Northern Bobwhite	6	3	19	16	10	13	9	4
Northern Cardinal	16	27	39	68	58	64	23	14
Northern Parula	13	31	30	35	33	37	11	5
Orchard Oriole	8	2	12	7	5	3	0	0
Ovenbird	19	23	27	42	35	22	18	6
Pine Warbler	31	22	47	42	42	26	18	3
Pileated Woodpecker	0	4	9	5	2	8	11	2
Prairie Warbler	94	94	162	132	151	152	44	24
Prothonotary Warbler	14	15	31	51	58	72	16	8
Purple Martin	1	2	1	4	5	9	0	2
Red-bellied Woodpecker	7	12	7	16	14	20	3	3
Red-cockaded Woodpecker	0	1	0	8	10	10	5	3
Red-eyed Vireo	7	17	22	30	41	19	6	1
Red-headed Woodpecker	1	3	4	1	3	3	6	3
Red-shouldered Hawk	0	0	0	1	0	1	1	0
Ruby-throated Hummingbird	1	5	4	3	4	3	5	3
Red-winged Blackbird	0	1	4	3	0	2	0	0
Scarlet Tanager	0	0	0	0	1	0	0	0
Summer Tanager	4	6	10	17	13	18	1	3
Swainson's Warbler	8	7	15	11	14	11	3	0
Tree Swallow	0	0	0	0	1	0	0	0

Croatan Bird Points

Turkey Vulture	0	0	0	0	2	0	0	0
White-breasted Nuthatch	4	0	11	22	6	12	1	0
White-eyed Vireo	26	31	52	61	68	46	3	9
Worm-eating Warbler	6	3	12	9	5	13	3	3
Wood Duck	0	0	0	0	0	1	0	0
Wood Thrush	6	2	5	5	7	14	8	3
Yellow-breasted Chat	22	18	57	37	27	20	6	0
Yellow-billed Cuckoo	10	7	9	23	23	19	11	8
Northern (Yellow-shafted) Flicker	3	7	7	16	28	17	14	4
Yellow-throated Vireo	0	1	9	11	9	3	0	0
Yellow-throated Warbler	20	13	21	17	25	31	7	7

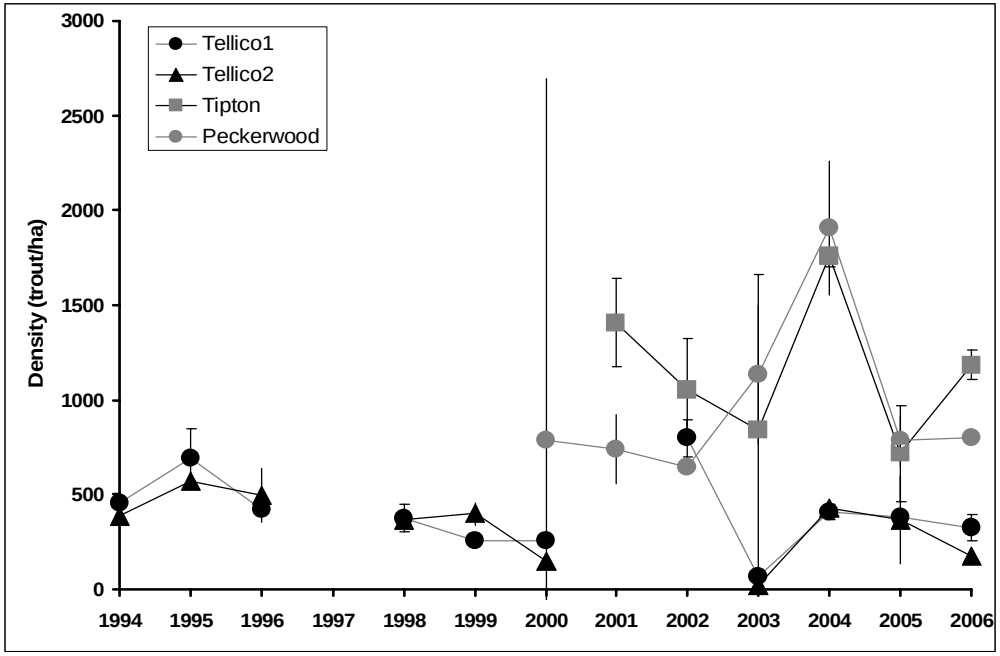
Bat Surveys

Forest bat monitoring was accomplished through mist netting of likely travel corridors and foraging areas at five areas on the Nantahala and Pisgah National Forests during the summer of 2006. These included the Alarka Laurel and Bear Creek on the Nantahala National Forest, Harmon Den, Mulberry, and Boone Fork on the Pisgah National Forest. Anabat recordings were also used to record species not captured during mist net surveys. Twenty-six bats were captured, representing seven species:

1. Little brown bat (*Myotis lucifugus*),
2. Eastern red bat (*Lasiurus borealis*),
3. Big brown bat (*Eptesicus fuscus*),
4. Hoary bat (*Lasiurus cinereus*),
5. Pipistrelle (*Pipistrellus subflavus*),
6. Rafinesque's big-earred bat (*Corynorhinus rafinesquii*) and
7. Northern long-earred bat (*Myotis septentrionalis*).

No Indiana bat (*Myotis sodalis*) captures or sightings occurred on National Forests in North Carolina in FY2006.

Aquatics

Coldwater stream fish populations trends	**Long-term trout population monitoring continued in FY 2006.** Monitoring on approximately 15 miles of streams within Nantahala and Pisgah National Forests continues to support earlier findings that while individual populations exhibit high annual variability in age class structure and biomass, **overall trends in brook, brown, and rainbow trout, and associated nongame species populations across the Nantahala and Pisgah have remained stable during the last 10 years**. Positive efforts are underway to improve trout habitat and populations within the Tellico OHV area. Trout population monitoring continues in this area. **Trout Density Variable on Tellico OHV Routes** 

Reservoir Fish Communities	**Long-term monitoring of reservoir fish communities continued on approximately 200 acres of mountain reservoirs in FY 2006.** Reservoirs included in this monitoring are Hiwassee Lake, Fontana Lake, Santeetlah Lake, and Chatuge Lake on the Nantahala National Forest and Badin Lake on the Uwharrie National Forest. Based on the age of the reservoirs and results of long-term population monitoring efforts, it is thought that habitat enhancement is one key to maintaining reservoir fish population stability on both the Nantahala and Uwharrie National Forests. To this effect, approximately 125 acres of reservoir shoreline habitat were improved on the Nantahala National Forest during FY06. Additionally, approximately 400 acres of mid-depth and deepwater habitats were enhanced across the Nantahala National Forest. As with coldwater stream fish populations, reservoir fish communities exhibit high annual variability in age class structure and biomass, although **overall trends in reservoir fish species populations have remained stable during the last 10 years.**
Warmwater stream fish populations trends	**Fish communities across the Uwharrie National Forest continued to be monitored during FY2006.** Index of biotic integrity scores for sites across the Yadkin Basin show that streams across the Uwharrie National Forest are generally in better condition than across the rest of the basin.
Aquatic rare species and habitat	**Approximately 100 miles of stream across the National Forests in North Carolina were evaluated for rare aquatic species presence and suitable habitat during FY 2006.** These inventories were done to maintain compliance with environmental laws and regulations during the NEPA process for forest management activities, as well as to further the science of individual species.
Aquatic invertebrate populations	**Aquatic invertebrate populations were monitored across the Nantahala and Pisgah National Forests.** As with fish populations, aquatic invertebrate populations tend to exhibit high annual variability in community structure and biomass; however, **overall trends in aquatic invertebrate populations across the Nantahala and Pisgah National Forests have remained stable.**
Freshwater mussel populations	**Freshwater mussel populations continue to be monitored in the Little Tennessee and Nolichucky Rivers** through cooperative efforts with the U.S. Fish and Wildlife Service and North Carolina Wildlife Resources Commission to implement the recovery plan for the endangered Appalachian Elktoe (*Alasmidonta raveneliana*). In addition, aquatic habitats suitable for all

	freshwater mussels continue to be inventoried to improve the reliability of mapped species' ranges and distributions across the National Forests in North Carolina. Despite regional declines in some species' populations, no declines have been documented on the Forests. In fact, **the known range and distribution of freshwater mussels on the Forests continues to expand** as inventories of suitable habitat are completed.

Status of Threatened and Endangered Plants

PLANTS	YEAR LISTED	STATUS	ON FORESTS?
Sensitive Joint-vetch	1992	T	May occur
Spreading Avens	1990	E	Occurs
Swamp Pink	1988	T	Occurs
Dwarf-flowered Heartleaf	1989	T	May occur
Mountain Bluet	1990	E	Occurs
Mountain Golden Heather	1980	T	Occurs
Small Whorled Pogonia	1982	E	Occurs
Heller's Blazing-star	1987	T	Occurs
Bunched Arrowhead	1979	E	May occur
Mountain Sweet Pitcher Plant	1988	E	May occur
Green Pitcher Plant	1979	E	May occur
White Irisette	1991	E	May occur
Blue Ridge Goldenrod	1985	T	Occurs
Rough-leaved Loosestrife	1987	E	Occurs
Schweinitz's Sunflower	1991	E	Occurs
Virginia Spiraea	1990	T	Occurs
Rock Gnome Lichen	1995	E	Occurs

There were 17 Threatened or Endangered plant species that occur or may occur on the National Forests in North Carolina at the end of FY 2006.

Activities in FY 2006: ***Spreading avens***

Spreading Avens. All monitoring was conducted on Roan Mt. Environmental baseline established at Grassy Ridge with 100% sampling and assessment. Additional baseline data was collected within a subset of a population at Reservoir Cliff. Resampling on Roan High Bluff indicated little change from FY 2005. An assessment within 7 additional subpopulations indicated healthy flowering with occasional reproduction. Two new subpopulations were located.

Swamp Pink. Two subpopulations of the large population present within the Pink Beds were visited. Both subpopulations appeared vigorous and were not affected by recent trail construction 50-100 meters away.

Small Whorled Pogonia. The annual census of small whorled pogonia indicates an alarming trend in this species across the Nantahala and Pisgah National Forests. No individuals were located in 2006.

Rock Gnome Lichen. Six subpopulations present within two large populations located on Roan Mt were revisited in FY 06. All the subpopulations were healthy and appeared vigorous. Two additional subpopulations were located on Roan Mountain. Two small subpopulations near an ongoing trail project were monitored near Shining Rock Wilderness. There was no visible change in these subpopulations and additional clumps were located further upstream.

Mountain Bluet. Baseline data collected on two subpopulations on Roan Mountain.

Blue Ridge Goldenrod. An assessment was completed within all 3 known subpopulations on Roan

Mt. Qualitative data indicated no decline from previous surveys in 2001. One new subpopulation was located.

Heller's Blazing Star. Baseline demographic data was collected within a subset of a recently discovered population. The population has nearby rock-climbing activity.

Heller's Blazing Star

Small whorled pogonia

Schweinitz's Sunflower. Fourteen subpopulations representing 8 populations were monitored in FY 2006. Trends of ramet numbers within these subpopulations indicated 5 were increasing, 4 decreasing, and 4 relatively stable. One subpopulation is believed to be extirpated. Two new sites were located across Uwharrie NF. The two sites represented 1 small population and a large subpopulation.

2006 Status of Threatened and Endangered Animals

ANIMALS	YEAR LISTED	STATUS	ON FORESTS?
Appalachian Elktoe Mussel	1994	E	Occurs
Red Wolf	1967	E	Extirpated
Spotfin Chub	1977	T	Occurs
Peregrine Falcon	1970	T	Occurs
Eastern Cougar	1973	E	May occur
Carolina Northern Flying Squirrel	1985	E	Occurs
Spruce-fir Moss Spider	1995	E	Occurs
Noonday Snail	1978	T	Occurs
Indiana Bat	1967	E	Occurs
Little-Wing Pearly Mussel	1988	E	Occurs
Virginia Big-eared Bat	1979	E	May occur
Red cockaded Woodpecker	1970	E	Occurs
Bald Eagle	1967	T	Occurs
American Alligator	1967	TSA*	Occurs
Bog turtle	1997	TSA*	Occurs

*Threatened due to similarity in appearance to another species.

Activities in 2006:

Bald Eagle. Assessed nesting success and adult census at all three sites on the Croatan.

Red-cockaded Woodpecker. Nest checks, banding young, fledge checks, population census: 107 nestlings banded (up from 61 in 2005), 75 fledglings, 146 adults observed (details on attached table).

The Endangered Red-cockaded Woodpecker is the subject of intensive monitoring

Table 1. RCW Population Parameters, 1990-2006.

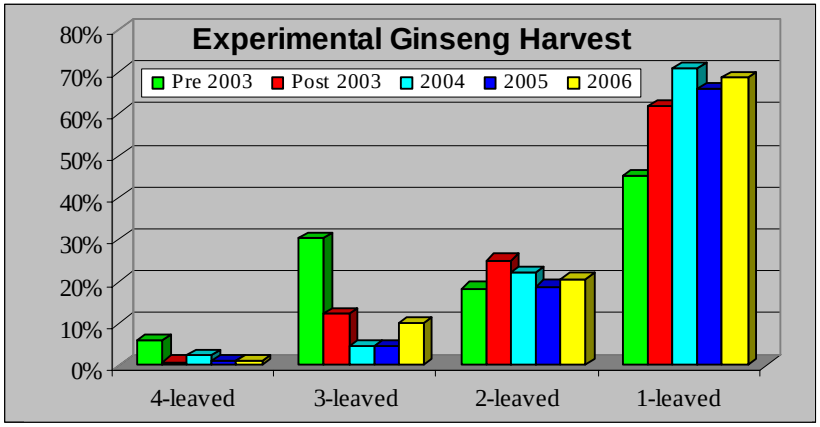
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004[1]	2005	2006
Active Clusters	44	50	53	54	57	59	64	62	62	60	64	64	66	62	60	60	60
% Solitary Males	9.1	8.0	9.4	3.7	5.3	8.5	9.4	12.9	10.0	6.9	9.7	9.8	12.7	8.62	10.0	11.6	15.0
Avg. Group Size	2.69	2.44	2.53	2.55	2.58	2.64	2.47	2.42	2.31	2.36	2.54	2.62	2.25	2.33	2.33	2.5	2.5
# Adults	111	125	133	135	151	165	158	139	137	121	142	144	144	135	132	150	146

Table 2. Reproductive Parameters, 1990-2006.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Potential Breeding Pairs	36	43	47	49	52	53	55	50	48	45	52	53	54	53	54	50	51
% no nest	8	7	9	16	12	9	9	8	8	2	4	15	9	13.2	12.9	18.0	3.9
Clutch size	3.43	3.47	2.96	3.14	3.20	3.07	3.16	3.11	3.16	3.20	3.27	3.20	3.29	2.69	3.3	2.9	3.52
% fail	21	12.5	21	29	26	21	20	32.6	13.6	13.6	14	6.6	15.6	21.2	6.38	14.6	14.2
% renest	29	60	22	25	41.6	60	60	67	16.6	16.6	28.6	0	25.0	27.3	33.3	16.6	8.1
% Partial Brood loss	40	41	37	33	28	40	38	35	44	38	36	41	50	48.6	34.4	63.0	42.0
Brood size	2.06	1.98	1.78	1.82	1.96	1.81	1.86	1.73	1.73	1.98	2.06	1.85	1.84	1.38	1.23	1..5	2.3
Fledglings	52	72	62	64	84	76	85	74	63	78	95	79	79	76	86	50	75

[1] Note: The North Carolina Wildlife Resources Commission recently acquired a property adjacent to the Croatan National Forest which contains two active RCW clusters. The presence of these clusters were reported through 1997, but have not been recorded from 1998 to present. However, these clusters are now being included as part of the Croatan National Forest RCW population and this table reflects this inclusion.

Sensitive Species Monitoring	New populations of the following sensitive plant species were located in 2006: Piedmont indigo bush, large witch alder, white-leaf sunflower, Appalachian violet, purple sedge, waterfan, Roan rattlesnake-root, small mountain bittercress, and large witch alder. Monitoring of previously documented populations was conducted within 8 populations for the following species: Piedmont indigo bush, Fraser's loosestrife, large witch alder, Georgia aster, Gray's lily, Appalachian violet, bent avens, and miserable sedge. All the populations were extant, stable or had more individuals than previously counted or estimated.   ***Large witch alder***

Forest Concern Species Monitoring	New populations were located for the following forest-concern species: smooth sunflower and simple peat moss. Monitoring of previously documented populations was conducted within 23 populations for the following species: smooth sunflower, thin-pod white wild indigo, glade wild quinine, Heller's rabbit tobacco, bog goldenrod, bog jack-in-the-pulpit, lance-leaf moonwort, Appalachian fir clubmoss, and Blue Ridge bindweed. All the populations were extant with what were estimated to be stable populations trends based on previous counts or estimates.
Botanical Products	A variety of non-timber forest products are still being collected on the Nantahala & Pisgah National Forests. Galax remains the most frequently permitted product. For the sixth consecutive year the southern research station monitored 18 sites with permanent ramp plots. Most of the populations remain stable. The populations with the greatest percent cover and stem density variability from year to year include those at the lowest elevations as well as at the most accessible sites. Remonitoring was conducted within all the permanent Galax plots scattered across 8 sites. The average foliar cover of Galax decreased within the plots slightly although stem densities remaining almost stable. Most of the plots showed little change from 2005. Two long-term monitoring experimental ginseng harvest plots were destroyed by heavy collection. Three years following harvest within the remaining plot showed an increase in population size greater than before the harvest however the age class structure had not recovered. Mature harvestable individuals represented less than 10% of the population in comparison to representing more than 35% prior to the single harvest event. 

SPECIAL REPORT: Evaluating impacts to T&E plants from recreational use at Roan High Bluff

In 2005 and 2006, trail counters were used to measure the amount of use on the observation platform at Roan High Bluff and the impacts to T&E plants occurring on the adjacent rock outcrops. These plants include *Geum radiatum* (spreading avens) listed as federally endangered and *Solidago spithamaea* (Blue Ridge goldenrod) listed as federally threatened. Trail counters were placed along the single access trail to measure total pedestrian traffic and at two other locations away from the trail to determine the number of users that were violating a Forest Supervisors closure order to protect the T&E species. One counter was placed along the fence that acts as a barrier between the platform and the rock outcrop and another was placed at a rock "chute" - the only access (without ropes) to the rock cliff below the platform where the largest number of individual T&E plants occur.

In 2005, all T&E plants were tagged, numbered, and their locations recorded using a laser range finder positioned over rock monuments measured to sub-meter GPS accuracy. Location accuracy of individual plants was considered to be within centimeters. In 2006, all spreading avens plants were remeasured. Monitoring of T&E plants followed protocols developed by the Department of Interior, US Park Service. Measurement periods for the trail counters were not exactly the same in 2005 and 2006 mainly because of sporadic equipment malfunction in the moist climate at Roan Mountain.

About 2,800 people (the counters also measure animals) used the trail to the observation platform between August 11, 2005 and the end of September – an average of 56 people per day. About 2,200 used the trail to the observation platform between July 25, 2006 and October 4, 2006 – an average of 30 people per day. Fridays and weekends (especially Labor Day) had the highest usage in both years.

About 160 people crossed the fence at the observation platform between August 11, 2005 and November 18, 2005 – an average of nearly 2 people per day. About 230 people crossed the fence at the observation platform between July 7, 2006 and November 1, 2006 – an average of over 2 people per day. Patterns of use were similar to that found on the access trail. No one climbed down the "chute" in 2006, the only year the counter was up in this location.

Outside of perhaps the busiest time at Roan Mountain (the rhododendron festival and UFO enthusiasts) fewer people went to the observation platform at Roan High Bluff in 2006 than in 2005 but more of them climbed the fence and therefore potentially could have directly impacted T&E plants. **Although plant monitoring data indicated no significant change in the T&E plant population size at Roan High Bluff, a redesign of the fence is being considered to reduce the potential for impacts to sensitive rock outcrop habitats and to improve the safety of people visiting the observation platform.**

SPECIAL REPORT: Monitoring understory plant structure and composition in longleaf pine forests on the Croatan NF

One aspect of Forest Plan monitoring on the Croatan evaluates if prescriptions, projects, and activities are effective in achieving movement toward, or maintenance of, open pine savannas with a grass dominated understory (the desired condition). Evaluating the change in longleaf pine forest abundance and the composition and structure of understory species allows managers to fine tune management activities to better-fit site capabilities found on the Croatan. The composition and structure of understory plants was measured at 92 permanent monitoring plots established from 2001 to 2003 in longleaf pine forests where prescribed fire and timber harvest are the primary vegetation management tools. Monitoring plots included multiple meter squared subplots measured along randomly selected transects. A portion of the monitoring plots (26 total) were re-measured at approximately 3-year intervals from 2004 to 2006.

The average foliar cover of all grasses on the 26 remeasured plots increased from 15% to 17% while shrubs less than 1.5 meters in height decreased from 42% foliar cover to 40%. These slight changes in cover occurred following one prescribed burn within stands that have been on a 3-5 year burn rotation for greater than 20 years. Most (18) of the plots showed little change in either grass of shrub cover (less than a 5% cover change between measurements) however, this varied by location. Plots in the drier southern portion of the forest showed a consistent decrease in shrub cover and an increase in grass cover (predominantly wiregrass) while shrub cover increased or remained static in the more mesic western portion of the forest and grass cover decreased or remained static. Response of vegetation in the northern portion of the forest was more variable. **In general, shrub cover decreased while grass cover increased. These results indicate that although management activities are resulting in a movement toward the desired condition, shrubs still dominate most longleaf pine stands and increases in grass cover are occurring very slowly under the current burning regime.**

Goal or Desired Condition: Attributes and resources of special interest areas including wilderness, research natural areas, and areas registered by the North Carolina Natural Heritage Program are maintained.

Monitoring Item	Results
Attributes and Resources of Wilderness	Recent monitoring results in Linville Gorge Wilderness indicate that **the number of campsites and amount of impacts from campsites is exceeding Forest Plan standards by more than 50%.** Campsites are a primary cause of Wilderness impacts due to expansion of barren ground, tree damage, and accumulation of trash. Educating Wilderness users in Leave-No-Trace principles is an effective long-term method of reducing impacts. More emphasis on education will be attempted prior to instituting more stringent use regulations.
Attributes and Resources of Special Interest Areas (SIAs)	**Croatan**: Prescribed burning is being used on all SIAs where it is appropriate except in wilderness areas. Special attributes within SIAs in wilderness areas are therefore not being maintained while special attributes in fire adapted forests within SIAs outside of wilderness areas are being maintained and are mostly improving in condition. **Uwharrie**: Management activities such as protection are maintaining special attributes of SIAs established in the current land management plan. Prescribed burning is being used in appropriate communities to maintain conditions. **N/P:** In general, special attributes are being maintained through protection of SIAs dominated by unique habitats such as rock outcrops and bogs. Although management activities are being implemented to control the hemlock woolly adelgid, SIAs that highlight oldgrowth hemlock forests (Kelsey Tract, Santeetlah Bluffs, Joyce Kilmer) are being degraded due to loss of hemlock.

General direction: heritage resources, which are listed on or eligible for the national register of historic places or the national register of historic landmarks, are protected. Suitable sites are developed and/or interpreted for public use and enjoyment.

<table>
<tr><th>Monitoring Item</th><th>Results</th></tr>
<tr><td>Heritage Resource Sites Identified in Relation to Acres Surveyed</td><td>
<table>
<tr><th></th><th>Sites & Properties Identified</th><th>Acres Surveyed</th></tr>
<tr><td>FY 2006</td><td>260</td><td>3,153</td></tr>
<tr><td>ALL-TIME TOTAL</td><td>5,642</td><td>182,510</td></tr>
</table>
</td></tr>
<tr><td>Sites Monitored</td><td>
<table>
<tr><th>Forest</th><th>Number of Sites</th><th>Sites Stable</th><th>Sites Impacted</th></tr>
<tr><td>Nantahala / Pisgah</td><td>43</td><td>28</td><td>15</td></tr>
<tr><td>Croatan</td><td>7</td><td>4</td><td>3</td></tr>
<tr><td>Uwharrie</td><td>11</td><td>4</td><td>7</td></tr>
<tr><td>Total:</td><td>61</td><td>36</td><td>25</td></tr>
<tr><td>Percent:</td><td>100%</td><td>59%</td><td>40%</td></tr>
</table>
</td></tr>
<tr><td>Tribal Relations Activities</td><td>The Forest continued to work in partnership with other agencies, American Indian Tribes, local communities and universities on the National Historic Trail of Tears. Relationship with the Catawba Indian Nation was renewed and expanded as part of the Uwharrie Forest Plan Revision.</td></tr>
<tr><td>Site Protection</td><td>Sixty-one (61) heritage resources, 28 prehistoric archeological sites and 33 historic structures, regarded as susceptible to vandalism or looting, potential impact from project implementation, visitor use and/or natural deterioration were visited and formally assessed and documented. Twenty-five of these sites (40%) had adverse impacts.</td></tr>
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Monitoring Item	Results
Site Protection [cont.]	**Monitored Sites:**

Forest	Prehistoric Sites	Historic Sites	Total Sites Monitored
Nantahala / Pisgah	17	26	43
Croatan	2	5	7
Uwharrie	9	2	11
Total:	*28*	*33*	*61*

Most Forest management projects such as recreation developments, timber harvest, road construction, etc., have not adversely impacted heritage resources. However, several projects impacted significant sites and required Archeological Resources Protection Act (ARPA) damage assessments and mitigation. There are several ARPA mitigation projects outstanding on the Forest due to lack of funds. Better coordination with archeologists and more oversight is needed for trail construction / reconstruction and some timber harvest activities when allowed in proximity to archeological sites.

Several sites have been determined to be larger and more significant than when originally reported and recorded. Archeologists need to conduct more intensive site surveys, complete more thorough documentation and fully evaluate sites for NRHP eligibility before project implementation.

Increasing numbers of Forest users have impacted sites. Dispersed recreation activities, off-highway vehicles, horse trail use, mountain bike trail use, and dispersed camping are impacting significant archeological resources. Impacts were observed at many sites, ranging from minor to severe erosion and exposure of artifacts. OHV and horse use on the Uwharrie and Grandfather Ranger Districts continue to impact heritage resources. User-created trails impacting sites need to be closed. There has also been recent vandalism at accessible (in proximity to recreation use areas) historic cemeteries.

The Forest has seen an increase in illegal metal detector use as well as requests for the activity. There needs to be a consistent Forest-wide policy instituted.

Monitoring Item	Results
	Historic structures, fire lookouts and cabins, continue to deteriorate at an increasing rate. Proposals are being finalized to re-roof the Historic French Broad Work Center and to repair 2 lookouts, Albert Mountain and Green Knob. Increasing water based recreation use is impacting Civilian Conservation Corps constructed improvements. These areas need to be recorded, evaluated and stabilized as needed. The National Register of Historic Places Cradle of Forestry (a proposed National Landmark) historic buildings are in urgent need of maintenance, repair and restoration. Work is underway to complete inspections and formulate specifications and costs.

Other Monitoring

Monitoring Item	Results
Land Adjustment in Support of LRMP Goals	Acres Acquired by Exchange/Nantahala NF = 0 Acres Conveyed by Exchange/Nantahala NF = 0 Acres Purchased/Donated = Uwharrie NF = 0 Pisgah NF = 0 Nantahala NF = 17
Special Uses Compatible With LRMP Goals	Special use authorizations allow for the use of National Forest System lands for a wide variety of purposes. Some authorize facilities and services necessary for public health, welfare, and safety while others authorize uses of a private nature. Number of Special Use Permits by Forest

Forest	Recreation	Lands	Total
Nantahala	153	654	717
Pisgah	203	328	531
Croatan	7	100	107
Uwharrie	34	100	134

Monitoring Item	Results
Special Uses Compatible With LRMP Goals [cont.]	Of these permits state-wide, 1,092 are for land-based uses such as road easements and water systems, and 397 permits are for recreation activities such as outfitting, guiding, and whitewater rafting. There are a total of 1,489 permits state-wide. Key projects included: - 35 NC Department of Transportation Projects for the improvement of existing public roads. - Six Federal Highway projects for major multi-lane highways- Havelock Bypass and US 17 – Croatan; Corridor K and NC 143 – Cheoah; NC 215 – Pisgah; and NC 24/27 – Uwharrie. - Relicensing of three hydroelectric projects involving 12 impoundments. Program emphasis will continue to be the monitoring of existing uses to ensure they are operated and maintained with minimal impact on the land. New applications are managed to ensure they are consistent with the Forest Land and Resource Management Plans and Forest Service Regulations. Cost Recovery regulations will be implemented that allow the Forest Service to assess fees for processing applications, amendments and transfers of permits.
Road Construction, Reconstruction, and Obliteration	The Forest is in the second year of a major storm restoration effort. September 2004 storms damaged major segments of the Forest Road System especially on the Nantahala and Pisgah Forests. The following miles of road were reconstructed as part of this effort: *Nantahala/Pisgah – 408 miles; Croatan – 20 miles* Contracts for four new road bridges were awarded/constructed in FY2006. Two miles of new road was constructed in FY 06 as follows: *Croatan – 0.8 miles; Nantahala/Pisgah – 1.2 miles* Due to the focus of funding high priority restoration projects across the Forest, there was no road obliteration accomplished in FY06.

Fire Management

Monitoring Item	Results
National Fire Plan Accomplishments for FY 2006	

Year	Prescribed Fires Accomplishments - National Forests in North Carolina						
		Total Acres	Fuels	Wildlife	Site Prep	Other (T&E)	
2006	Croatan		16,000	4,500	432		
	Uwharrie		1,819	335	225		
	N/P		5,796		294		
	TOTAL		23,615	4,835	951		29,401
2005	Croatan		18,885	4,654	965		
	Uwharrie		1,696		223		
	N/P		4,949		442		
	TOTAL		25,530	4,654	1,630		31,814
2004	Croatan		18,506		500		
	Uwharrie		1,808				
	N/P		5,573		259		
	TOTAL		25,887		759		26,646
2003	Croatan		15,810				
	Uwharrie		1,666				
	N/P		4,859				
TOTAL			22,335	0	0		22,335
2002		21,854	22,180				
2001		20,000	20,000				
2000		26,000	26,000				
1999	No information available						
1998		26,352	22,734	3,618			
1997		26,092	22,190	2,183	1,154		
1996		15,964	13,900	1,231	401		
1995		12,881	9,279	586	879		
1994		13,027	7,940	2,931	648		
1993		11,399.50	7,057	2,986.50	1,356		
1992		7,944	4,862	2,202	725	155	

Monitoring Item	Results
To what extent are new minerals leases limited to those where the minerals activity can occur and still maintain the other resource objectives?	Croatan: No new mineral leases have been issued during 2006 and areas are limited to areas that can maintain forest plan resource objectives. Uwharrie: No new mineral leases have been issued during 2006 and areas are limited to those that can meet forest plan resource objectives. N/P: One new mineral lease is being considered in the expansion of the Massey Branch Quarry. The proposed expansion of 20 acres is proposed in an area that is suitable for mineral extraction. Resource objectives are currently being analyzed in an environmental assessment to ensure compliance with forest plan objectives.

Emerging Issues

Special Uses: The number of Special Use Permits issued on the Uwharrie, Nantahala and Pisgah National Forests is increasing for outfitting and guiding, recreation events, research, and access to private lands. Personnel will be reassigned in 2007 to concentrate on dealing with special uses management. Special use permittees are now billed for costs associated with granting the permits. It is not known what effect this will have on the rate of increase in permits.

Fire Management:

- Nantahala and Pisgah. The wildland-urban interface is becoming a large factor which is not addressed in the Forest Plan. Also, there is a new state smoke management plan in place that will impact burning in the mountains at the same time we are interested in increasing the amount of prescribed burning. We are striving to create large landscape-size burns to reduce fuels and maintain wildlife habitat, and this will be more and more challenging.
- Uwharrie. When the plan revision for the Uwharrie is finalized it will place new emphasis on restoring longleaf pine, which means more prescribed fire, and more growing season burning. These are both good things, but adequate personnel becomes critical for implementation. The new smoke management regulations will make it more challenging (but not impossible) to accomplish prescribed burning in the summer when the air is more stagnant.
- Croatan. There is interest in allowing prescribed fire in the wilderness areas, and there is need for clarification in regard to burning in the roadless areas.

FY 2007 Action Plan

1) **Complete revision of the Uwharrie Land Management Plan.**

2) **Increase the organizational capacity to deal with special use permits.**

3) **Continue to emphasize creation of early successional habitat on the Nantahala and Pisgah.**

LIST OF PREPARERS

Ruth Berner – Forest Planner – M&E Report Coordinator

Report Contributors:

John Blanton - Silviculturist

Rodney Snedeker – Archeologist

Ray Johns – Special Uses/Lands

Dave Wright – Recreation Specialist

Lea Wofford –Fire Management Officer

Sheryl Bryan – Wildlife & Fisheries Biologist

Steve Simon – Ecologist

Gary Kauffman – Botanist

Steve Hendricks – Recreation Planner

Dave Wright – Recreation Program Manager

Dale Remington – Timber Sale Forester