

South Carolina Forestry Commission

Annual Report 2001-2002

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STATE COMMISSION OF FORESTRY

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MISSION

The mission of the Forestry Commission is to protect, promote, enhance, and nurture the forest lands of South Carolina in a manner consistent with achieving the greatest good for its citizens.

Responsibilities extend to all forest lands, both rural and urban, and to all associated forest values and amenities including, but not limited to, timber, wildlife, water quality, air quality, soil protection, recreation, and aesthetics.

The Forestry Commission shall have general and specific responsibilities for the promulgation and enforcement of laws and regulations related to protection of the forest and its associated values.

The Commission shall be responsible for promoting and developing the appropriate technologies to accomplish its objectives, and for the development and promulgation of Best Management Practice Guidelines for South Carolina's forest land.

FIELD OPERATIONS SUPPORT

The Field Operations Support (FOS) Division provides operational and technical staff direction to the Forestry Commission field organization in each of the major program areas of forest management, forest protection, nurseries and tree improvement, state forests and other state lands, and dispatch and forest technology.

FOREST MANAGEMENT

The Forest Management Section assists South Carolina citizens with management and development of the forest resources of the state. Programs include woodland management assistance, reforestation assistance, forestry services, forest products utilization and marketing assistance, resource conservation and development, water quality, urban forestry, and forest inventory. These programs assist owners in growing more timber, aid industries in more efficient utilization of the timber resource, and foster conservation and multiple use of the forest resource.

There are 12.3 million acres of commercial forestland in South Carolina. According to the 2000 U.S. Forest Service Survey, farmers and non-industrial private owners own 74% of this land. Forest industry owns approximately 16% with 10% in public ownership.

The Forest Management programs are designed to assist the non-industrial private landowner with multiple-use forest management.

FOREST MANAGEMENT ASSISTANCE

Professional foresters from the Forestry Commission provide forest management advice and assistance to landowners. The land is examined and a written forest management plan is prepared. Recommendations for management may include such silvicultural practices as forest protection, reforestation, harvesting, prescribed burning, wildlife habitat improvement, and recreation.

This year, 2,115 management plans were prepared for 132,858 acres. Beginning in July of 1999, customer satisfaction surveys were sent to every landowner that received a forestry management plan. In FY 02, 98% of the landowners that responded to the survey indicated that they were very satisfied or somewhat satisfied with the management plan they received. Of these landowners, 84% also indicated that they intended to complete most or all of the recommendations in their plan. Where practical, the landowner is referred to consulting or industrial foresters to assist in carrying out management recommendations. This year 412 cases were referred to consulting foresters and 108 to industrial foresters.

COST SHARE PROGRAMS

Forest Renewal Program (FRP) - State

In 1982 the program was funded for the first time by a \$100,000 state appropriation. This permitted an assessment of \$400,000 from forest industry, and created a \$500,000 Forest Renewal Fund. The state funding was doubled effective July 1, 1996. This increase permitted an assessment of \$800,000, increasing the program to \$1,000,000.

Forest Incentives Program (FIP) - Federal

FIP funding for fiscal year 2001-02 was \$514,795. This program was eliminated in the 2002 Farm Bill.

Conservation Reserve Program (CRP) - Federal

The Program began with crop year 1986 and was renewed with the passage of the 2002 Farm Bill. Twenty-two signups have been held. This year 12,163 acres were planted.

Statewide Accomplishments for All Cost-Share Programs Reforestation and Timber Stand Improvement

Program	Number of Landowners	Acres Planted	Natural Regeneration	TSI Acres	Cost Share Payments
FRP	403	10,803	15	2085	\$939,725
FIP	290	3340	0	950	\$202,000
CRP	372	12,163	0	0	\$647,884
SIP	0	0	0	0	\$0
Totals	1076	26,306	15	3035	\$1,789,609

SEEDLING SURVIVAL

Survival checks were made on 10 percent of plantings using a row count or tenth acre plot method for determining survival. A weighted average involving all survival checks was used to determine the statewide survival of 75% for loblolly pine plantings. Survival rates for longleaf pine plantings were tabulated separately. Plantings with longleaf seedlings had a survival rate of 51%. Extended drought, unfavorable planting conditions, improper planting, and poor seedling quality may have contributed to the poor survival rates for longleaf pine.

Forest Management Assistance 2001-2002

County	Non Cost-Share		Cost-Share		Forest Stewardship	
	Exams	Acres	Exams	Acres	Exams	Acres
Abbeville	19	1,148	14	704	0	0
Aiken	28	2,226	12	850	5	555
Allendale	10	565	8	193	2	146
Anderson	23	2,254	16	628	1	79
Bamberg	2	116	18	920	5	503
Barnwell	12	954	16	900	6	2,133
Beaufort	4	59	0	0	1	89
Berkeley	24	1,133	12	438	2	193
Calhoun	2	48	26	1,489	6	776
Charleston	30	1,617	10	367	6	267
Cherokee	16	976	8	166	2	595
Chester	18	1,049	26	1,345	2	134
Chesterfield	25	1,927	41	1,423	5	1,001
Clarendon	17	617	65	1,389	2	120
Colleton	21	1,260	29	1,508	10	1,486
Darlington	13	751	9	380	0	0
Dillon	32	2,042	51	1,851	5	669
Dorchester	31	972	27	1,039	3	380
Edgefield	15	551	40	1,891	6	943
Fairfield	17	1,590	19	937	5	710
Florence	36	1,345	36	1,278	15	2,254
Georgetown	10	361	8	181	2	998
Greenville	21	1,046	2	219	1	111
Greenwood	15	2,215	6	150	4	297
Hampton	27	1,814	16	535	8	1,082
Horry	62	6,635	76	1,991	11	2,845
Jasper	4	519	2	50	0	0
Kershaw	10	815	30	1,344	3	507
Lancaster	32	1,006	15	578	1	139
Laurens	24	1,723	24	1,559	2	383
Lee	4	129	27	945	4	514
Lexington	9	475	25	348	0	0
Marion	14	1,638	9	359	7	1,225
Marlboro	34	1,029	12	510	5	1,318
McCormick	8	428	24	1,113	2	554
Newberry	12	1,065	36	1,607	2	190
Oconee	15	427	20	1,534	0	0
Orangeburg	31	3,982	98	3,160	15	3,283
Pickens	7	794	9	216	0	0
Richland	10	481	13	441	2	218
Saluda	5	366	34	2,140	3	800
Spartanburg	13	243	7	275	1	183
Sumter	8	461	14	790	3	1,022
Union	16	2,367	32	2,076	6	2,413
Williamsburg	13	906	75	2,680	7	543
York	21	1,472	19	674	2	523
State Totals	820	55,596	1,116	45,170	180	32,181

FOREST SERVICES

Through this program the Commission provides assistance to landowners and other state agency lands with afforestation, reforestation, and maximization of production from their woodlands. The landowner is charged the cost of all services performed.

These services were available to landowners during the year:

Firebreak Plowing - performed by Forestry Commission employees using agency equipment for \$80 for the 1st hour and \$55 for each additional hour.

Prescribed Burning - performed by Forestry Commission employees using agency equipment for \$12 per acre for the 1st 50 acres, \$10 per acre for the 2nd 50 acres and \$8 per acre for all over 100 acres. Firebreak plowing costs are not included. Minimum fee \$200.00.

Prescribed Burning Standby - an agency tractor and employee on standby at burning site for \$50 for the 1st hour and \$25 for each additional hour while landowner performs burning under an approved plan. Minimum fee \$100.00.

Equipment Rental Program - agency owned tree planters and drum choppers made available to private landowners at rates from \$5 to \$20 per acre.

Timber Marking - performed by Forestry Commission employees at the rate of \$8 per thousand board feet and \$3.00 per cord.

Service	Number of Tracts	Units of Measure	Receipts FY 99-00
Firebreak Plowing	761	1707 miles	\$171,603
Prescribed Burning	130	7780 acres	\$86,158
Prescribed Burning Standby	27	5187 acres	\$7,738
Equipment Rental	59	1223 acres	\$9,715
Water Bar Construction	4	222 bars	\$2,045
Timber Marking	6	1195 cords 806,264 board feet.	\$8,900
Totals	987		\$286,159

Beginning in July of 1999, a customer satisfaction survey was sent to all landowners that received forestry services. In FY 02, 48% of the surveys were returned and 96% of these landowners indicated that they were very satisfied or somewhat satisfied with the services they had received.

ENVIRONMENTAL MANAGEMENT

The Environmental Management Section is responsible for the development and implementation of South Carolina Forestry Commission programs that are related to the environmental protection of forest and associated natural resources. Issues that are addressed include the protection of water quality, site productivity, endangered species, and unique ecosystems.

BMP Implementation Monitoring

Compliance with harvesting BMPs has been documented in three previous surveys. Compliance for harvesting BMPs was 84.5% in 1990, 84.7% in 1991, and 89.5% in 1994, 91.5% in 1999. A new survey was initiated in the fall of 2000 to update BMP compliance. Two hundred sites were located and inspected for compliance with BMPs relating to timber harvesting throughout the state. Compliance with harvesting BMPs rose to 94% in the initial phase of a two-year study. In the winter of 2001, site preparation BMPs were evaluated on the same 200 sites and an additional 100 site prepared tracts. A third and final site visit to each monitoring location will be conducted in early 2002 to determine site preparation BMP compliance, regeneration methods, site stabilization, conversion to other uses, and other related factors. Data from the 2000, 2001, and 2002 site visits will then be compiled for publication.

BMP Education/Training Program

BMP training and education are essential to the success of the Forestry Commission's non-regulatory BMP program. During this fiscal year, 83 BMP meetings were held across the state for forest landowner groups, government agencies, and professional organizations. A total of 4,004 people attended these meetings. Included in these meetings were three Timber Operations Professional (TOP) workshops, seven TOP Refresher workshops, and three TOP SMZ workshops, which reached 223 loggers, landowners, foresters, and road construction contractors.

Courtesy Exam program

The S.C. Forestry Commission's BMP Foresters, located in each of the three operating regions of South Carolina, offer courtesy BMP exams to landowners, foresters, and timber buyers. The BMP Forester makes site-specific BMP recommendations to follow while conducting forestry activities. During the 2001-2002 fiscal year, the BMP Foresters completed 318 courtesy exams. Of the 318 sites, 303 (95.3%) were completed in compliance with our recommended guidelines.

Endangered Species

This year, the Environmental Management Section continued training on endangered species biology and management, with an emphasis on those species that may impact forestry operations. The BMP Foresters are available to provide information and assistance to SCFC personnel, foresters, and private landowners. This assistance may include site visits, cooperating on the Safe Harbor program administered by the S.C. Department of Natural Resources, and assisting State Forests and other state-owned properties upon request. This year, the BMP foresters made 17 site visits to assist landowners and foresters with endangered species identification and information and presented information regarding endangered species to 14 groups, reaching 367 college students, forest landowners, foresters, loggers, and the public.

URBAN & COMMUNITY FORESTRY

Urban and community forestry (U&CF) seeks to improve the quality of life in populated areas by providing direct technical assistance to municipal and county governments, educational institutions, non-profit conservation organizations, businesses and homeowners. This is accomplished by working through diverse and cooperative partnerships to protect, conserve and improve the management of community tree resources here in South Carolina. Clean air, clean water, increased property value, energy conservation, improved aesthetics, noise buffering, and public safety are some of the products of these endeavors.

Urban and Community Forestry Grant Program

The Urban and Community Forestry Grant Assistance Program is a national program funded by Congress through the U. S. Forest Service. South Carolina received \$150,000 in base funding to provide technical assistance and training. Three full-time urban foresters are responsible for providing that technical assistance on a regional basis for the Piedmont, Pee Dee, and Coastal regions of the state. Other Commission foresters provide urban forestry assistance in their respective areas on a time available basis. A full-time Grant Administrator Assistant works in the Columbia office along with the Urban Forestry Coordinator for statewide program management.

Pass-through grants in the amount of \$230,000 were provided to county and local governments, non-profit organizations, and educational institutions to assist in the establishment and enhancement of long-lasting urban and community forestry programs.

Partnership Development and Educational Programs

Through the technical assistance of the urban and community forestry staff and utilization of grant funds, the urban forestry program strives to develop partnerships with a variety of organizations and units of local government. Often these partnerships result in educational programs about the benefits and importance of urban forest resources. During FY 02, the urban and community forestry staff and grant projects were involved with developing 145 partnerships with various organizations and presented 108 educational sessions to approximately 13,185 South Carolinians, both youth and adults.

Tree City/Tree Line USA

Sponsored by the National Arbor Day Foundation, Tree City USA is administered in South Carolina by the SC Forestry Commission. The program seeks to stimulate and promote the management of urban and community trees by recognizing towns and cities which meet the following criteria: (1) establishment of a municipal tree ordinance, (2) expenditure of at least two dollars per capita on tree care and planting, (3) a legally constituted tree board or permanent staff, and (4) observance of Arbor Day by a mayoral proclamation and official ceremony. The SC Forestry Commission has recognized and awarded 29 municipalities and 3 military bases under the Tree City USA program.

Another program sponsored by the National Arbor Day Foundation is Tree Line USA. The Tree Line USA program seeks to stimulate and recognize proper line clearing and safety techniques of private and public utility companies. In order to qualify as a Tree Line USA, a utility must meet three criteria: (1) Perform quality tree care regarding pruning, trenching and tunneling methods, (2) Provide opportunities for annual utility line worker training, and (3) sponsor an ongoing community tree planting program to include an Arbor Day celebration and at least one educational mailing to customers. The Forestry Commission recognized the Gaffney Board of Public Works as South Carolina's only Tree Line USA utility for the third consecutive year.

Types of Technical Assistance	U&CF Program Accomplishments Forestry Commission Regional Urban Foresters		U&CF Program Accomplishments Sub-Grantees
	Total # of Customers	Total # of Assists	Total # of Sub-Grants Awarded
Program Development/Expansion			
Municipal Governments	94	175	24
Non-Profit Organizations	25	49	6
Educational Institutions	37	67	2
State/County Governments	<u>16</u>	<u>48</u>	9
	172	339	41
Public Vegetation Ordinances Passed or Revised		NA	0
Urban Forest Cultural Practices			
Commercial / Business		105	
Residential		473	NA
Public Agency		<u>136</u>	
Total Assists (#)		709	
Public Trees Inventoried			
Miles		NA	701
Acres		NA	<u>30</u>
Total Trees Inventoried (#)			9,973
Public Trees Planted			
Saplings (<2" caliper)			418
Street / Park (>2" caliper)			<u>119</u>
Total Trees Planted (#)		NA	537
Public Trees Maintained (#)		NA	0
Demonstration Planting Projects		NA	20
Partnership Development		23	145
Public Information / Education			
Municipal		31	16
Non-Profit Organizations		0	5
State/County Governments		0	6
Civic Organizations		14	0
School/Youth Groups		<u>34</u>	2
Total Programs (#)		79	29
Total # of seat hours		8,100	10,495
Total # of people		6,035	7,150

FOREST STEWARDSHIP

The Forest Stewardship Program is a cooperative effort among the USDA Forest Service, Forestry Commission, other natural resource agencies and organizations, forest industry, and private forest consultants in South Carolina to encourage the long-term stewardship of non-industrial private forest lands. Landowners are provided technical assistance by having a multiple resource management plan developed for their property addressing their management objectives.

During FY 02, 246 Stewardship Plans were written in South Carolina on 50,515 acres. The plans were written by the following cooperators: S.C. Forestry Commission/ DNR: 179 plans; Forest Consultants: 49 plans; and Forest Industry: 18 plans.

Stewardship Incentive Program

The federal cost-share Stewardship Incentive Program which provided financial incentives to private landowners to implement management practices outlined in their Stewardship Management Plan, was terminated in FY02.

FOREST INVENTORY & ANALYSIS/FOREST HEALTH MONITORING

The Forest Inventory and Analysis (FIA) program is a cooperative program with the US Forest Service – Southern Research Station to collect forest inventory and forest health monitoring data from a network of permanent sample plots. There are 3,492 total forest inventory plots located in South Carolina. Plots are sampled in 20% increments of the total. Plots will be measured for growth projections, damage assessments, and land-use classification. In addition, FIA provides information about South Carolina's forest resources including forest acreage, timber quality, timber volume, timber growth, forage, water, and recreation. The information provided by FIA allows the evaluation of both quantity and quality of these important resources. The US Forest Service furnishes data analysis and reporting for this program.

The Forest Health Monitoring section of the program provides data on forest health. A total of 204 plots are located in South Carolina. Each year, during the summer, 20% of these plots are measured to provide forest health data, such as, soil chemistry, tree health, tree carbon fixation, tree nutrient storage, and potential for tree survival and reproduction. Forest health data provides a quantitative assessment of current tree conditions and provides an integrated measure of site conditions, stand density and influence of external stresses. In addition, separate bioindicator plots are taken to detect the presence of ozone pollution.

Currently, three full-time inventory crews are stationed throughout the state. The program coordinator is stationed in Columbia. All crew members are required to exceed a minimal accuracy average of 87% for all inventory plots. US Forest Service personnel conduct quality assurance and quality control checks to insure the accuracy of the field crews. During FY 2001-2002, the average accuracy for all crews was 88.32%.

During FY 2001-2002, Field crews completed the final 20% initial measurement in February and establishing the current plot design. The first remeasurement began in March and the FIA program has completed 30% of the 658 (20% of the total plots) plots to be measured this year. Currently, the FIA program is below target goal to complete 20% of the total plots this year. This is largely due to agency budget constraints in regards to filling vacant positions. Data collection for health monitoring began in June and will be completed in September on a network of 42 plots.

STATE FORESTS AND OTHER STATE LANDS

MANCHESTER STATE FOREST

Manchester State Forest, located in Sumter County and Clarendon County, is currently comprised of approximately 25,800 acres. From 1939 to 1955, Manchester was leased by the State of South Carolina from the federal government and managed by the South Carolina Forestry Commission. The State received title to the property on June 28, 1955.

Receipts for Operating Budget

Activity	Receipts
Timber Sales	\$277,622.73
Pinestraw Sales	\$82,980.10
Land Lease Payments	\$51,907.81
Wildlife Management Area Payments	\$30,704.73
Trail and Special Use Permits	\$29,186.50
Total	\$472,401.87

Note: 25% of all forest receipts paid to Sumter County - \$108,652.43 and \$9,448.04 paid to Clarendon County.

Timber sales were concentrated on thinnings in overstocked stands and conversion of older slash pine stands to longleaf plantations.

Silvicultural Practices

Two hundred forty-seven acres were site prepared for planting with 89 acres being mechanically prepared and 158 acres by chemical. Due to extreme drought conditions only 46 acres were planted with bareroot improved coastal loblolly pine with the expectation of planting the remaining site prepared acres in the 2002-03 planting season. Two hundred sixty-six acres were chemically treated for release from competition.

The following species and number of trees were planted:

Improved Coastal Loblolly Pine	25,000
Total Trees Planted	25,000

A total of 458 acres were prescribed burned for wildlife habitat enhancement, hardwood control and fuel reduction.

Again drought conditions and smoke management concerns were the limiting factors in the completion of the proposed schedule of burning.

In excess of 6,000 acres were delineated by timber type using GPS in preparation for development of a new management plan for Manchester

Forest Protection

Three (3) wildfires occurred burning approximately 34 acres, with damage ranging from minimal to severe. Firebreaks were maintained on those areas that were either high risk or of high value. Manchester personnel responded to several fires outside the forest boundaries in assistance to regional fire needs.

Over sixty miles of boundary line were remarked and signed, and property corners within this area were also located and marked with signs and metal posts.

Recreation/Education

Recreational use of the forest continues to escalate over previous years. Hunting, fishing, horseback riding, motorcycle/ATV riding, mountain biking, and use of the rifle/pistol range continue to be favorite activities.

A drop box/honor system was implemented to provide additional availability of daily permits.

Improvements were made to the motorcycle/ATV staging area and initial clearing work has begun to provide for an additional horse staging area.

Six special-use permits were issued for organized events with approximately 1,400 participants.

Eight (8) educational programs were conducted with the assistance of the forest staff and area personnel with approximately 180 individuals involved. Several training sessions were held at Manchester for SCFC personnel, including law enforcement training and technician training.

Wildlife Management

Approximately 23,000 acres of the forest are presently included in the Wildlife Management Area Program through a cooperative agreement between the Department of Natural Resources (DNR), and the South Carolina Forestry Commission. DNR provided technical assistance with game food plot establishment monitoring, deer herd dynamics, tracking various nongame and game species, and pond management. Law enforcement on the forest is provided through interagency cooperation with Department of Natural Resources. Manchester also hosted its annual youth dove hunt with approximately 35 participants. The Oak Lea Tract was opened for hunting dove, duck and deer under the WMA Program. Grants and permits were obtained from Ducks Unlimited and SCDNR for water control and dike improvements on the Biedler Impoundment.

Planting and maintenance was conducted on 424 acres of wildlife areas. Corn, sunflowers, sorghum, browntop millet, benne, wheat, rye, clover, vetch and bicolor were utilized to diversify the food supply. Several of the plantings were donated by the Department of Natural Resources and planted by Manchester and DNR personnel.

Rare, Threatened, and Endangered Species Management

Manchester currently maintains six (6) clusters of Red Cockaded Woodpecker. Colony sites continue to be monitored along with scouting for new cavity and start trees in cooperation with biologists from the neighboring Poinsett Gunnery Range (USAF). An agreement was reached with the USAF that would allow them to monitor and work on the colony sites only with prior agreement with the Manchester State Forest director.

Research

Manchester cooperates with the Nursery and Tree Improvement Section by providing eight (8) sites for clone banks, seed orchards, and progeny tests.

SAND HILLS STATE FOREST

Sand Hills State Forest (SHSF) covers approximately 46,000 acres with 45,000 acres in Chesterfield County and 1,000 acres in Darlington County. The forest was operated under a use agreement with the federal government from 1939 until 1991. In July of 1991, title to Sand Hills State Forest was transferred to the South Carolina Forestry Commission.

Since 1967, Sand Hills has been totally self-supporting. The only appropriated funds coming to Sand Hills are earmarked for the development of the H. Cooper Black Memorial Field Trial and Recreation Area.

Receipts For Sand Hills Operating Budget

Activity	Receipts
Timber Sales	\$972,739.01
Pinestraw Sales	\$46,150.00
Land Lease Payments	\$2,204.00
Wildlife Management Area Payments	\$13,322.00
User Fees (includes permit sales from PRT)	\$16,322.00
Prior Yr Refund	\$3,339.42
Equipment Rental	\$560.00
Total	\$998,158.02

Note: 25% of all receipts are paid to Chesterfield and Darlington County School Systems.

Chesterfield County Schools	\$243,550.56
Darlington County Schools	\$ 5,988.95
Total	\$249,539.51

Silvicultural Practices

Site preparation for planting longleaf pine by disking and V-blading was completed on 848 acres. These areas were in slash pine that had stagnated. Bareroot longleaf seedlings were planted on 742 acres on SHSF. Containerized longleaf seedlings were planted on 1,060 acres on Sand Hills and 125 acres on Carolina Sandhills National Wildlife Refuge. Prescribed burning was done on 3,259 acres.

The following species and number of seedlings were planted:

Bareroot Longleaf Pine	525,000
Containerized Longleaf Pine	324,000
Total	849,000

In 1999 Sand Hills started a pinestraw enhancement program. Under this program an individual from the general public can enter into a four-year agreement with the Forestry Commission to clear up land for pinestraw production.

The individual agrees to eradicate 90% of all hardwoods on a tract of land using chemicals. In exchange, that person may harvest all the pinestraw that falls during the 4 years of the agreement. After the agreement expires, the acreage becomes part of SHSF's quality straw production program. The straw from these areas is offered for sale on a lump sum sealed bid basis at three-year intervals. Currently there are 16 individuals working on approximately 18,226 acres of land. The value of the pinestraw in the year 2005 will approach \$1,000,000.

Pinestraw Enhancement Program

Fiscal Year	Contracts	Acres
1999	15	4,565
2000	29	5,635
2001	25	6,922
2002	5	1,104
Total	69	18,226

Sand Hills' personnel assisted Nursery and Tree Improvement section with longleaf pinecone collection. During the month of October Sand Hills staff issued permits for gathering cones on the Forest and issued checks totaling \$455 for 91 bushels of cones.

Forest Protection

Eight wildfires burned 15 acres on Sand Hills this year. SHSF boundary lines and the road system are maintained as firebreaks and as access in case of wildfire.

Recreation/Education

Recreational use of the Forest continues to escalate. Hunting, fishing, horseback riding, riding, mountain biking, hiking, bird watching and camping continue to be favorite activities.

Visitors from 6 states and over 150 different cities visited the forest this year. A trail use permit was purchased with Canadian Currency this year. The visitors that traveled the greatest distance to see our great forest were from Korea.

ATV use was discontinued July 1, 1999 based on an opinion from the attorney general's office. Environmental studies and mapping on a planned 5,000 acre off highway vehicle (OHV) trail continue. U.S. Fish and Wildlife Service must approve the OHV plan before it can be completed.

The Headquarters Mountain Bike Trail continues to attract riders from the surrounding areas. One hundred nine permits were issued for bike riding.

At Sugarloaf Mountain, there are 7 primitive camping sites for family camping and 8 primitive equestrian campsites. Sand Hills' personnel booked 283 reservations for these sites this year. An estimated 4,200 visitors with 866 horses used the campsites and trails.

Cooper Black Recreation area continues to grow. There are now 52 campsites for RV campers. Twenty-seven have electricity and water hookups. The remaining sites are maintained as primitive sites. A clubhouse, kitchen, horse

barn, full size arena, comfort station, and dump station are available for use. A second comfort station was added this year. Twelve more corrals were installed this year bringing the total to twenty-six. Five hundred dogs can be housed in the dog pens just miles from the camp area.

Twenty-seven weekend events were scheduled at Cooper Black. Reservations for sites at Cooper Black showed an increase from the previous year. Eight hundred seventy four (874) reservations were booked. Reservations are required for campsites, stalls, corrals, training sites, arena, clubhouse, kitchen and grounds. Receipts from all reservations totaled \$24,664. Twenty five percent of the revenue will be distributed to Chesterfield and Darlington County School Systems. \$6,018.02 will be disbursed to Chesterfield County and \$147.98 will be disbursed to Darlington County.

Summary of Sand Hills State Forest Recreation Areas

Year	Cooper Black Reservations	Sugarloaf Reservations	Total	Cooper Black Visitors/Horses		Sugarloaf Visitors/Horses		Total Visitors/Horses*	
FY 1999	129	284	413	3,000	815	3,000	1,000	6,000	1,815
FY 2000	504	316	820	3,790	1,662	3,674	1,025	7,464	2,687
FY 2001	711	307	1,018	4,024	1,304	3,456	932	7,480	2,236
FY 2002	874	283	1157	5,000	1,580	4,200	866	9,200	2,446

*Number of Visitors and Horses does not include day users nor does it include any visitors from any other user group.

Trail use permits had a slight increase this year. Sales increased from 839 permits in FY 2001 to 932 in FY 2002. Receipts from designated trail use permits totaled \$16,322.00.

Free-use permits are issued for camping at Sugarloaf Mountain, raking pinestraw for personal use, and gathering firewood. Sand Hills' staff issued 335 this year. Five of the permits were for raking pinestraw for personal use, 32 for gathering firewood, 3 for picking longleaf pinecones and the remaining 294 were for camping.

Sand Hills State Forest Permit Summary

Year	Trail-Use Permits	Free-Use Permits	Total
FY 1998	271	217	480
FY 1999	505	329	834
FY 2000	573	412	985
FY 2001	839	299	1,138
FY 2002	932	335	1,267

Sand Hills' personnel conducted 8 educational programs that involved 348 children and adults. Several of the programs were held at Sand Hills and included a tour of the forest.

Francis Marion University frequently uses Sand Hills as a place to bring botany students for hands-on plant identification. Professor Jerry Long gave hands on instruction to 40 students this year on 4 visits to Sand Hills.

The Governor's School of Science and Mathematics in Hartsville visited the Forest for a presentation on the Red Cockaded Woodpecker and an overview of forest management practices.

A group of 21 students from Warren Wilson College came to Sand Hills to learn more about the Red Cockaded woodpecker and forestry management.

Eleven scout groups used Sugarloaf Mountain for their weekend campouts.

West Florence High School Track Team used H. Cooper Black as a training site for cross-country training.

Wildlife Management

Approximately 40,000 acres of the Forest are included in the Wildlife Management Area Program. This is a cooperative agreement between the S.C. Department of Natural Resources and the S.C. Forestry Commission. Department of Natural Resources personnel provide assistance with the game food plot establishment, monitoring deer herd dynamics, tracking various game and non-game species, and pond management. Law enforcement on the forest is provided through interagency cooperation. Sand Hills has a 57-acre public dove field and a 30-acre public dove field. Thirty-five acres of the 57-acre field were planted to annual crops with the remainder planted and maintained in bicolor lespedeza. The 30-acre dove field was planted with sunflowers, sorghum, corn and bicolor lespedeza.

Eighty-two acres (125 plots) were planted as wildlife food plots. These plots were planted in chufa, corn, sunflower, spring game mix, dove mix, dove proso, wild turkey mix, quail mix, sorghum, and bicolor. All plantings were fertilized and limed at the recommended rates. All manageable bicolor patches in compartments 14, 15, and 16 were bushhogged, fertilized, and limed. One hundred mast-producing hardwoods were planted throughout the Forest.

Sand Hills' staff planted and maintained 12 wildlife openings for quail. The quail project is a joint project with Quail Unlimited. Quail Unlimited supplied \$1,000 worth of seed and fertilizer for the quail project.

Sand Hills continues to conduct surveys for South Carolina Department of Natural Resources. A furbearer scent survey, fox squirrel survey, turkey survey, and a quail survey were conducted to track population trends.

Rare, Threatened and Endangered Species Management

There were 53 documented Red Cockaded Woodpecker (RCW) nesting attempts on SHSF in 2001. A total of 62 fledglings were banded as a result of the nesting. The past three years we have started putting 3 bands on the RCW for identification. Less than five birds did not get banded due to the small size of the birds at the time of banding. We will attempt to band these birds during fledgling checks.

There were seven artificial cavity boxes installed with plans to add more later in the year. Approximately 100 acres were roller chopped within RCW clusters. All new cavity trees were painted and tagged. The new trees are in the process of being mapped.

Fifty RCW clusters are located in pine straw enhancement areas. Most of the sites have been enhanced by removal of all hardwood understory through mechanical removal, herbicide, prescribed burning or a combination of the three methods.

Currently roosting checks on all fledglings are being conducted to provide data for the upcoming translocations throughout the forest.

Research

A longleaf pine natural regeneration research project in conjunction with the U.S. Forest Service is still ongoing and has been in effect for 25 years.

A professor from Clemson University set up a turkey litter/water quality survey on the forest in 1999. The study will last four years.

A sludge research project is on going. A four-year cycle that was started in 1999 continued this year. Turkey litter was added to the study site for comparison with sludge and commercial fertilizer applications and their effects on tree growth and soil chemistry.

STATE LANDS MANAGEMENT PROGRAM

The State Lands Forest Management Program was created to provide professional forest management assistance to South Carolina state agencies that own timberlands. During fiscal year 2001-2002, four agencies requested assistance from the state lands coordinator. The agencies and facilities were as follows:

Department of Natural Resources

- Webb Wildlife Center
- Donnelley Wildlife Management Area
- Mason Wildlife Management Area
- Thurmond Wildlife Management Area
- Yawkey Wildlife Management Area
- Beach Hill Wildlife Management Area
- Landsford Canal Wildlife Management Area
- Shooting Tree Ridge WMA
- Botany Bay Plantation

S.C. Department of Corrections

- Broad River Road Complex
- Wateree Prison Farm
- Cross Anchor Correctional Institute

Department of Juvenile Justice

- Willow Lane

SC National Guard

- McEntire ANG Base

Timber Revenue

Four state-owned tracts were marked or cruised for timber sales and produced an estimated volume of 3,847 cords of pulpwood valued at \$90,346.

FOREST PROTECTION

This section encompasses Fire Management, Law Enforcement, Forest Health, and Equipment programs.

FIRE MANAGEMENT

Area protected: 12,807,924 acres. Area protected is based on 1993 Forest Survey data for non-federal forest land, plus 10% to cover adjacent non-forest land. Also included is 101,320 acres of federal land protected under special contract. Mutual aid is provided on 808,701 acres of additional federal land.

Wildfire Summary

Agency firefighters recorded 6,378 wildfires during the fiscal year. These fires burned a total of 49,371.8 acres of forest and grassland.

Three fires exceeded 1,000 acres in size: The Long Bay Fire burned 1,911 acres in Horry County in November; the Santee River Fire burned 1,600 acres in Berkeley County in February; and the Legends Fire burned 1,648 acres in Horry County in June.

Budget restrictions left more than 20 firefighting positions vacant during much of the year. Wildfire response resources were stretched thin by high fire occurrence and extended mop-up associated with extreme drought conditions.

The local fire situation eliminated most opportunities for agency personnel to participate in out-of-state firefighting assignments.

Fire Protection Cooperatives

The Forestry Commission has cooperative arrangements with 11 fire and emergency management entities. Activities for each cooperative during FY 2001-02 are as follows:

Southeastern States Forest Fire Compact Commission: Formed in 1954, the Compact allows member states to provide and receive mutual aid in fighting wildland fires. Member states include: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The Forestry Commission responded to requests from Texas during the year.

SC Emergency Management Division: SC Forestry Commission personnel responded to three emergency activations during the year. Forestry Commission personnel participated in several EMD emergency response training sessions. The Forestry Commission worked with EMD to secure two Fire Management Assistance grants from FEMA.

SC Army National Guard: Under an agreement with the National Guard, helicopter firefighting support is available when requested by SCFC. Requests from SCFC are channeled through EMD and the Governor's Office to activate the Guard.

The Guard's primary firefighting mission is providing helibucket service to SCFC Incident Commanders using SCFC's 780-gallon Bambi buckets. Two Guard helicopters responded to two fires in Horry County this year. Guard helicopters are also available to transport firefighters into rough or inaccessible terrain.

Volunteer Fire Assistance Program: The following grants were awarded:

Title II Grants – 107 fire departments received \$70,200

National Fire Plan Grants (Wildland Firefighting) Title IV – 27 fire departments received \$100,912

State Fire Assistance – Preparedness – 75 fire departments received \$188,062

Federal Excess Property Program: Two hundred thirty-nine (239) pieces of federal excess equipment with acquisition value of \$3.74 million were loaned to fire departments during the year. At present, 1,433 pieces of equipment with acquisition value of \$22.6 million are assigned to 444 fire departments statewide.

National Weather Service: NWS provides daily fire weather forecasts and atmospheric dispersion information. During the year, SCFC and NWS worked to improve content of daily forecasts.

USDA Forest Service: Under the terms of a 1996 contract, SCFC provides aerial wildfire detection on 198,000 acres of Savannah River Site land in SC. A mutual aid agreement between the US Forest Service and SCFC allows both parties to provide initial attack firefighting within one-quarter mile of National Forest boundaries.

SCFC provided initial attack on a number of fires on the Francis Marion National Forest during the fire season, and SCFC investigators assisted with wildfire investigation and stake-outs.

DOD Corps of Engineers: Beginning in 1997, SCFC has provided all fire suppression services on 55,320 acres of Corps of Engineers land. Under the terms of the agreement, actual fire suppression costs are reimbursed to the SCFC.

USDI Fish and Wildlife Service: Under the terms of a 1992 land acquisition agreement, SCFC provides initial attack fire suppression on the 46,000-acre Carolina Sandhills National Wildlife Refuge. The agreement terminates in 2042. SCFC maintains mutual aid firefighting agreements with the following National Wildlife Refuges: Ace Basin, Cape Romain, Savannah, Pinckney Island, and Santee.

USDI Park Service: Agreement maintained; no reportable activity.

Wildland Fire Protection Partnership: Organized in 1991, the Partnership seeks solutions to wildfire management problems in the wildland-urban interface. Membership includes the SC Forestry Commission, US Forest Service, SC Firemen’s Association, Department of Health and Environmental Control, SC Division of Emergency Preparedness, SC Fire Marshal, SC Fire Academy, and SC Forestry Association (ex officio).

Fire Weather

Weather Stations: The Forestry Commission, USDA Forest Service, National Park Service, Department of Defense (Ft. Jackson), and USDI Fish and Wildlife Service share a network of 12 Automated Weather Stations across the state. Data from these stations are used in daily calculations for the National Fire Danger Rating System. Weather readings from these stations are available 24 hours a day for wildfire and prescribed fire management purposes.

Inches Precipitation: FY 2002*

Month	Precipitation
July 2001	5.43
August	2.68
September	3.56
October	0.99
November	1.04
December	1.65
January 2002	3.66
February	2.14
March	4.24
April	1.98
May	3.52
June	3.18
Total	34.07

*Source – National Climatic Data Center

Fiscal Year	Precipitation Last 5 Years*	
	Precipitation Inches	Departure from Normal**
1997-98	62.62	+11.95
1998-99	42.83	-7.84
1999-00	42.24	-8.43
2000-01	40.56	-9.07
2001-02	34.07	-15.72

*Source – National Climatic Data Center

**statewide normal, based on previous 30 years

Readiness Plan: The daily readiness level of Forestry Commission firefighters is based on fire danger data, available number of firefighters, and status of firefighting equipment. Average statewide readiness levels for FY 2002 are as follows:

Readiness 1 (No wildfire danger)	5 days
Readiness 2 (Low wildfire danger)	110 days
Readiness 3 (Moderate wildfire danger)	205 days
Readiness 4 (High wildfire danger)	38 days
Readiness 5 (Extreme wildfire danger)	7 days

Burning Ban and Red Flag Fire Alert: There were five Red Flag Fire Alert implementations during the year. The longest of these was a 21-day implementation in November.

A State Forester’s Burning Ban was declared four times during the year. One declaration in November spanned 18 days. Another ban, also in November, was declared due to air quality concerns in eight coastal counties.

Dispatch And Air Operations

Dispatch: Forestry Commission dispatch is by closest available resource, regardless of political or administrative boundaries. Dispatching was handled by Region Dispatch Centers located in Walterboro, Florence, and Newberry.

Air Operations: Specially trained private aerial contractors provide basic wildfire detection services. Forestry Commission pilots equipped with Federal Excess planes provide incident reconnaissance as well as additional detection service.

During the year, SCFC pilots flew a total of 2017 hours; contractors flew a total of 3,438 hours.

Prescribed Fire

Certified Prescribed Fire Manager Program: Three Certified Prescribed Fire Manager Schools were conducted during the year. Interest in this program continues to be high, with 90 participants during the year.

Prescribed Burning for Forestry, Wildlife, and Agriculture (Smoke Management Guidelines)

Region	Forest Understory		Forestry Site Prep.		Wildlife		Agriculture	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Coastal	1,839	130,000	2,879	8,895	499	38,555	4,040	65,455
Pee Dee	1,248	60,843	1,769	6,920	339	23,345	3,951	78,011
Piedmont	502	36,953	2,782	10,686	119	2,849	941	6,827
Totals	3,589	227,796	7,430	26,501	957	64,749	8,932	150,293

Total Forestry, Wildlife & Agriculture Burns: 20,908 for 469,339 acres

Fire Prevention Information

Wildland-Urban Interface: Significant federal grants were made available during the year to combat fire problems in the wildland-urban interface. Forestry Commission personnel delineated six areas for initial study and wildfire prevention/mitigation efforts. The areas are representative of various terrain, fuel, and development types. A computerized wildfire hazard analysis system was revised to evaluate developments within the designated areas.

Cause	Fires By Cause			Percent of Total Number FY 02
	Number	Acres Burned	Average Acres per Fire	
Lightning	110	1,432.2	13.0	2
Campfire	53	2055.9	38.8	1
Smoking	190	753.4	4.0	3
Debris Burning	2,865	19,895.5	6.9	45
Incendiary	1,871	20,193.6	10.8	29
Equipment	361	2,005.4	5.6	6

Five-Year Summary: All Fires

Fiscal Yr.	Acres Protected	# Fires	Acres Burned	Avg. Acres/Fire	% Area Burned
1997-98	12,807,924	1,943	10,425.1	5.4	0.08
1998-99	12,807,924	6,615	35,155.5	5.3	0.27
1999-00	12,807,924	4,715	21,399.3	4.5	0.17
2000-01	12,807,924	5,283	29,933.9	5.7	0.23
2001-02	12,807,924	6,378	49,371.8	7.7	0.39
Five Year Averages		4,987	29,257.1	5.7	0.15

Acres Protected and Total Burning Notifications by County

County	Acres Protected	Smoke Mgt. Notifications	Other Notifications
Abbeville	202,645	165	3,021
Aiken	455,540	868	12,490
Allendale	178,794	438	908
Anderson	214,724	303	12,351
Bamberg	182,062	430	1,444
Barnwell	147,093	556	3,209
Beaufort	136,739	441	7,556
Berkeley	390,299	963	18,339
Calhoun	168,997	337	2,487
Charleston	244,385	398	8,687
Cherokee	165,386	183	4,103
Chester	307,154	145	2,846
Chesterfield	350,594	546	7,218
Clarendon	241,314	664	4,169
Colleton	502,776	1,354	15,014
Darlington	206,641	284	5,636
Dillon	158,914	353	3,678
Dorchester	283,205	474	12,616
Edgefield	238,766	256	2,313
Fairfield	409,985	150	2,123
Florence	322,779	785	11,690
Georgetown	417,150	647	9,367
Greenville	271,893	319	16,138
Greenwood	212,203	171	3,530
Hampton	279,511	787	4,487
Horry	492,064	1,093	21,347
Jasper	329,574	569	3,604
Kershaw	413,527	275	13,729
Lancaster	289,284	141	4,448
Laurens	325,714	205	5,009
Lee	149,375	275	1,388
Lexington	280,985	387	39,236
Marion	140,099	269	7,992
Marlboro	239,275	219	5,160
McCormick	203,906	69	1,054
Newberry	254,485	240	2,835
Oconee	226,058	279	10,263
Orangeburg	438,154	1,642	10,046
Pickens	233,056	248	9,552
Richland	280,398	253	7,836
Saluda	203,906	239	1,723
Spartanburg	289,043	321	8,445
Sumter	258,685	544	9,484
Union	229,078	95	553
Williamsburg	450,241	1,212	6,164
York	290,432	316	11,176
Federal Land	101,320		
Total		20,908	356,464

Total No. Smoke Mgt. & Other Notifications:

377,372

TOTAL ALL LAND FIRES by COUNTY & CAUSE, FISCAL YEAR 2002

County	Lightning		Campfire		Smoking		Debris Burning		Incendiary		Equipment Use		Railroad		Children		Miscellaneous		Total No.	Total Acres
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres		
Abbeville			2	7	6	18.5	15	13.	19	77	1	8.	7	3.	3	0.	3	0.	56	130.
Aiken	7	19.	7	45.	6	90.2	89	271.5	31	90	8	9.	1	0.	27	32.2	42	153.2	218	711.
Allendale	4	70.					10	37.	3	15	4	8.	2	3.					23	134.
Anderson			1	0	6	35.5	9	41.	4	69	8	34.			2	2.	6	28.0	36	212.
Bamberg	1	3.					40	166.3	4	170.	8	81.			2	1.	3	7.	58	429.
Barnwell	4	90.			3	4.6	30	203.7	1	0	3	28.			7	6.	6	7.	54	340.
Beaufort	1	10.	1	4	1	2.0	37	250.5	39	211.	2	2.			8	16.7	3	18.0	92	514.
Berkeley			2	1600.2	9	28.8	213	1391.6	160	1820.0	6	13.	1	0.	20	46.8	26	56.8	437	4958.1
Calhoun	1	10.			2	1.2	45	243.1	1	0	13	108.5			3	4.	9	18.8	74	386.
Charleston			2	2			47	151.0	34	559.	4	9.			4	9.	7	24.0	98	755.
Cherokee	1	10.	5	20.	3	6.	11	31.	7	34.	6	59.	1	1.	4	3.	15	77.6	53	243.
Chester	1	2.			2	1.	12	14.	6	72	7	40.	1	1.			5	29.7	34	161.
Chesterfield	6	13.			14	92.2	68	279.9	24	96	13	37.	5	5.	5	11.0	3	4.	138	540.
Clarendon	1	20.	1	2	1	2.0	111	894.5	121	1801.4	9	27.			3	5.	2	0.	249	2752.5
Colleton	4	10.			2	12.5	175	1205.5	98	964.	19	25.			10	14.3	7	36.1	315	2269.5
Darlington	3	7.			5	4.5	81	310.0	47	450.	9	19.	6	5.	9	49.7	20	170.7	180	1017.8
Dillon	3	0.			3	26.0	40	632.1	35	359.	15	40.	2	11.0	6	13.8	7	21.5	111	1104.8
Dorchester					1	0.	84	389.7	74	368.	5	550.9	1	1.	21	43.7	2	3.	188	1357.7
Edgefield			1	1	3	32.0	17	94.	2	2	3	7.					12	11.2	38	147.
Fairfield	3	19.			6	4.	16	58.	11	102.	12	34.			2	1.	11	22.3	61	243.
Florence	3	4.			3	18.5	197	2450.2	184	2228.3	12	73.			19	54.9	19	34.5	437	4864.5
Georgetown	3	61.	1	4			78	1754.8	60	430.	5	59.			3	1.	4	17.1	154	2327.3
Greenville			3	6	2	0.7	18	43.	12	74.	3	5.			7	7.	9	55.2	54	193.
Greenwood	1	80.			6	19.7	13	24.	3	31	1	0.	1	0.	5	3.	10	29.3	40	188.
Hampton	14	102.9			1	0.2	68	190.5	52	218.	14	17.			3	2.	1	0.	153	531.
Horry	6	21.	8	22.	5	26.0	164	2326.6	131	2722.3	10	25.			11	49.1	18	75.8	353	5269.4
Jasper	3	7.					137	605.2	104	1017.6	11	12.	4	23.5	7	12.5	8	8.	274	1686.5
Kershaw	9	414.0	1	1	9	25.0	55	235.3	9	12	16	30.			13	16.2	21	43.9	133	779.
Lancaster	4	53.	1	0	5	9.6	19	55.	4	5	3	11.			8	27.8	16	63.0	60	226.
Laurens			1	1	3	13.0	16	43.	5	51	2	16.			1	1.	14	56.1	42	181.
Lee					3	3.0	42	177.0	42	488.	5	35.	1	0.	2	4.	5	290.2	100	997.
Lexington	9	172.4	5	8	11	29.6	90	126.0	17	45	21	115.6			50	39.5	45	62.9	248	600.
Marion	4	42.	1	3	2	0.6	41	712.5	25	235.	4	7.			4	6.	8	39.9	89	1047.2
Marlboro	3	132.0			2	4.0	42	235.0	56	506.	4	29.			2	7.	3	4.	112	917.
McCormick							19	52.	27	32	3	1.	2	12.2	1	0.	8	53.7	60	152.
Newberry	1	0.	1	2	3	5.0	14	32.	1	0	3	7.	3	0.	3	2.	13	18.1	42	68
Oconee	1	0.			6	4.5	17	75.	7	32	1	4.	1	2.	5	13.7	12	21.5	50	153.
Orangeburg	3	11.			24	35.7	213	697.1	65	394.	43	206.0			21	38.3	15	104.4	384	1487.5
Pickens					3	36.5	40	85.	2	0	2	1.			8	18.2	16	24.9	71	166.
Richland			1	1	8	24.7	31	165.5	22	135.	8	29.	5	131.0	17	30.5	28	116.2	120	633.
Saluda			1	15.	1	0.3	27	81.	2	2	4	0.					4	0.	39	100.
Spartanburg					1	0.5	21	100.6	1	16	1	15.			7	13.1	10	65.0	41	210.
Sumter	2	26.	1	1	3	9.0	112	599.0	60	596.	16	119.1			11	17.5	16	27.7	221	1395.5
Union			1	2			23	94.	3	9	4	7.	1	40.0			16	80.7	48	233.
Williamsburg	4	18.	4	302.	16	125.9	197	2203.0	254	3621.8	10	28.	1	4.	2	1.	11	118.4	499	6423.1
York			1	2			21	49.	2	17					5	9.	12	46.8	41	125.
Grand Total	110	1,432.2	53	2,055.9	190	753.4	2,865	19,895.5	1871	20,193.6	361	2,005.4	46	246.8	351	638.9	531	2,150.1	6378	49,371.8

Total All Land Fires by County and Month, Fiscal Year 2002

County	2001												2002						Total No.	Total Acres						
	July		August		September		October		November		December		January		February		March				April		May		June	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres		
Abbeville	1	0.2					3	17.5	29	61.2	5	5.6			8	5.8	4	7.1	4	2.4	1	0.5	1	30	56	130.3
Aiken	8	32.3	8	3.5	10	8.3	30	131.9	35	76.1	17	71.9	12	52.6	32	140	24	61.1	17	93	13	12.7	12	28.2	218	711.6
Allendale							1	13.	4	17.2	1	0.1			8	19.3	5	14.7	1	5			3	65	23	134.3
Anderson									8	7.5	2	2.5	5	25.8	14	121.2	1	1	1	11	2	21	3	22	36	212
Bamberg	1	0.1	2	0.4			2	16.	12	12.4	7	5.5	5	62.2	10	99.2	7	47.3	3	172.1	4	10.5	5	3.7	58	429.4
Barnwell							3	0.4	5	1.5	7	33.7	6	21.2	12	111.1	11	69.9	4	11.1	1	1	5	90.9	54	340.8
Beaufort	1	1.	2	18.			3	14.	6	14.6	8	17.8	6	9.2	19	137.8	22	217	12	47	6	17	7	21.5	92	514.9
Berkeley	1	15.	6	5.5	2	1.1	46	142.3	77	281.3	48	223.5	32	231.1	80	2612.7	74	849	47	542.4	12	12.5	12	41.7	437	4958.1
Calhoun	1	0.2	1	0.2	1	0.1	3	1.8	15	15.5	10	31.3	3	3.8	23	203.5	7	65.6	3	11	1	4	6	49	74	386
Charleston	1	21.6					7	10.7	17	57.9	4	11.9	9	115.7	22	70.7	14	166.7	9	271.6	7	15.7	8	12.8	98	755.3
Cherokee			5	48.5			2	1.1	14	39.6	3	13	2	8.6	5	28.7	8	56.8	6	29	4	5.5	4	13	53	243.8
Chester	1	25.	2	10.	2	56.1	2	1.1	4	13	1	0.1	2	2.1	7	8.2	5	6.5	3	5.5			5	34	34	161.6
Chesterfield	3	4.4	3	12	6	10.4	10	14.2	16	27.2	8	14.7	9	52.6	34	179.4	15	149.7	12	38.1	8	8.4	14	29.7	138	540.8
Clarendon			3	4.1	1	5.	19	145.3	38	165.1	42	164.7	16	91.4	60	968.1	36	344.4	12	621.5	3	3.6	19	239.3	249	2752.5
Colleton	1	3.			3	1.6	17	44.	44	275.1	37	197.4	36	233.7	76	885.8	48	351.4	24	226.3	14	8.6	15	42.6	315	2269.5
Darlington	2	8.	12	21.3	2	3.1	13	17.3	24	91.2	17	33.8	13	33.2	41	267.2	27	296	11	168.3	3	3.3	15	75.1	180	1017.8
Dillon	1	10.	5	9.4	2	0.6	13	546.1	20	48.3	7	29.1	4	16	14	120.5	11	43.4	13	174.8	6	40.2	15	66.4	111	1104.8
Dorchester	1	0.1	2	4.	5	12.5	20	608.8	32	84.7	21	68.7	18	53.3	30	207.4	22	107	23	179.4	5	16.5	9	15.3	188	1357.7
Edgefield	1	1.	2	1.1	2	5.5	9	6.7	10	34.8	3	3.2			5	74.2	2	2	1	5	1	0.5	2	13.5	38	147.5
Fairfield	1	0.1	3	22.3	3	25.9	6	28.8	9	20.8	4	1.9	3	5	8	71.5	9	24.3	8	26.1	2	1.1	5	15.2	61	243
Florence	2	3.	3	1.5	8	42.1	51	189.5	96	786.6	44	368.6	32	162.6	73	914.9	50	1261.1	39	956.8	20	108	19	69.8	437	4864.5
Georgetown	5	18.	1	4.	2	18.	13	61.7	16	24.3	13	71.7	5	125.6	36	359.3	27	453.9	21	953.8	8	26.3	7	210.7	154	2327.3
Greenville	2	0.3					2	4.5	9	69.7	5	3.7	5	5.8	11	47.2	4	40.6	11	13.6			5	8.1	54	193.5
Greenwood	1	5.			3	8.2	6	4.7	11	39.2	5	4.3	2	0.6	6	34	2	2.1	1	0.1			3	90.1	40	188.3
Hampton	2	1.3	5	6.6	3	1.7	15	30.9	16	12.1	17	138.3	8	10.8	28	110	23	80.9	10	24.6	12	50.2	14	64.4	153	531.8
Horry	5	3.6	3	3.5	6	11.8	63	203.2	54	2228.7	29	114.3	17	87.1	56	267.2	30	246.1	42	153.5	21	147.4	27	1803	353	5269.4
Jasper	2	1.1	4	5.3	1	0.5	22	136.3	32	43.6	22	51.2	13	47.6	49	692.8	46	392.7	28	125.7	20	68.1	35	121.6	274	1686.5
Kershaw	10	211.4	12	57.9	6	21.	17	32.9	12	39.2	7	17.7	10	43	23	93.8	15	23.1	15	66.6	1	0.5	5	172	133	779.1
Lancaster	2	0.3	11	60.1	5	8.5	2	2.5	6	35.5	4	35.1			9	35.5	5	6.1	5	19.6	4	3.3	7	19.9	60	226.4
Laurens			3	15.7			2	7.5	7	12.6	2	6	2	7.4	13	68	8	46.5	2	4.5			2	13.5	42	181.7
Lee	2	0.3	5	5.4	5	22.	5	5.3	17	378.7	4	85.1	6	21	26	234.2	17	84.7	6	73.6	3	6.8	4	80.5	100	997.6
Lexington	13	16.6	6	19.9	14	23.3	31	27.1	22	20	41	89.2	16	15.3	45	138.6	27	63.7	19	41.6	4	3	10	141.7	248	600
Marion	1	1.	4	7.2	7	12.8	12	15.7	6	7.2	7	58.7	5	7.6	18	717.7	12	94.8	8	33.8	4	22.2	5	68.5	89	1047.2
Marlboro	3	1.1	6	5.1	2	4.	11	30.9	15	59	9	86.6	1	0.2	20	196.2	8	145.4	15	281.9	8	39	14	68.2	112	917.6
McCormick	1	0.2	7	7.	1	3.	7	15.7	28	83	1	0.2	2	1.2	3	22.6	3	17.3	3	0.6	1	0.1	3	1.5	60	152.4
Newberry	2	2.1					7	11.8	7	3.9	6	8.4	4	24.9	4	3	2	2	3	1	1	3	6	7.9	42	68
Oconee	1	2.			1	2.	2	19.	10	9.2	2	1.2	6	42.2	10	18.8	7	25.5	4	20.5			7	13.5	50	153.9
Orangeburg	3	0.4	11	24.8	2	0.2	23	26.3	87	150	49	233.2	30	136.5	81	429.2	41	269.9	23	43.2	5	36.1	29	137.7	384	1487.5
Pickens	1	0.5	1	1.5			3	2.3	16	20.8	3	3	7	41.2	19	39.7	13	43	7	13.7			1	0.5	71	166.2
Richland	5	2.6	2	2.	4	13.	10	107.6	28	53.1	9	57.2	6	12.1	27	265.5	12	21.2	11	57.6	2	3	4	39	120	633.9
Saluda			3	4.6	4	9.5	5	5.6	7	7.5	2	0.6	5	17.1	8	25.9	3	14.1	1	15	1	0.1			39	100
Spartanburg			1	2.			4	24.5	10	27.6	4	37	1	12	9	51.5	5	36.5	1	4			6	15.1	41	210.2
Sumter	1	0.1	9	30.7	9	57.7	20	207.9	32	228.5	24	45	12	36.2	44	366.1	37	220.1	18	155.7	3	7.4	12	40.1	221	1395.5
Union			6	15.5	2	9.	3	3.	7	58	5	6.5	4	24.5	3	52	5	10	5	27	1	3.5	7	24.3	48	233.3
Williamsburg	4	22.2	3	2.6			34	142.3	84	365.6	61	453.7	27	156.4	113	2370.1	78	1825.6	64	732.5	10	120.2	21	231.9	499	6423.1
York	1	1	4	5.5	2	3.2	5	12.6	5	23.8	1	3.5			8	48	5	9.5	6	7.1			4	11	41	125.2
Grand Total	94	416.1	166	448.7	126	401.7	585	3,092.3	1,059	6,132.4	628	2,910.4	407	2,056.4	1,250	13,934.1	837	8,317.3	582	6,468.2	222	830.8	422	4,363.4	6,378	49,371.8

FOREST HEALTH

The Forest Health Program, in cooperation with the State Division of Plant Industry and the U.S. Forest Service, maintains a program to detect, evaluate, and suppress forest pests. Through cooperative agreements, these agencies make their technical assistance and advice available to the Forestry Commission.

The current forest pest detection and reporting system involves the reporting by field foresters of forest pests that are causing abnormal losses, require control action, or which may present new problems. Aerial surveys are made periodically for specific pests to determine occurrence and the need for suppression action.

Major Insect Problems

Southern Pine Beetle

The Southern Pine Beetle outbreak which began in York County in 1997 continued to intensify and spread. As of June 30, 2002, the outbreak contained 18 counties in the Piedmont Region. These were Abbeville, Anderson, Cherokee, Chester, Edgefield, Greenville, Greenwood, Laurens, Lexington, McCormick, Newberry, Oconee, Pickens, Richland, Saluda, Spartanburg, Union, and York. Some beetle infestations were greater than 150 acres in size.

Losses to the beetle were well above the yearly average of \$7.8 million per year. During the year SCFC foresters and technicians sketch-mapped 21,728 beetle spots containing 5,345,886 trees. These infested trees had an estimated volume of 303,860 cords and 213,834 thousand-board feet. The green stumpage value lost to beetles was \$73,829,736. The Forestry Commission continued in a cooperative suppression project with the U.S. Forest Service.

During the spring, 31 counties were pheromone-trapped for prediction of Southern Pine Beetle population trends. Of the counties trapped, Abbeville, Anderson, Cherokee, Chester, Edgefield, Fairfield, Greenwood, Kershaw, Lancaster, Laurens, Lexington, McCormick, Newberry, Oconee, Pickens, Saluda, Union and York were predicted to experience a severe outbreak. Five additional counties recorded trap catches sufficient to receive a prediction of high populations. These were Georgetown, Greenville, Horry, Jasper and Richland. Only one county, Spartanburg, was expected to have moderate beetle activity. Other counties, mostly in the coastal plains, are not expected to have significant beetle problems.

Personnel are currently flying 100% surveys in infested areas and notifying affected landowners of beetle infestations on their property. Unfortunately, the statewide pulpwood market is depressed and salvage of infested trees is at a historical low. A significant number of beetle spots have been treated with the cut and leave technique. While this technique controls most infestations, it represents a cost to the landowner.

Major Disease Problems

Oak Wilt

Oak wilt disease has been identified in Aiken, Barnwell, Chesterfield, Kershaw, Lancaster, Lee, and Richland counties. Except for the recent discoveries in Aiken and Barnwell Counties the disease appears to be static and causing losses only to low value oaks. Since there is potential for loss of valuable trees, including urban trees, periodic surveys are made to evaluate the spread.

Dutch Elm Disease

Dutch Elm disease has been confirmed in Aiken, Anderson, Cherokee, Chester, Chesterfield, Edgefield, Fairfield, Greenville, Greenwood, Kershaw, Lancaster, Laurens, Lexington, Marlboro, Newberry, Oconee, Pickens, Richland, Saluda, Spartanburg, and York counties. It is expected to gradually spread through the state because the primary agent of spread is the smaller European elm bark beetle which occurs statewide.

Dogwood Anthracnose

In 1988 a new anthracnose disease of dogwood was noted for the first time in South Carolina. This disease is caused by the fungus *Discula destructiva*. Symptoms include foliage blighting, canker formation, and progressive deterioration. The fungus usually kills infected trees in two to three years. At this time infected trees have been found in Anderson, Greenville, Laurens, Oconee, Pickens, and Spartanburg counties. As part of a southwide effort, the Forestry Commission has established 19 permanent plots in the counties known to harbor infections of the fungus. The dogwoods in those plots will be monitored periodically to determine the rate of spread of this potentially devastating disease.

Miscellaneous Insect And Disease Checks

Commission foresters made approximately 1,665 field checks of insect and disease problems and made recommendations for prevention and control. Other inquiries were handled by telephone, mail, and personal contact.

Insect And Disease Laboratory

During Fiscal Year 2001-2002, the Insect and Disease Laboratory processed 65 samples. These were submitted for analysis by Commission employees and private individuals. Recommendations for control of various pests identified were given where needed. In addition to these samples, 198,136 southern pine beetles and 41,460 clerid were counted in the lab. Insect and disease collections from two Ranger-Technicians were processed for training purposes.

Forest Health

The SCFC entered into agreement with the USFS to evaluate permanent Forest Health plots throughout South Carolina. This was done by the Management Section and reported there. As another part of this program, the Forestry Commission also received additional funding for off-plot activity to survey for and report on other forest insects and diseases.

In conjunction with the spring 20% beetle survey, the entire state was surveyed for defoliation, beaver damage, fire, and annosus root rot damage.

Some defoliation continued this year due to an outbreak of Forest Tent Caterpillar. Larvae of this insect defoliated gum and other bottomland hardwoods over 29,673 acres in 11 counties. Defoliation occurred until late May at which time the insects pupated and became adults. The most impacted areas were along the Congaree, Wateree, Upper Santee, and Pee Dee basins. Defoliation also included damage from hailstorms in Aiken, Colleton and Oconee counties.

Timber losses due to beaver impoundment and feeding were seen on a total of 4,475 acres with resulting damage of \$1,449,900. Fire mortality was detected on 12,895 acres. The estimated value of fire-killed timber was \$5.1 million.

This year we also surveyed for tracts with apparent annosus root rot. A site was considered positive for annosus if it contained thinned pines with scattered patches of mortality. This survey detected 53,850 acres of apparent annosus infection. Damage related to this infection was calculated at \$1,938,600.

EQUIPMENT

The Equipment Program is responsible for development and implementation of statewide activities concerning use, design, and maintenance of specialized forest fire control equipment.

The program provides technical assistance and advice to repair shops, developing specifications for fire suppression equipment and motor vehicle fleet, and arranging training for all field mechanics.

All regular and specialized fire suppression equipment is modified and processed for field use at the Commission's Central Repair Shop. The Central Repair Shop personnel made numerous repairs to Forestry Commission vehicles

and equipment and manufactured fire suppression equipment. Following are some of the major accomplishments of the Central Repair Shop:

- Serviced and maintained vehicles/equipment assigned to Columbia Office/Shop Complex, Richland and Lexington Counties, and Creech Seed Orchard in Sumter County.
- Provided maintenance assistance to the Region Repair Shops
- Processed new motor vehicle equipment

Maintenance facilities at the Regions, State Forests, Taylor Nursery, Neiderhof Seed Orchard and Central Repair Shop were all certified by the State Fleet Management.

Equipment Purchased

Coastal Region:

- Two (2) Pitts 30-ton lowbed trailers (Colleton, Dorchester Counties)
- Four (4) 2002 Dressta crawler tractors
- One (1) 2002 Terra-Riser wheel fire plow
- One (1) Chevrolet Tahoe – Law Enforcement

Pee Dee Region:

- Two (2) Pitts 30-ton lowbed trailers
- Four (4) 2002 Dressta crawler tractors
- One (1) 2002 Terra-Riser wheel fire plow

Piedmont Region:

- Four (4) 2002 Dressta crawler tractors
- Installed service bed on 2001 Ford truck
- One (1) 2002 Terra-Riser wheel fire plow

Taylor Nursery:

- One (1) 2002 JD Gator

Niederhof Seed Orchard:

- One (1) JD farm tractor with front-end loader

Creech Seed Orchard:

- One (1) 2002 JD Gator

Columbia Headquarters:

Central Repair Shop initiated purchasing, fabrication, and organized the modification of crawler tractors for field use. The Central Repair Shop prepared and organized the fire suppression equipment for two auctions held at its headquarters. The auction in November 2001 netted the Forestry Commission \$123,840.00; the auction in February 2002 netted \$103,927.00. These proceeds are used to purchase like equipment.

A balance of \$164,942.03 in the surplus equipment budget will be carried forward for FY 02-03.

Received 1.8 million dollars in recurring funds to purchase fire suppression equipment.

LAW ENFORCEMENT

The Forestry Commission has 54 commissioned officers including 4 full time investigator positions trained and experienced in arson, forest product theft and fraud, and related crime investigations. During the year, investigators cleared 194 timber theft and related cases involving timber valued at \$1,057,220. In addition, 40 cases were pending court of pleas at the end of the year with a timber value at \$668,620.

Investigators also presented 17 timber theft awareness and prevention programs to landowners and forestry professionals.

Law Enforcement Report, Fiscal Year 2002

County	Prosecutions					Investigations				Burn Site Inspections	State Forests		
	Outdoor Burning		Woods Arson	Juvenile cases	Total	Fire	Smoke	Timber Theft/Fraud	Investigated		Settled	Prosecutions	Fines
	Prosecutions	Fines											
Abbeville	3	\$250.00			3	14							
Aiken	15	\$1,090.00			15	53	1	5	7				
Allendale	3	\$15.00			3	3							
Anderson					0			17	13				
Bamberg	19	\$1,275.00			19	29	1	3	2	3			
Barnwell					0			2	1				
Beaufort	11	\$1,250.00			11	79		3	2	2			
Berkeley	56	\$11,135.00	2	2	60	296	7	7	4	12			
Calhoun	30	\$4,803.00			30	31	1	2	2	2			
Charleston	18	\$765.00			18	27	3	1	1				
Cherokee					0	1		1	1				
Chester					0	1		3	3				
Chesterfield	3	\$150.00			3	22		2	2				
Clarendon	18	\$1,256.00	2	1	21	69		7	6				
Colleton	55	\$4,225.00			55	109	3	13	10	12			
Darlington	10	\$581.00		1	11	19		3	3				
Dillon	2	\$185.00			2	4		4	4				
Dorchester	33	\$3,585.00			33	100	1	9	9	13			
Edgefield					0			4	4				
Fairfield					0	15		2	2				
Florence	29	\$2,764.00			29	48		10	12				
Georgetown	38	\$5,990.00		1	39	61		2	2	18			
Greenville	5	\$1,025.00			5	19							
Greenwood					0	3		1	1				
Hampton	8	\$400.00			8	99		5	4	3			
Horry	17	\$1,530.00			17	22		18	15	25			
Jasper	18	\$2,285.00			18	97		2	3				
Kershaw	30	\$2,500.00			30	40	1	4	6	10			
Lancaster					0			1	1				
Laurens					0			2	4				
Lee	6	\$1,475.00	1		7	8		1	2	1			
Lexington	38	\$6,950.00			38	57		3	6				
Marion					0	4		3	3	1			
Marlboro	6	\$825.00	1		7	9		5	5				
McCormick					0	10		1	1				
Newberry	1	\$50.00			1	3		2	2				
Oconee	8	\$1,800.00	2		10	16	1	5	3				
Orangeburg	106	\$15,530.00	1		107	163	4	10	7	7			
Pickens	19	\$1,600.00			19	58	2	2	2				
Richland	5	\$900.00			5	23		6	7				
Saluda	2	\$175.00			2	6		5	8				
Spartanburg					0	2		3	3				
Sumter	17	\$1,425.00			17	17		2	2	8			
Union					0			4	8				
Williamsburg	27	\$2,475.00	1		28	138		5	10	14			
York	2	\$350.00		1	3	8		1	1				
Manchester											25	\$4,600.00	
Sandhills											9	\$1,600.00	
Totals	658	\$80,614.00	10	6	674	1783	25	191	194	131	34	\$6,200.00	

NURSERIES AND TREE IMPROVEMENT

This year the SC Forestry Commission distributed a total 13,500,023 seedlings to landowners in SC. A total of 81,431,448 seedlings from all sources were planted on 136,515 acres in the state during the year.

The South Carolina Forestry Commission's goal is to produce 25 % of seedlings planted in the State. Determining factors such as weather, seedling availability from other private industry nurseries, the economy and timber prices have affected the sale of seedling that the South Carolina Forestry Commission can achieve from year to year. In 2001-2002 Taylor Nursery grew and distributed 12,691,440 bareroot seedlings representing 22 different species they provide for their customer's needs. For the fourth year in a row, South Carolina and Taylor Nursery experienced a below average rainfall. Due to the lack of rain, irrigation became a critical step in seedling survival in the fields. Irrigation had to be done with water transferred from another water source to Taylor Nursery's irrigation pond. Drought conditions have greatly impacted the seedling demand as well as survival.

Creech Greenhouse in Wedgefield produces containerized seedlings, rooted cuttings and progeny test material. The greenhouse production was 808,583 for this fiscal year. The demand for longleaf pine remained high this year fueled by CRP cost-share incentives. The new mechanized production line and new building at Creech were put into use this fall for packing and this spring to start the fall 2002 crop of longleaf. More benches were built to hold the 300,000 longleaf expansion which will be ready for planting in fall 2002. The improved irrigation system has made it possible to water more thoroughly and with fewer dry spots. More benches will be built in the fall/winter of 2002 in order to increase production by 250,000 longleaf for fall 2003 planting.

A marketing team has been initiated to research and develop new approaches for providing tree seedlings to our customers. Ideas being investigated include variety of species grown, packaging, advertising, customer service and methods of ordering. Already more emphasis is being placed on the production of containerized longleaf, rust-resistant loblolly, and improved Virginia pine for Christmas tree growers.

The old Piedmont Nursery (now an education center), Coastal Nursery (now a seed orchard) and Tilghman Nursery (now Sumter Area Office) facilities continue to house white pine, Virginia pine and hardwood orchards. Spartanburg, Sumter and Walterboro Area Offices plus Taylor Nursery are used as seedling distribution centers. A customer survey indicated that 100% of customers were satisfied with our products and services.

RESEARCH

The South Carolina Forestry Commission continues cooperative research projects with Clemson University, Auburn University and U.S. Forest Service. The Commission also maintains membership in the North Carolina State University Pine Tree Improvement Cooperative and the Auburn University Southern Forest Nursery Management Cooperative. The SCFC ended its membership in the North Carolina State Hardwood Research Cooperative.

FOREST TREE SEED COLLECTION PROGRAM

Each year the South Carolina Forestry Commission collects or purchases pine cones and other forest tree seed for seedling production. During the past year, a variety of hardwood and longleaf pine seed were purchased for future seedling production. The SCFC collected 91 bushels of longleaf pine from the public, 463 bushels of black walnut from the public, and 34 pounds of American Hazel from the public. SCFA employees collected 15.5 bushels of sawtooth oak acorns from Savannah, GA and 74 pounds of dogwood berries from Taylor Nursery.

TREE IMPROVEMENT

Niederhof Seed Orchard produced a 2,124 bushels of second generation piedmont loblolly and 3,135 bushels of second generation coastal loblolly pine cones. This represents 11% of all second generation seed produced this year in the south. The second generation coastal orchard has been rogued to twenty clones and the piedmont orchard to

ten clones. Based on SCFC and North Carolina State University field tests these coastal trees produce 18% more volume/acre than unimproved and the piedmont trees produce almost 30% more volume/acre than unimproved. Both sources have demonstrated one half the rust infection of unimproved trees.

SCFC staff measured 3 progeny tests this year bringing the total measured to 125 since 1988. This completes the majority of our second cycle of breeding and testing. We are continuing to graft new selections into our breeding orchard at Niederhof Seed Orchard. We began grafting scion from families that have demonstrated superior traits for height and growth while exhibiting resistance to fusiform rust. These selections will be planted in our third cycle orchard at Niederhof. We have recently started breeding work to produce fourth generation progeny.

A Virginia pine Christmas tree research study was recently completed in cooperation with the SC Christmas Tree Association and NC State University. The results identified families from our orchard that will produce superior Christmas trees. Our Virginia pine orchard produced 26 bushels of cones. Of the 26 bushels harvested, 19 bushels of clonal cones were harvested that are proven superior Christmas trees.

State Nurseries Seedling Production by Species, 2001-2002

Bareroot Seedlings

Baldcypress	134,000
Cedar, Eastern Red	120,000
Loblolly Pine, Coastal 2nd Gen.	6,300,000
Loblolly Pine, Coastal 2 nd Gen. Rust Resistant	1,500,000
Loblolly Pine, Piedmont 2 nd Generation	4,734,000
Loblolly Pine, Pine 2 nd Generation Rust Resistant	1,500,000
Loblolly Pine, Texas	85,000
Longleaf Pine	5,500,000
Virginia Pine	35,000
White Pine (2 years old)	59,000
Ash, Green	10,000
Buttonbush	5,000
Crab Apple, Southern	1,500
Hazel, American	900
Lespedeza, Attaway	1,200,000
Oak, Cherrybark	49,000
Oak, Gobbler Sawtooth	9,000
Oak, Laurel	11,000
Oak, Sawtooth	63,000
Oak, White	21,000
Oak, Willow	14,000
Persimmon	11,000
Sweetgum	15,000
Sycamore	15,000
Walnut, Black	25,000
Yellow Poplar	40,000
Total	21,457,400

Containerized Seedlings
(Creech Greenhouse)

Longleaf Pine	750,000
Virginia Pine	5,000
Atlantic White Cedar	5,000
Carolina Sapphire	6,000
Clemson Greenspire	5,000
Leyland Cypress	50,000
Wiregrass	4,000
Total	825,000
Total Seedlings Produced by SCFC	22,282,400
Total Seedlings Distributed in South Carolina	13,500,023

Tree Seedling Distribution by Landowner Classification

	Percent of Total	Number Planted
Non-industrial Private Forest Landowner	53	43,524,139
Forest Industry	44	35,924,843
Non-forest Industry	1	269,160
Government (State, Federal, Other)	2	1,713,306
Total	100	81,431,448

Source of Seedlings Planted in the State

1. Nurseries in South Carolina

Industry Nurseries	55,854,850
South Carolina Forestry Commission	13,500,023
Private Nurseries	450,000
Total	69,804,873

2. Nurseries Outside of South Carolina

Industry Nurseries	2,345,800
Private Nurseries	6,710,270
Georgia Forestry Commission	261,500
North Carolina Forest Service	2,269,005
Florida Division of Forestry	40,000
Total	11,626,575

GRAND TOTAL: 81,431,448

SCFC Active Seed Orchards

Orchard Type	Year Established	Acres
Creech Greenhouse/Seed Orchard		
Genetic Diversity Archives (clone banks)	1977-83	25
Coastal Loblolly Pine 1.0 Rust Resistant	1971	5
Longleaf Pine 1.0	1971	12
Virginia Pine 1.0 (Creech)	1980	1
Virginia Pine 1.0 (Manchester SF)	1986	2
Sawtooth Oak 1.0 Seedling	1990	2
Total		47
Niederhof Seed Orchard		
Coastal Loblolly Pine 2.0	1985-88	204
Piedmont Loblolly Pine 2.0	1985-88	118
Longleaf Pine 1.0	1988-90	30
Loblolly Pine Breeding Orchard 3.0	1997-	10
Longleaf Pine Seedling Seed Orchard	1998	8
“Gobbler” Sawtooth Oak Seedling S.O.	1998	1
Total		371
Coastal Seed Orchard		
Sycamore 2.0	1992-95	4
Sweetgum 2.0	1992-95	6
Willow Oak Seedling Seed Orchard	1992-95	1
Swamp Chestnut Oak Seedling S.O.	1992-95	1
Green Ash Seedling Seed Orchard	1992-95	3
Red Maple Seedling Seed Orchard	1992-95	1
Southern Red Oak Seedling Seed Orchard	1992-95	2
White Oak Seedling Seed Orchard	1992-95	2
Total		20
Piedmont Seed Orchard		
White Pine 1.5	1991-93	12
Virginia Pine 1.0	1993	3
Northern Red Oak Seedling Seed Orchard	1993-95	2
Total		17
Grand Total		455

DISPATCH AND FOREST TECHNOLOGY

Dispatch Technology

A number of enhancements have been made in FY 2002 to the Commission's Dispatch Centers using funds from the Myrtle Beach land sale and approved by the state legislature for implementing the Commission's Strategic Plan. An action item under *Protect the Resource* of the Strategic Plan was to update dispatch software, equipment and staffing.

The "heart" of our computer aided dispatch system is the Oracle database. The Oracle database is where all the information that is entered and displayed by the dispatchers is stored. This database system is also responsible for sending and receiving (i.e. replicating) information to the other dispatch centers and Columbia. This enables each center to have a complete image of what is going on statewide at anytime and allows us to easily switch operations to just one center at night.

The 1996 version of the database software the agency was using was no longer supported by Oracle and considered by some to be one of the worst versions Oracle put out. The database required daily monitoring and intervention to make sure data was passed along to the other centers. Upgrading this database software to a newer version was identified as a major priority should funds become available. Any new computer aided dispatch systems or enhancements to be built around our existing data would require upgrading our Oracle version as a first step.

An Oracle consultant was brought in to do the upgrade when it was identified. An easy migration procedure was not available. The consultant had to do a complete analysis of our current system and replication environment, test out several methods to migrate to the newer version, and determine which one would have the least impact on our dispatch operations. Even with all this pre-planning, the dispatch centers had to operate on paper for several days until various unforeseen problems were identified and resolved.

One of the many improvements from upgrading to the newer version is a function in the computer aided dispatch software to determine the closest resource to an incident. It would take anywhere from 45 seconds to more than 2 minutes to calculate the distance of available wardens and rangers to a fire. After the upgrade and some performance tuning, this function now can run in under 10 seconds.

Another enhancement to the dispatch operations was the installation of a communications recording system. Unlike other emergency dispatch and 911 centers, the Forestry Commission dispatch centers didn't have a system to record phone calls and radio communications. This was identified as a major priority should funds become available. Such systems help to verify who said what to whom, and when they said it. It can also provide "instant recall" capabilities. In addition to being used for clarifying hurried or garbled messages, the recording system can be utilized in mediating complaints, trapping nuisance or abusive callers, reducing exposure to liability, training and staff evaluation.

The automated yard debris burning notification system was modified so that all non smoke management type vegetative debris burning notifications could be directed to that system as of July 1, 2001. It was estimated that this change would redirect approximately 30,000 calls per year from our dispatch centers to the automated system. This reduction in call volume would allow dispatchers to more efficiently handle smoke management notifications, radio communications, and wildfire calls. The automated system was also modified to handle 24 calls simultaneously which increased its call handling capabilities by 50%.

Another benefit of this change was an overall reduction in phone charges even when the number of calls placed to the automated system and dispatch centers increased by 12.3% in FY 2002 when compared to FY 2001. Phone charges to our 1-800 numbers decreased by **20.3%** in FY 2002 when compared to FY 2001 due to the automated system being more efficient and cost effective in handling these types of burning notifications.

**COMPARISON OF 1-800 CALLS
TO AUTOMATED NOTIFICATION SYSTEM AND DISPATCH CENTERS
FY 2001 AND FY 2002**

FY	1-800 Call Routing	Calls	Percent Change	Average Length	Average Cost	Call Charges for Year	Percent Change
01	Automated System	345,061	XX	1.47	\$0.14	\$48,437.58	XX
	Dispatch Center	132,140	XX	2.08	\$0.30	\$39,456.50	XX
	Total	477,201	XX	XX	XX	\$87,894.08	XX
02	Automated System	419,066	21.4%	1.61	\$0.12	\$48,946.42	1.1%
	Dispatch Center	116,768	-11.6%	1.83	\$0.18	\$21,080.70	-46.6%
	Total	535,834	12.3%	XX	XX	\$70,027.11	-20.3%

Forest Technology

The Commission was a major cooperator in the 1999 National Aerial Photography Program, which acquired 1:40,000 color infrared aerial photography of South Carolina during January and February of 1999 and 2000. The Commission is currently working with the Department of Natural Resources, US Corps of Engineers and other agencies to have this photography converted into Digital Orthophoto Quarter Quads (DOQQs) so various computer applications and geographical information systems can more easily utilize it. Delivery of the 1999 DOQQs began in August, 2001 for the majority of the Pee Dee Region (including Manchester and Sand Hills State Forests) and portions of Oconee, Beaufort and Jasper counties. Due to quality control issues with the current contracted vendor, the remainder of the state will not be available until after July 1, 2002.

The Information Systems group was realigned under the Dispatch and Forest Technology Coordinator in February, 2002. The Information Systems group is responsible directly and indirectly for the maintenance and support of the agency's wide area network, 10 Windows NT Servers, and over 200 computer users and their software applications. The development of a formal Annual Work Plan was implemented to identify and set priorities for major projects and their deadlines. Technical training needs for this group was also identified, prioritized and included in the Annual Work Plan.

OFFICE OF THE STATE FORESTER

South Carolina Forestry Commission Financial Statement Fiscal Year 2001-2002

REVENUES

State Appropriations	17,916,250
Federal Grants	2,904,939
Earmarked Funds	
Hunting & Fishing License	54,025
Refund of Prior Year Expenditure	62,851
Asbestos Removal	63,000
Burning Assistance Fee	88,450
Fire Lane Fee	166,945
Timber Marking Fee	16,775
Training Conf - Registr Fee	1,688
User Fee - State Park & Forest	70,773
Miscellaneous Fee - Field Trial	24,664
Construction of Water Bar	1,875
Stand By for Prescribed Burning	5,513
Sale of Seedlings	1,098,672
Sale of Timber	1,805,768
Rent - Residence	19,987
Rent - Farm Land	66,204
Rent - State Owned Property	63,529
Rent - Equipment	10,192
Contributions & Donations	703
Insurance Claims	40,501
Sale of Services	35,615
Sale of Materials & Supplies	387
Sale of Recycling Material	113
Commission-Vending Machines	742
Forest Product Assessment	654,386
Sale of Assets	2,312,485
Total Earmarked	\$6,665,840
Total Revenue	<u>\$27,487,030</u>

EXPENDITURES

State	17,891,969
Federal	2,831,597
Earmarked	4,694,116
Permanent Improvements	<u>2,337,135</u>
Total Expenditures	<u><u>\$27,754,817</u></u>

EXCESS OF REVENUE O/(U) EXPENDITURES (\$267,787)

INTERNAL AUDIT

The Internal Audit Department is an independent appraisal function that examines and evaluates the adequacy and effectiveness of Commission activities as a service to all levels of Management and the Commissioners. Emphasis is on auditing the agency's activities, processes, systems, and operations to ascertain efficiency in quality services.

The following audits were completed this fiscal year: Purchasing Card Program and South Carolina Forestry Commission Travel. These two audits were initiated last fiscal year but were not completed at fiscal year-end. Two additional audits were performed as follows: Process of Handling Seedling Orders and Payroll Summaries and Employee Activity Reports. A follow-up audit was performed of the Recreational Activities on Manchester State Forest.

Other activities include: a review of the Voluntary Retirement Incentive Plan and the Voluntary Separation Plan, physical inventories of shop supplies in all relevant locations, physical inventories of fixed assets, analysis of customer satisfaction surveys for Nursery and Tree Improvement, assistance with Wood Magic at Harbison State Forest and Camp Daniels, participation in Career Day at a local elementary school.

The Internal Audit Department was also aware and involved where applicable in reviews performed by external sources. The Internal Auditor attended reviews performed by State Fleet Management at the Spartanburg and Florence Shops.

In addition, memorandums were prepared and submitted to Management noting various issues that warranted attention.

The Internal Auditor has obtained adequate training to maintain compliance with the continuing education requirements of the Government Auditing Standards.

During Fiscal Year 2001-2002, the Internal Auditor also became certified as a Grants Specialist. She has been charged with the responsibility of seeking opportunities of additional revenue for the Commission. Input received from our personnel regarding their needs will be the target areas explored.

Records Management

The Internal Audit Department oversees the Records Management System for the Commission. The Internal Auditor serves as Records Officer. We have Record Liaison Officers selected based on the organizational structure of the Commission. The Records Officer is responsible for training the Record Liaison Officers. Such training is performed periodically to ensure consistency and continuity. In addition, the Record Liaison Officers are kept abreast of other training opportunities available. During Fiscal Year 2001-2002, three electronic records management workshops were held in the regional offices for the Record Liaison Officers.

The South Carolina Department of Archives and History has recognized our efforts in Records Management. During Fiscal Year 2001-2002, the Coastal Region received the Award of Achievement. The "Award of Achievement" signifies substantial achievement in records management.

During Fiscal Year 2001-2002, a total of 65 cubic feet of official records were destroyed in accordance with the retention schedules approved by the South Carolina Department of Archives and History. This total does not include the destruction of copies. In addition, a minimal amount of records were transferred to the South Carolina Department of Archives and History for possible retention.

ECONOMIC AND RURAL DEVELOPMENT

Forest and wood product business development and recruiting as well as rural development assistance is a component of the Forestry Commission's mission. The goal is to maximize the benefits to the state from the forest resource base.

BUSINESS DEVELOPMENT

3 new wood products businesses announced with new investment of \$2.2 million and creation of 54 new jobs.

49 business recruiting contacts were maintained, with 23 contacts initiated this year.

59 business assists or requests for information were provided.

Business promotion activities included a South Carolina exhibit at the Association of Woodworking and Furniture Suppliers Show in Anaheim, CA.

Served on World Trade Center Advisory Board and participated in South Carolina District Export Council and Midland International Trade Association meetings.

RURAL DEVELOPMENT

Rural Development activities included participation in Governor's Rural Summit, and continuing to represent the Forestry Commission on the South Carolina Rural Development Council. Administered a program in conjunction with the US Forest Service to assist communities in reducing hazardous fuels by creating markets for small diameter trees. Administered Rural Community Assistance grant program, awarding one grant to Berkeley County.

INFORMATION OFFICER

The Information Officer is charged with generating news media coverage of SCFC activities and responding to inquiries from the news media.

During the year, the Information Officer wrote and distributed 110 press releases as well as four articles for specialty publications. Some releases were for statewide distribution; others covered specific local events and were released only to the appropriate local media. Field offices produced nine additional press releases.

The Information Officer provided 507 interviews to the news media. These were distributed as follows:

Television stations:	246
Daily newspapers:	167
Radio stations:	55
Weekly newspapers:	25
Wire services:	7
Other:	7

The Information Officer arranged 66 media interviews with other SCFC personnel and made 16 media referrals to outside agencies. Field personnel and Columbia specialists provided many additional interviews to the media.

Newspaper exposures pertaining to SCFC activities were tracked by means of a clipping service. From clippings returned by the service, the following information was determined:

Number of articles mentioning SCFC:	1,261
Number of articles originating from SCFC releases:	693
Number of articles directly quoting SCFC personnel:	442
Number of SCFC personnel quoted:	68

TRAINING AND SAFETY

During fiscal year 2001-2002, the Training and Safety section continued to work to provide a well-trained and safe workforce. The Training portion of this section is charged with providing the training needed by SCFC employees to carry out their duties in a safe, efficient, and effective manner. There were 96 training sessions with 1144 employees attending during fiscal year 2001-2002 (some employees attended multiple sessions). These sessions are listed by major subject area below.

Category	Number of Sessions	Number of Employees Attending
Fire Management	29	386
Forest Management	17	255
Equipment Maintenance	10	119
Safety	18	149
Law Enforcement	11	168
Personnel Management	6	55
Administration	4	8
Information and Education	1	4
Total	96	1144

The Training section is also responsible for coordinating the agency's wildfire and Certified Prescribed Fire Manager training for non SCFC personnel. During the fiscal year, 26 training sessions for fire departments with 512 firemen attending and 3 Certified Prescribed Fire Manager training sessions with 90 people attending were held.

Other major accomplishments included: maintaining an active and working Training Council, working with the SC Fire Academy in developing a basic Wildland Fire fighting course for Fire Departments, and developing 6 SCFC Employee Training Guides. These training guides give both the supervisor and the employee a checklist of minimum required training, a time frame in which to complete the training, and the level of knowledge required by subject area.

The Safety portion of the section is responsible for insuring that all SCFC employees work in a safe environment, in a safe manner, and comply with safety regulations. During fiscal year 2001-2002 10 safety inspections were made at SCFC facilities by the SCFC Safety Coordinator. Safety violations were noted and corrected. Eight employees received Recertification as Red Cross First Aid Instructors.

During fiscal year 2001-2002, there were 43 personal injuries (many minor in nature) to SCFC personnel while on duty.

The SCFC Physical Fitness Program was implemented in September 2001. The Training and Safety section is charged with administering the program. Participation in the program is required for all fireline employees and for those that volunteer to assist with fireline duties. In 2001, 331 employees participated in the program. The program will be phased in over a 3 year period. The first goal is to walk 1 mile in 16 minutes, the second is to walk 2 miles in 30 minutes, the third is to walk 1 mile in 15 minutes while carrying a 25 pound pack, and the final goal is to walk 2 miles in 30 minutes while carrying a 25 pound pack.

INFORMATION AND EDUCATION

The Information and Education Department includes Creative Services, Environmental Education, Harbison State Forest, Piedmont Forestry Center, and Poe Creek State Forest.

CREATIVE SERVICES

Creative Services provides audio-visual and print materials for use by schools, Forestry Commission personnel and the public for both educational and training purposes. The department is the agency's contact for outreach activities related to state forests, forest landowner assistance, and fire prevention. Creative Services periodically compiles and publishes a newsletter, *Tree Country: SC*, and a weekly electronic news bulletin.

Internet Website

The Forestry Commission's website at <http://www.state.sc.us/forest> has been expanded and updated, since we went online in 1997, to include comprehensive forestry information and information about the Commission's services.

Categories for search include Fire/Outdoor Burning, Forest Recreation, Forest Management, Forest Products, SCFC Facts and Facilities, Environmental Education, Reference Resources, and a bulletin board. Entire publications are available online, such as the Best Management Practices (BMP) Guidelines for Forestry Practices in SC and its supplement on braided streams, SC Smoke Management Guidelines, and the Forest Fire Law Handbook.

The website is a research tool for students of forestry. It is a reference for users of our services, with complete lists of county forestry personnel, outdoor burning information and relevant phone numbers, grant application information, seedling and services prices, current seedling inventory, ordering information and forms, location and trail maps for the state forests, and trail user permit applications. It is a continually updated source for fire weather, current news and training events. And it provides convenient links to related online resources. During fiscal 2001-2002 the site was visited 467,999 times.

Projects Completed in FY 2001-2002

Web

- Wood Magic staff website

Planning

- Planned and facilitated monthly meetings of the SC State Forests Recreation Advisory Council. The Council was formed to draft statewide guidelines for recreational use of the state forests.
- Formed Forestry Commission Wildland-Urban Interface Education Team, to promote fire prevention in the urban interface.
- Designed SC Firewise logo

Outreach

- Planned and staffed forestry field day at Camp Kemo, Richland Memorial Hospital's weeklong camp for SC children with cancer.
- Served on local planning teams to provide SCFC speakers on the subject of timber theft and fraud and provided SCFC Services exhibits for SC Statewide Outreach Committee's programs in Anderson, Spartanburg, York, Sumter, Horry County, Charleston, and Voorhees College tri-county areas.
- Administered USFS grant to Penn Center for heirs-property legal handbook for SC.

Exhibits

- BMPs exhibit, Water Quality Project
- H. Cooper Black, Sand Hills State Forest with accompanying handouts

Exhibit Venues

- Friends of the Edisto River, annual meeting, Orangeburg, SC
- SC State Fair
- SC Science Council convention, Myrtle Beach
- Wildlife Expo, Charleston, SC
- Anderson Fairgrounds
- Spartanburg Technical College
- Sheraton Hotel, Charleston, tri-county outreach
- York, SC, tri-county outreach
- Voorhees College

Publications

- *Smoke Management Guidelines* revision.
- SC State Forests *Sketches*, publication #3
- Project Learning Tree presentation folders
- Harbison State Forest (reprint)
- Redesign and reprint of *Why Do Good Forest Managers Burn the Woods?*, prescribed fire brochure
- SC fire and timber theft laws brochure

Direct Mail

- Postcards to homeowners following fires in wildland-urban interface areas: Long Bay, Legends, Awendaw, Mt. Pleasant, Santee.

Posters

- Forests: America's Greatest Treasure
- Southern pine beetle

Articles

- Forest Inventory Analysis, first cycle findings, and results of Southern Forest Resource Analysis

Video

- Wildland Fire: Tools and Techniques

Photography

- Wood Magic Forest Fair: video and still photography
- Southern pine beetle aerials

Radio

- Produced timber theft and fraud radio spot and scheduled 6-week campaign starting in October 2001.
- Produced and scheduled sixty-second radio spots for targeted wildland-urban interface high-risk areas.

Special projects

- Provided 2 Fire Information Officers for incident command on Long Bay Fire and Legends Fire, Myrtle Beach, and assisted with wildland-urban interface awareness campaign planning and follow-up.
- Computer screensaver created to promote results of SCFC's first Forest Inventory Analysis results.
- Wood Magic CDs and presentations

ENVIRONMENTAL EDUCATION

It is the responsibility of the Environmental Education Coordinator to plan, develop, support, and coordinate the Forestry Commission's environmental education effort. The Coordinator oversees the development of Harbison State Forest's Environmental Education Center and serves as State Coordinator of Project Learning Tree (PLT),

which is an international environmental education program designed for students in pre-kindergarten through high school.

Last fiscal year SC PLT conducted 22 educator workshops throughout the state to train 434 teachers. One facilitator workshop is included in this figure, with 12 new facilitators trained to conduct PLT workshops. In addition, PLT participated in 15 exhibits and/or presentations at various functions across the state to reach approximately 3352 participants. South Carolina PLT also hosted the 2002 International PLT Coordinators Conference in Charleston in June. Approximately 130 participants representing 40 states and the District of Columbia, along with three foreign countries (Japan, the Philippines, and Mexico), attended this 4-day event.

The Coordinator represents the Commission on the Coalition for Natural Resource Education (CNRE), the environmental education committee of the Governors' Interagency Council on Natural Resources, and various other committees involved with environmental education throughout the state.

The Assistant Environmental Education Coordinator was instrumental in assisting the training and conducting of this year's Envirothon competition. The Envirothon is a program for high school students to learn more about our natural environment. Students' knowledge is tested on topics such as soils, water resources, forestry, wildlife, and current environmental issues. The Assistant Coordinator established contacts and training throughout the state, teaming our Commission employees and high school teams in their areas, along with conducting a training session for the teachers and coordinating the forestry part of the competition and test.

The Assistant Coordinator also coordinates the Wood Magic Forest Fair which was held at Harbison State Forest in Columbia, Sewee Visitor's Center in Charleston County and Camp Harry Daniels in Elloree. The program involved approximately 3533 students, teachers and adult chaperones. This successful educational program for fourth graders is being expanded to Clemson University in the fall of 2002.

The Forestry Commission was also a key partner in the SC Teachers' Tour Coalition, an association of forest industry representatives, state and federal agencies. This coalition conducted the SC Teachers' Tour in the Piedmont area in June of this year. This successful tour provided 34 teachers with a first-hand experience of the forest industry and forest management. Educators received training, resources and information to conduct lessons in sustainable forestry for their students. Twenty-six of the participants received non-degree graduate credit for their efforts.

The Forestry Commission continues to be a strong supporter of the Coalition for Natural Resources' environmental education efforts throughout the state. Foresters are trained to help conduct Teaching KATE (Kids About The Environment) environmental education lessons in forestry at Camp Long in Aiken County and Camp Cooper in Clarendon County.

Personnel in Coastal, Pee Dee and Piedmont Regions presented programs, mounted exhibits and gave talks on forestry and fire prevention subjects:

Subject	Number	Total Attendance
Forest Fire Prevention	363	20,100
Forestry/Forest management	299	5,607
Arbor Day	74	4,267
Project Learning Tree	12	402
Earth Day	4	2,527
Career Day	43	2,861
Envirothon	3	16
Scouts	22	739
RC&D Woodland Clinic	1	117
Lions Club	1	7
4-H	5	107
NRCS Youth Group	18	934

HARBISON ENVIRONMENTAL EDUCATION FOREST

Harbison Environmental Education Forest, located within the city limits of Columbia, contains 2,177 acres. The tract is being managed as a public greenspace to emphasize environmental and forestry education, demonstrate forest management practices, and serve as a forest recreational area. The forest is open seven days a week, with estimated annual attendance of 75,000 – 80,000.

Harbison's education staff and other SCFC employees associated with Harbison conducted 54 programs this past year, serving approximately 6262 participants. Twenty-nine programs were conducted at Harbison, with 2179 participants, and 25 programs were conducted outside of Harbison by the staff, serving approximately 4083 participants.

Harbison continues to offer support to the Scouting community. Twelve scouting programs were held for both Cub Scouts and Girl Scouts. Approximately 138 scouts and their leaders participated in these programs. Harbison also conducted one Boy Scout Forestry Merit Badge Program in which approximately 60 scouts earned their Forestry Merit Badges. Scouts. Other organized groups use the facilities at Harbison for camping and other activities. Seventy-one groups used the camping facilities for a total of 1094 campers.

They also give back to the Forest. Prospective Eagle Scouts completed 3 projects during the 2001-2002 fiscal year to fulfill their requirements. These scouts built and installed 2 bridges on the trail system at Harbison State Forest and built 10 trail benches. Cub Scouts helped maintain 10 waterbars on the Eagle Trail. In addition, 75 volunteers from a local church group carried out a variety of projects on a volunteer day organized by church leaders.

The Harbison Environmental Education Center is a 5000 square foot log building containing three offices, a small conference room, a screened porch, a deck and a 100-seat conference room. The conference rooms at the Center are offered free to groups or agencies conducting environmental education workshops or classes. Sixteen environmental education meetings with 567 participants were held at the center free of charge last fiscal year. The SCFC conducted 82 meetings and training for 1914 participants using the Education Center at no charge. Eighty-eight other groups or agencies used the facilities for a fee. The conference rooms were used a total of 186 times with 6798 participants. This generated an income of \$13,900.00*.

Harbison State Forest contains over 15 miles of roads and trails for bicycling, hiking, jogging and nature study. A permit system for recreational users requires bikers to pay a user's fee and promotes donations from other users. Harbison sold 978 bike permits for an income of \$19,020.00* and received \$398.18* in donations. Five special use permits were also issued for biking events on Harbison, which generated revenue of \$1000.00*. Both school groups and visitors, who may rent the facilities, used the Gazebo and Eagle Shelter frequently. Sixty groups used these facilities, with a total attendance of 3235. Among those were 41 paying groups, which generated an income of \$1730.00* and 19 educational groups that were not charged a fee.

The Middle Creek landing provides access to the Broad River for canoes and kayaks. One hundred-seventeen float plans were filed during 2001 – 2002 with the Education Center for approximately 467 participants.

Forest Management Activity

Three timber sales were conducted in 2001-2002, all three of which were negotiated sales associated with a severe southern pine beetle outbreak on the Forest. These sales removed 1,536 cords of pine pulpwood; 5,858 cords of chip-n-saw; and 1,335 Mbf of sawtimber for a total of \$326,783.54*.

*Note: Twenty-five percent of all revenue generated on Harbison State Forest is paid to Richland County for local school district use.

PIEDMONT FORESTRY CENTER AND POE CREEK STATE FOREST

As a result of ongoing and predicted state budget cuts, plans for construction of an environmental education facility at the Piedmont Forestry Center were put on hold. Improvements were completed to the onsite cabin, which can now be used as lodging for small groups using the facility for training or meetings. Plans are to begin construction improvements to the former packing shed and director's house in FY 2002-03.

The annual Fishing Rodeo for children was held in June in cooperation with the Department of Natural Resources and other agencies. The DNR and the Forestry Commission completed installation of structures in the Cheohee Creek, preparing it for stocking as trout fishing stream.

At the present time, the Forestry Commission has only one forest technician assigned to both the Piedmont Center and Poe Creek State Forest. He works closely with the State Lands Section Chief and Piedmont Region personnel on all forest management and fire suppression activities.

A bridge was constructed on Poe Creek to allow access to internal logging roads. The Piedmont BMP forester consulted on treatment of stream banks.

The Forest was heavily impacted by the southern pine beetle epidemic. Affected areas were marked; bids were solicited for timber sale.

South Carolina Forestry Commission

Organizational Chart

