

South Carolina Forestry Commission Annual Report

FY2015-2016



July 1, 2015 – June 30, 2016

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STATE COMMISSION OF FORESTRY

Members of the Commission

Dr. Walter McPhail, Maudlin, Chair

James B. Thompson, Greenwood, Vice Chair

Dr. A.G. “Skeet” Burris, Varnville

Sam R. Coker, Gilbert

H. Stro Morrison III, Estill

G. Edward Muckenfuss, Summerville

Jesse Neville, Walhalla

Mitchell S. Scott, Allendale

Dr. George Askew, representative for Dr. James P. Clements, Clemson University

Administration

Henry E. (Gene) Kodama, State Forester

Tom Patton, Deputy State Forester

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.

FOREST PROTECTION

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

FIRE MANAGEMENT

The South Carolina Forestry Commission (SCFC) is responsible for protecting 13,657,033 acres of forestland in South Carolina from wildfire. This total area protected is based on the 2001 Forest Inventory Analysis data with 10% added to cover adjacent non-forest land. This figure includes 101,320 acres of federal land protected under special contract, which includes such lands as the Carolina Sandhills National Wildlife Refuge and the Corps of Engineers land around such lakes as Lake Thurmond, Hartwell, and Russell. Also included is forestland protected by Mutual Aid, which is approximately 824,801 acres of additional federal land that includes lands such as the Francis Marion and Sumter National Forests, National Park lands, and lands owned by US Fish and Wildlife Service.

Wildfire Summary

Agency firefighters recorded 989 wildfires that burned 5,446 acres of forestland and grassland during the fiscal year. The number of fires and acres burned were lower than the five-year average- this was the lowest number of fires on record since 1947.

In FY2015-2016 wildfires destroyed 6 homes and damaged 9 others. In addition, 28 other buildings were destroyed and 7 buildings were damaged. Agency firefighters saved 141 structures that were directly threatened by wildfires.

Fire Protection Cooperatives

The Forestry Commission has cooperative arrangements with 12 fire and emergency management entities. Activities for each cooperative agreement during FY2015-2016 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 of the Southeastern States Forest Fire Compact include: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and West Virginia. During this fiscal year, no SCFC resources were mobilized under the Compact.

SC Emergency Management Division: SCFC personnel, including incident management teams, participated in several emergency response training sessions involving hurricanes, earthquakes, weapons of mass destruction, dam failures, and nuclear disasters. This year a wildfire response seminar was held with SCEMD, and agency response and contingency plans were evaluated and updated. The SCFC also provided staffing at the State Emergency Operation Center and saw crews in response to the historic floods in October 2015.

SC Army National Guard: Under an agreement with the SC National Guard (SCNG), 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. Guard helicopters are also available to transport firefighters into rough or inaccessible terrain. Joint training and coordination meetings between the SCNG and the SCFC are held annually to ensure mission readiness.

Volunteer Fire Assistance Program: Pass through funds from the National Fire Plan, Volunteer Fire Assistance funds through the USDA Forest Service were distributed as follows:

- National Fire Plan grant funds are for firefighting needs: 111 Fire Departments requested \$337,154 worth of firefighting equipment of which 95 fire departments were funded for \$303,419.

Federal Excess Personal Property program (FEPP) and the Firefighters Program (FFP): The amount of equipment available for screening is limited but with the SCFC enrolled in both programs, we continue to screen items that fire departments have requested. The total value of inventoried federal excess property (including both FEPP and FFP) now stands at around \$19.5 million for 855 items, most of which are on loan to Volunteer Fire Departments. In an effort to improve the program and bring all departments into compliance, SCFC field personnel and the FEPP program manager encouraged fire departments to turn in any equipment that was not being properly maintained or actively in operation. FEPP inventory training was conducted at each of the 3 regional offices as well as the Columbia Office.

National Weather Service: NWS provides daily fire weather forecasts and atmospheric dispersion information. During the year, SCFC and NWS work to improve content of daily weather forecasts. The SCFC did not request any spot weather forecasts from the NWS during this fiscal year.

USDA Forest Service: A mutual aid agreement between the US Forest Service (USFS) 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 and Sumter National Forests during the fire season, and SCFC investigators assisted with wildfire investigation.

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. This year the SCFC responded to one fire on lands owned by the Corps of Engineers.

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 National Park Service: Agreements were maintained to provide initial attack wildfire suppression on National Park Service lands; no reportable activity occurred during this fiscal year.

Wildland Fire Protection Partnership: Organized in 1991, the Partnership seeks solutions to wildfire management problems in the wildland-urban interface. Membership includes the SCFC, USFS, SC Firemen's Association, Department of Health and Environmental Control, SC Emergency Management Division (SCEMD), SC Fire Marshal, SC Fire Academy, and SC Forestry Association (ex officio).

Prescribed Fire Council: Organized in 2003, the goal of the Prescribed Fire Council is to increase the amount of prescribed burning in SC. The Council is working on increasing the capacity to get burning done in SC and in educating the public on the benefits of burning. The SCFC is a charter member and active participant in the council.

Homeland Security: Through a grant from the Department of Homeland Security (DHS) and the South Carolina Law Enforcement Division (SLED), the SCFC continued to train incident management teams (IMT) to improve the effectiveness of response to large incidents. SCFC IMTs were staffed, training was conducted for individual team members and teams, and team members participated in training assignments to complete task books to validate their training. Grant funds continued to support an Incident Management Team (IMT) Coordinator position to facilitate the development of nationally-qualified IMTs from within the SCFC and to ensure consistency among three multi-disciplinary (non-SCFC) Type 3 IMTs located in each region of the State. The IMT cooperated with the US Army for an exercise of the National Disaster Medical System, worked with the SC Firefighters Association to manage the Fire Rescue Conference at Myrtle Beach and worked with DHEC to manage the Nuclear Plant Failure Exercise in Florence. The SCFC IMT also managed the three Wood Magic Events. When the Joaquin Flood occurred in October of 2015 the SCFC IMT was asked to manage the search and rescue for Richland County.

Fire Weather

Weather Stations: The SCFC, USFS, USDI National Park Service, Department of Defense (Ft. Jackson), and USDI Fish and Wildlife Service share a network of 17 Automated Weather Stations across the state. Data from these stations is 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: FY2015-2016* (GHCN-D 5km Data)		
Month	Precipitation	Departure from Normal**
July, 2015	3.47	-1.47
August	5.71	0.44
September	4.35	0.08
October	12.17	8.76
November	7.24	4.04
December	6.70	3.31
January, 2016	2.93	-0.87
February	4.78	1.32
March	2.26	-1.82
April	2.48	-0.59
May	5.60	2.43
June	3.64	-1.08
Total	61.33	14.37
*Source: National Climate Data Center		

Precipitation Last 5 Years* (GHCN-D 5km Data)		
Fiscal Year	Precipitation (inches)	Departure from Normal**
2011-12	39.98	-7.13
2012-13	51.26	4.52
2013-14	50.83	4.10
2014-15	45.61	-1.06
2015-16	61.33	14.37
*Source: National Climate 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 readiness levels for each of the three regions for FY2015-2016 are as follows:

Readiness Levels by Region			
Region	Coastal	Pee Dee	Piedmont
Readiness 1 (No wildfire danger)	1 days	0 days	0 days
Readiness 2 (Low wildfire danger)	306 days	189 days	233 days
Readiness 3 (Moderate wildfire danger)	59 days	176 days	131 days
Readiness 4 (High wildfire danger)	0 days	1 days	2 days
Readiness 5 (Extreme wildfire danger)	0 days	0 days	0 days

Burning Ban and Red Flag Fire Alert: No Red Flags were issued by the Forestry Commission during this fiscal year.

Dispatch and Air Operations

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

Aviation – During the year, SCFC pilots flew 12 different Federal Excess Property aircraft for a total of 400 missions for 883 hours. Reduced aviation budgets have curtailed aerial detection flights and have limited flights to moderate to high fire danger days when aircraft are needed for wildfire suppression, evacuation, or other emergency response assistance.

During the year, SCFC pilots flew a total of 883 hours (Coastal- 231 hours, Pee Dee-163 hours, Piedmont- 410 hours, Columbia- 79 hours).

Prescribed Fire

Certified Prescribed Fire Manager Program: Four Certified Prescribed Fire Manager Programs were conducted during the year with 125 participants. This course focuses of planning prescribed burns to comply with mandated air quality standards.

Prescribed Burning for Forestry, Wildlife, and Agriculture FY2015-2016								
	Forest Understory		Forestry Site Prep		Wildlife		Agriculture	
REGION	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Coastal	1,704	154,811.0	1,380	12,467.5	1,060	89,265.6	941	15,238.1
Pee Dee	873	47,892.9	923	4,331.9	541	40,948.2	790	14,280.3
Piedmont	672	97,801.7	1,172	3,359.8	151	7,229.1	367	3,373.7
State Total	3,249	300,505.6	3,475	20,159.2	1,752	137,442.9	2,098	32,892.0

Total Forestry, Wildlife & Agriculture Burns: 10,574 for 490,999.7 acres

Fire Prevention Information

Wildland-Urban Interface (WUI): Work continued on assessing wildland-urban interface communities' risks to wildfire throughout the state. Primary areas of concern involve communities in Horry, Georgetown and Charleston Counties with increased interest in Oconee, Spartanburg, York and Chester Counties. The communities within the Keowee Fire District of Oconee County continue to thrive with Keowee Key leading the way. The goal of the Firewise program is to increase the awareness of homeowners to their responsibility in helping to reduce the risk of their homes from burning in a wildland fire. This is accomplished by conducting Firewise workshops such as 'How to Have a Firewise Home.' This year, 24 Firewise presentations, community and homeowner workshops with 5961 in attendance were made at various venues, including community events, fire department open houses, safety expos and the SC Firefighters Association annual meeting. Presentations included information about Firewise and the Ready, Set, Go! Program. Efforts have primarily been concentrated in Oconee County, Charleston County and in Horry/Georgetown Counties where interest has been greatest. The Firewise mobile exhibit (and the Firewise Table Top exhibit) was used 8 times by SCFC, US Park Service and USFS personnel during the year to reach over 9,650 people at such places as fire department open houses, safety days, community festivals and events, and community chipping days demonstrating how homeowners can mitigate those risks to wildfire. Fuels mitigation plans, workdays and assessments were conducted throughout the state. The SCFC has conducted a total of 1268 community assessments to date with 1,211 of those rating at moderate to extreme with regard to wildfire risk. 72 new assessments were completed covering 72 communities. Community Wildfire Protection Plans (CWPPs) were written for 10 communities with a few at the fire department's request to address their entire coverage area. To date 209 CWPPs have been written in which 706 communities have benefitted.

Cooperative Firewise efforts are also occurring within communities around the Sumter and Francis Marion National Forests with USFS personnel. Community Wildfire Protection Plans are in progress for communities around USFS and USFWS land in Berkeley, Charleston, Jasper and Oconee Counties with USFS and US Fish and Wildlife personnel. The Nature Conservancy has also participated in the CWPP development.

National Fire Plan grant funds were awarded to 22 communities in the amount of \$144,460 for various projects including installation of a leaf disposal site, underbrushing of undeveloped lots and common areas such as entrance roads, and assistance with community chipping days to reduce the fuel buildups within their communities. Additional funds were used for fuels reduction and mitigation projects involving prescribed burning, underbrushing and fuel break installation on 28 tracts (4,011 acres) for \$57,872.

Wildfire Prevention: A statewide wildfire prevention awareness effort was made across the state prior to the spring 2016 wildfire season to promote safe debris burning; the number one cause of wildfires in the state. Field personnel visited

counties known to have high numbers of escaped debris burn. Also, these types of wildfires are also commonly found near communities putting them at risk (i.e. wildland urban interface). In cooperation with local fire departments and some Clemson Extension Agents, SCFC field personnel throughout the state distributed "Think Before You Burn" (TBYB) promotional materials to businesses and public buildings. The distribution of materials included TBYB brochures, various other items, i.e. cups, koozies, slap bracelets, pencils and magnets with the county 1-800 burn numbers. Burning notification magnets were placed on the store counters for customers to pick up so they would have the appropriate county outdoor burning notification phone number handy.

Interviews were conducted with local media to increase public awareness.

Fires by Cause				
Cause	Fires	Acres Burned	Average Acres per Fire	Percent of Total Fires FY2015-2016
Lightning	41	489.0	11.9	4.15%
Campfire	13	63.8	4.9	1.31%
Smoking	14	87.5	6.3	1.42%
Debris Burning	474	2,062.7	4.4	47.93%
Incendiary	161	1,413.3	8.8	16.28%
Equipment Use	61	285.9	4.7	6.17%
Railroad	14	141.0	10.1	1.42%
Children	44	153.7	3.5	4.45%
Miscellaneous	104	406.5	3.9	10.52%
Fireworks	8	12.2	1.5	0.81%
Power Line	30	291.5	9.7	3.03%
Structure	25	38.6	1.5	2.53%
Totals	989	5,445.7	5.5	100.00%

Five-Year Summary: All Fires					
Fiscal Year	Acres Protected	# Fires	Acres Burned	Avg. Acres/Fire	% Area Burned
2011-12	13,657,033	2,192	16,960.1	7.7	0.12%
2012-13	13,657,033	1,799	10,223.4	5.7	0.07%
2013-14	13,657,033	1,823	9,425.00	5.2	0.07%
2014-15	13,657,033	1,427	6,637.3	4.7	0.05%
2015-16	13,657,033	989	5,445.7	5.5	0.04%
Five Year Averages		1,646	9,738.3	5.7	0.07%

Total Burning Notifications by County - Fiscal Year 2016			
County	Acres Protected	Smoke Mgt. Notifications	Other Notifications
Abbeville County	248,551	73	2,373
Aiken County	524,743	523	18,096
Allendale County	199,005	330	803
Anderson County	216,023	209	13,356
Bamberg County	202,862	287	1,602
Barnwell County	266,959	340	3,311
Beaufort County	130,448	221	7,495
Berkeley County	595,291	548	15,399
Calhoun County	151,294	229	3,132
Charleston County	318,526	213	6,476
Cherokee County	168,077	105	3,111
Chester County	315,565	87	2,733
Chesterfield County	416,239	299	6,168
Clarendon County	238,952	291	4,631
Colleton County	560,896	654	10,881
Darlington County	176,333	129	9,584
Dillon County	163,935	84	2,517
Dorchester County	272,524	218	8,214
Edgefield County	279,433	202	2,449
Fairfield County	408,433	135	2,351
Florence County	308,707	185	10,362
Georgetown County	400,136	316	7,975
Greenville County	296,082	58	11,957
Greenwood County	205,593	75	3,345
Hampton County	303,663	468	2,568
Horry County	493,012	250	17,431
Jasper County	341,036	522	2,890
Kershaw County	376,376	247	13,197
Lancaster County	291,845	138	4,313
Laurens County	337,499	57	4,611
Lee County	121,735	232	1,339
Lexington County	256,939	360	28,925
Marion County	226,896	73	5,253
Marlboro County	226,676	103	3,322
McCormick County	223,394	108	863
Newberry County	334,566	135	3,270
Oconee County	292,590	64	10,628
Orangeburg County	446,887	532	11,999
Pickens County	236,029	72	10,214
Richland County	352,904	203	6,642
Saluda County	196,376	134	1,694
Spartanburg County	286,496	100	8,053
Sumter County	268,338	211	10,890
Union County	277,640	52	348
Williamsburg County	407,761	569	6,454
York County	293,768	133	9,644
Total	13,657,033	10,574	322,869
Total Smoke Mgt. & Other Notifications			333,443

Total All Land Fires by County & Cause -- Fiscal Year 2016

COUNTY	LIGHTNING		CAMPERE		SMOKING		DEBRIS BURNING		INCENDIARY		EQUIPMENT		RAILROAD		CHILDREN		MISC		FIREWORKS		POWER LINE		STRUCTURE		Total	Total		
	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres		
ABBEVILLE	1	0.1					7	9.8	5	8.3	3	6.0	1	4.0			3	8.0			2	0.4			22	36.6		
AIRKEN	4	50.0					40	198.4	8	51.8	9	21.9			6	37.0	5	15.1			2	3.0	3	2.5	77	379.7		
ALLENDALE	1	1.0	1	0.5			3	19.0									5	15.1			2	3.0			5	20.5		
ANDERSON	2	62.0	2	6.0			11	28.3	1	3.2	1	0.1			2	2.0	3	1.8	1	0.5					6	105.2		
BAMBERG	1	0.1			1	11.0	2	15.0	2	7.0																35.1		
BARNEVELL							9	142.0	2	22.0	1	2.0											3	201.7	15	367.7		
BEAUFORT	2	24.0			1	2.0	5	32.0	2	5.2	2	7.0			4	9.0	1	25.0					4	2.0	7	614.4		
BERKELEY							32	166.1	20	378.8	2	1.2														18	12.2	
CALHOUN							13	10.9			4												1	0.1			134.8	
CHARLESTON	2	76.0					2	7.8	2	51.0																6	52.4	
CHESTER	1	90.4			1	2.0	8	29.6	2	2.0	3	3.0			2	2.5	2	2.5					3	10.6	22	22		
CHESTERFIELD	2	47.0					5	8.2			1	0.2	6	17.0												14	116.0	
CLARENDO							18	53.8	4	57.0	2	0.3			2	4.3	3	51.8								32	214.4	
COLLETON	1	8.0			1	1.0	19	135.2	6	24.0							4	10.1					2	2.0			32	170.3
DARLINGTON	2	5.5	1	14.5			23	156.2	7	57.1	3	89.5			2	5.2	1	0.5	1	3.0			2	21.0			41	343.5
DILLON	1	0.1					13	18.3	2	2.0	1	3.0			2	8.1	5	32.5									27	84.0
DORCHESTER	1	5.0					6	9.4	2	15.1							3	10.2									13	35.1
EDGEFIELD							11	79.8	9	61.1					1	1.0											23	147.9
FAIRFIELD	3	58.0	1	6.5			1	2.0	2	14.0	1	1.0															4	17.0
FLORENCE	2	5.1					8	23.2	8	19.8	1	0.5			1	4.0	5	29.0					2	1.2	2	2.4	23	121.3
GEORGETOWN							10	11.3	8	19.8	2	11.0			1	0.5	3	10.3					1	13.0			27	74.5
GREENVILLE	1	1.0	2	5.8			15	91.1	4	110.0	1	2.0			2	23.0	2	4.2					1	0.3	1	0.5	26	231.1
GREENWOOD							6	10.5	1	0.5	3	37.3			1	1.0											15	58.1
HAMPTON					1	2.0	3	3.8	4	21.1	1	1.0					1	1.3									5	5.9
HORRY	1	1.0					6	6.5	4	139.2	1	1.0			1	4.0	4	9.7	1	0.8	1	0.3					13	31.6
JASPER							5	7.6	1	19.2	2	9.0															28	170.6
KERSHAW	1	0.2					21	322.8	1	5.0																	24	336.8
LANCASTER	1	0.2			1	0.2	18	95.1	4	21.6			2	75.0		8.0	3.4										29	195.3
LAURENS							5	2.5	1	0.5	1	0.1	1	0.5	2	7.1	2	3.5	1	0.4							12	7.7
LEE	2	5.0					7	21.4	3	10.5	1	0.3					1	1.5									15	47.8
LEXINGTON	2	1.8	1	25.0			15	45.3	5	4.1							2	0.6	1	3.0							25	58.0
MARION							12	25.3	1	0.1					1	26.5	8	27.0					1	0.5	2	13.1	34	156.8
MARLBORO							5	47.0	1	3.0	1	8.0			2.0		1	8.0									9	68.0
MCCORMICK	1	2.0					9	17.6	1	2.0	4	3.7					10	41.8	1	2.0							26	69.1
NEWBERRY							3	8.5									2	4.0					1	8.0			7	22.5
OCONEE	2	6.5	2	2.3			3	2.8	1	2.0					4	3.1	4	31.0									9	36.8
ORANGETBURG							5	8.6	2	1.3					1	2.0	6	14.7	1	0.5	1	3.5	1	0.2			19	35.1
PICKENS	2		6	66.1			36	66.9	2	5.0	1	4.0			1	1.0	1	9.0									51	160.2
RICHLAND	1	2.0					2	1.3	2	1.5					1	0.5	1	0.7									7	6.0
SALUDA	1	15.0					2	8.5	2	0.3							5	2.5									11	13.8
SPARTANBURG							2	1.2			2	0.2					2	16.0									7	32.4
SUMTER	1	4.0					4	4.2	3	9.0	1	1.0			3	3.5	3	3.1					1	20.0	1	1.0	13	38.3
UNION	2	15.2			1	0.2	16	42.0	4	2.2		0.2			2	3.5	2	1.9					1	1.0			27	55.1
WILLAMSBURG	1	5.0					23	62.1	19	288.8	5	70.1					2	0.5					2				7	20.3
YORK							4	3.8	2	7.0							2	23.8					2	13.0			52	462.8
State Total	41	489.0	13	63.8	14	87.5	475	2,062.9	159	1,412.6	61	285.9	14	141.0	44	153.7	104	406.5	8	12.2	31	31	292.0	25	38.6	989	5,445.7	

Total All Land Fires by County & Month -- Fiscal Year 2016

COUNTY	2015												2016												Fiscal Year	
	July	August	September	October	November	December	January	February	March	April	May	June	Total	Total												
	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres								
ABBEVILLE	1	0.1	3	4.6	1	0.2	1	0.2	1	0.2	1	3.0	5	10.2	2	5.3	1	0.5	1	2.2	6	10.3	22	36.6		
AIKEN	10	62.5	5	7.0	5	6.7	1	1.0	1	1.0	1	0.5	9	54.1	18	123.5	9	59.1	8	36.0	9	16.3	77	379.7		
ALLENDALE																										
ANDERSON	2	4.0	1	1.0	1	0.2	1	0.5				0.1	1	1.3	4	18.5	3	74.5	4.3	0.8	8	74.5	26	105.2		
BAMBERG																										
BARNWELL	1	1.0	1	146.7								2.5	4	182.0	6	19.5					1	10.0	15	367.7		
BEAUFORT																										
BERKELEY	5	34.0	3	7.3								7.0	7	74.5	26	364.9	11	61.2	7	39.8	6	25.7	67	614.4		
CALHOUN	1	2.0	2	0.6	1	0.1			1	0.5		0.3	3	2.2	5	3.2	3	3.2	1	0.1			18	12.2		
CHARLESTON	2	76.0																								
CHESTER	2	1.0	2	23.0	2	4.0			1	2.0		2.1	1	0.5	4	14.0	3	1.7	2	2.0	3	2.1	6	52.4		
CHESTERFIELD	3	105.4	3	2.0	2	1.0						3.1	3	4.8	9	77.0	4	7.2	1	0.2			14	116.0		
CLARENDO	2	45.3	2	17.2	2	3.0						2.0	1	5.0	8	81.3	2	6.5	1	1.0	6	56.7	32	214.4		
COLLETON	10	70.2	3	2.6	1	0.3			1	0.2		2.0	1	4.10	10	22.5	8	106.8	5	7.0	3	1.9	3	170.3		
DARLINGTON	5	58.5	2	85.2	1	20.0			1	0.5		0.1	5	2.60	3	0.3	5	6.1	2	1.1			41	343.5		
DILLON	3	10.5	5	2.4	5	36.0	1	0.1				1.5	2	26.0	6	11.4	2	5.1	2				27	84.0		
DORCHESTER	2	3.3			1	0.2						15.0	1										1	0.1	13	35.1
EDGEFIELD	7	58.6	2	3.5																						
EDGEFIELD	1	3.0																								
FAIRFIELD	5	57.5	3	10.0			1	1.5																		
FLORENCE	4	4.1	5	16.4	3	10.4																				
GEORGETOWN	2	0.7	1	0.1																						
GREENVILLE	4	2.4	1	0.5																						
GREENWOOD	1	1.3																								
HAMPTON	3	3.5					1	2.0																		
HORRY	10	38.2	4	14.6					1	4.0																
JASPER	5	17.0																								
KERSHAW	2	25.1	3	7.5	3	25.7	1	0.8				2.0	5	19.5	12	292.2	5	9.6	2	1.5			29	193.3		
LANCASTER	1	0.2	1	0.5	1	0.5						0.1	1	50.0	11	73.0	3	0.6	1	0.5	1	0.3	12	7.7		
LAURENS	3	8.7	3	11.1																						
LEE	5	11.6	2	2.7	3	2.1																				
LEXINGTON	5	41.8	4	12.5			2	2.0																		
MARION	2	15.0	3	37.0																						
MARLBORO	3	4.7	6	27.7	4	10.4	1	0.5																		
MCCORMICK	2	5.0																								
NEWBERY	2	2.0																								
OCONEE	13	25.6	8	17.3	1	2.5	1	0.2	1	0.2																
ORANGEBURG																										
PICKENS	2	0.7			1	0.5																				
RICHLAND																										
SALUDA	3	15.2	1	1.1																						
SPARTANBURG	1	0.1			1	20.0																				
SUMTER	9	30.3	5	12.5	2	1.8																				
UNION	4	15.6																								
WILLIAMSBURG	5	68.1	3	28.5	1	0.1																				
YORK																										
State Total	153	929.8	87	503.1	44	147.2	10	8.6	5	18.7	8	3.7	26	48.7	84	748.3	276	##	137	527.1	71	285.6	88	416.3	989	5445.7

FOREST HEALTH

The Forest Health Program, in cooperation with the state Department of Plant Industry, and the US Forest Service (USFS), maintains a program to detect, evaluate, and suppress forest pests. Through cooperative agreements, these agencies make their technical assistance and advice available to the SC Forestry Commission (SCFC).

The current forest pest detection and reporting system involves the reporting by field foresters of forest pests that are causing abnormal losses, that 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 and Bark Beetles

In FY2015-2016, losses due to the Southern Pine Beetle (SPB) were minimal. During that time, aerial surveyors detected no signs of death attributable to SPB.

During the spring of 2016, pheromone traps were deployed in 32 counties to predict southern pine beetle population trends. No counties trapped enough beetles to predict a severe outbreak. Populations of SPB in 2016 were not as low as last year, which was the lowest on record. Aerial surveys were in progress at the end of the fiscal year and little beetle activity has been found statewide. Surveys will continue as needed. Due to prolonged periods at high temperatures, many pines were stressed and subsequently attacked by *Ips* beetles.

The SCFC continued to participate in the SPB Prevention and Restoration Program funded by the USFS. This program's objective is to prevent or reduce the potential damage by SPB. SCFC personnel make forest management recommendations known to minimize future beetle damage. These include thinning, prescribed burning, planting at low density, matching planted species to site, and other mitigation measures. This program is managed by a coordinator whose salary is funded by the program. In 2015 2,918 acres of pine planting at a reduced tree density was completed.

Emerald Ash Borer

Although this exotic beetle has not yet been detected in South Carolina, it is likely soon to be. Last year it was found to be so widespread in North Carolina that quarantine has been imposed on wood from that state. Emerald ash borer is found in Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New York, North Carolina, Ohio, Ontario, Pennsylvania, Tennessee, Quebec, Virginia, West Virginia, Wisconsin and Georgia. The US Forest Service employed a private contractor to monitor for emerald ash borer throughout SC, and the Animal Plant Health Inspection Service (APHIS) has placed traps as well. So far, emerald ash borer has not been detected. We continue to monitor stressed, dying, or dead ash trees in South Carolina brought to our attention by the public.

Walnut Twig Borer/Thousand Canker Disease

Currently this beetle and the fungus it vectors has not been detected in South Carolina. On the east coast, they have been found in Tennessee, North Carolina, Virginia, Ohio, and Pennsylvania. Clemson's Cooperative Agricultural Pest Survey (CAPS) has placed early detection traps in 12 counties and have not detected the walnut twig beetle.

European (*Sirex noctilio*) Woodwasp

This woodwasp is currently found in several counties in New York, Pennsylvania, Michigan, Connecticut, Ohio and Vermont. The spread of the European woodwasp has been slow in these regions, but movement of firewood and other solid wood could bring this insect to the southeast sooner than expected. In 2008 and 2009, the SCFC Insect and Disease section and several other southeastern state forest agencies cooperated in a region-wide early detection trapping of the European woodwasp. This invasive species has not been found outside the above-mentioned states. Trapping has been discontinued but Southern State Forest agencies have developed recommendations in an action plan in the event it arrives in the southeast.

Redbay Ambrosia Beetle/ Laurel Wilt Disease

In November 2004, an exotic ambrosia beetle, *Xyleborus glabratus* Eichhoff, was discovered in a dead redbay tree on Hilton Head Island. The beetle attacks redbay trees and introduces a fungus (*Raffaelea lauricola*) into the tree. Since the discovery of *X. glabratus* in 2004, the beetle and its associated fungus have been found in sixteen (16) South Carolina counties: Jasper, Beaufort, Hampton, Colleton, Charleston, Bamberg, Barnwell, Allendale, Dorchester, Orangeburg, Horry, Georgetown, Berkeley, Lexington, Aiken and Sumter. Laurel wilt continues to expand into new counties and this year it was detected in Williamsburg County. The beetle and fungus have also been found in Georgia, Florida, Mississippi, and Alabama. Unfortunately, in the areas where the beetle has been found, there is a large loss of redbay (up to 90% in some locations). There is a concern that once the fungus has become established, native ambrosia beetles in the genus *Xyleborus* may transmit it to other hosts. However, so far it has only had an impact on redbay populations in South Carolina; decline of sassafras and other potential hosts in the Lauraceae has not been widespread in South Carolina.

Major Disease Problems

Oak Wilt

Oak wilt disease has been identified in Aiken, Barnwell, Chesterfield, Kershaw, Lancaster, Lee, Lexington, Richland, and Darlington counties. This 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, surveys and on-call evaluations are made to evaluate the spread.

Dutch Elm Disease

Dutch Elm disease has been confirmed in the past 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 that occurs statewide. This disease has not been detected in South Carolina for many years and may be on the decline due to loss of susceptible cultivars and planting of resistant hosts.

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. Dogwoods in those counties will be monitored periodically to determine the rate of spread of this potentially devastating disease.

Sudden Oak Death (caused by *Phytophthora ramorum*)

Sudden oak death is a disease caused by an oomycete in the genus *Phytophthora*. It is presently known to occur only on the West Coast in the United States. This disease kills oaks and causes leaf spots on many other plant species. Testing of eastern species of oaks in California has shown that they could be susceptible to this disease if the disease were to occur in the eastern United States. Unfortunately, several nursery plants infected with *Phytophthora ramorum* were shipped to South Carolina in 2004 from the area of known infestation. No local spread of the disease was detected and the infected nursery stock was destroyed.

As part of a Southeastern project, we are cooperating with Clemson University in a stream baiting survey to determine if the disease occurs in South Carolina. Stream baiting survey to detect the fungus that causes SOD continued in the spring of 2016. The pathogen has not been detected in SC since 2004.

Cogongrass

Cogongrass, a non-native federally regulated noxious weed, has been detected in 13 South Carolina counties: Anderson, Pickens, Greenville, York, Aiken, Allendale, Hampton, Beaufort, Colleton, Dorchester, Charleston, Williamsburg and Florence. Most infestations are small, comprising a total of less than 2 acres, and all acres have been treated by Clemson University Department of Plant Industry. Seven (7) counties (York, Charleston, Allendale, Hampton, Beaufort, Williamsburg, and Florence) have active cogongrass sites while the sites in the remaining six counties are considered inactive. All sites (both active and inactive) will continue to be monitored to detect re-sprouting in the future.

Miscellaneous Insect and Disease Checks

Commission foresters and Insect and Disease staff made approximately 50 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 2016, the Insect and Disease Laboratory processed 11 samples submitted by SCFC employees and private individuals. Recommendations for control of various pests identified were given where needed. In addition to these samples, 368 southern pine beetles and 2,978 clerids were counted in the lab.

Forest Health Surveys

The SCFC entered into agreement with the USFS to evaluate permanent Forest Health plots throughout South Carolina. This was done by the Resource Development 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.

EQUIPMENT

FY2015-2016 Equipment Purchases			
Act 271 and Capital Reserve	Unit Price	Delivery Date	Price
Eleven Plows	\$16,634	Delivered 4/16	\$182,974
Six Forester Trucks	\$30,588	Delivered 4/16	\$182,286
One Supervisor Truck	\$36,000	Delivered 4/16	\$28,768
TOTAL			\$394,028.00

Auction Budget	
John Deere MX6 Rotary Cutter (Piedmont Forestry Center)	\$2,889.56
F-450 Service Truck (Walterboro)	\$46,893.00
One F-250 Diesel Pickup (Central Repair Shop)	\$40,525.00
TOTAL	\$90,307.56

Act 271 and Supplemental (Ordered in FY2015-2016 but not delivered by 6/30/16)	Unit Price	Delivery Date	Price
Ten Dozers w/ Winch	\$158,352	Delivered 12/16	\$1,583,520
Two Dozers w/ Lift Plows	\$157,386	Delivered 12/16	\$314,772
Six Transports	\$91,168	Delivered 1/17	\$547,008
Seven Truck Tractors	\$99,498	Delivered 12/16	\$696,486
Six Truck Bodies	\$18,985	Delivered 12/16	\$113,910
TOTAL			\$3,255,696.00

The Forestry Commission prepared and organized equipment for auction. The auction process now takes place exclusively online at www.govdeals.com. The sale of equipment netted the Forestry Commission approximately \$103,227.75.

LAW ENFORCEMENT

During FY2015-2016 the Forestry Commission had 37 sworn Law Enforcement Officers statewide. Three of these were investigators that focused primarily on complex timber theft, timber fraud and woods arson cases.

Officers prosecuted 93 fire cases, 9 litter and environmental cases, 8 violations of state forest regulations, 2 pine straw theft cases, 14 miscellaneous cases and 9 game and fish cases. Total fines collected were \$22,654.50. Fines collected from these cases are retained in the county where the offense occurred.

Forestry Commission Law Enforcement Investigators investigated 118 timber theft/ fraud cases which represented a loss of \$504,452.90 to the victims. Investigators collected and returned 52% or \$263,271.88 to the affected landowners. Forestry Commission officers arrested two individuals for woods arson who were responsible for two fires. During the year there were 332 fire investigations conducted with 108 of them escaped debris burns. There were 61 Burn Site Inspections and 65 Smoke Management Investigations.

FOREST MANAGEMENT

There are 12.9 million acres of commercial forestland in South Carolina. According to 2013 National Woodlands Owner data (<http://www.fia.fs.fed.us/nwos/>) , 88% of South Carolina's forests are privately owned, 51% of private forests are family-owned, and 82% of these owners live on the land. Forest industry has sold much of their forestland during the last several years and now owns only 238,100 acres (1.8%), which is down 89% since 2000. Public agencies (municipal, county, and federal) control 12% of South Carolina's forests.

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, and urban & community forestry. 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. The urban & community forestry program strives to help local government, educational institutions and non-profit organizations develop and enhance the benefits provided by trees and greenspace where we live and work.

In addition to programs designed to assist private landowners and local communities, the Forest Management Section also coordinates development and management of over 90,000 acres of forestland included in the state forest system. These lands are owned by the Forestry Commission and provide forest based recreation opportunities and serve as examples of the benefits of active forest management. The State Lands Coordinator also assists other state agencies in the management of their forest resources.

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, 1,182 management plans were prepared for 78,686 acres. Beginning in July of 1999, customer satisfaction surveys were sent to every landowner that received a forestry management plan. In FY2015-2016, 98% of the landowners that responded to the survey indicated that they were satisfied with the management plan they received. Of these landowners, 93% 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 for assistance in carrying out management recommendations. This year 96 cases were referred to consulting foresters and 20 were referred 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. Beginning in 2001, the objectives of the Forest Renewal Program were expanded to include providing funds to help match federal grants that provide financial support for the Forest Inventory and Analysis (FIA) program. This practice was discontinued in 2015.

Conservation Reserve Program (CRP) - Federal

The Conservation Reserve Program (CRP) began with crop year 1986 and was renewed with the passage of the 2014 Farm Bill. This program provides technical and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. CRP reduces soil erosion, protects the Nation's ability to produce food and fiber, reduces sedimentation in streams and lakes, improves water quality, establishes wildlife habitat, and enhances forest and wetland resources. It

encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filter strips, or riparian buffers. CRP is administered by the USDA Farm Service Agency, with the SC Forestry Commission providing technical assistance for forestry practices.

Environmental Quality Incentives Program (EQIP) – Federal

The Environmental Quality Incentives Program (EQIP) was created by the 1996 Farm Bill. EQIP provides financial assistance to help plan and implement conservation practices that address natural resource concerns and help improve soil, water, plant, animal, air and related resources on agricultural land and non-industrial private forestland. An additional purpose of EQIP is to help landowners meet federal, state, tribal and local environmental regulations.

Southern Pine Beetle (SPB) – Federal

The SPB Prevention and Restoration Cost-Share Program (SPB Program) was created in 2006 for non-industrial private forest landowners. It seeks to mitigate future loss from SPB by managing pine density through prevention and restoration practices. These practices ensure that a pine stand will be of merchantable size before the stress of being overly dense develops. Receiving income and maintaining vigorous growth are usually enough incentives for landowners to thin merchantable sized pine stands and, in return, reduce the potential loss from SPB.

Statewide Accomplishments for All Cost-Share Programs 2015-2016 Reforestation and Timber Stand Improvement							
Program	Number of Landowners	Acres Planted	Prescribed Burning	TSI Acres	Commercial Thinning	Precommercial Thinning	Cost Share Payments
FRP	243	9,074	0	282	0	0	\$755,547
SPB	67	2,423	0	0	0	117	\$264,218
CRP	*	*	*	*	*	*	*
Totals	310	11,497	0	282	0	117	\$1,019,765

*data not available at time of publication

The SC Forestry Commission surveyed landowners who received cost-share assistance both at the beginning of the process and at the end. This survey indicated that 96% of customers were satisfied with the assistance they received initially and the follow-up survey indicated that 90% were satisfied with the assistance received at the end of the process.

SEEDLING SURVIVAL

Survival checks were made on 10 percent of plantings using a row count or tenth acre plot method for determining survival. An average of all survival checks was used to determine the statewide survival of 87% for loblolly pine plantings. Survival rates for longleaf pine plantings were tabulated separately. Plantings with longleaf seedlings had a survival rate of 79% when containerized stock was used. Due to a decline in the use of bare root longleaf stock no bare root longleaf plantings were sampled during FY2015-2016.

Forest Management Assistance, FY2015-2016						
	Non Cost-Share		Cost-Share		Forest Stewardship	
County	Exams	Acres	Exams	Acres	Plans	Acres
Abbeville	2	95.11	16	721	0	0
Aiken	4	135	15	585	6	1025
Allendale	2	45	7	225	1	148
Anderson	6	206	9	296	3	66
Bamberg	2	62	52	1642	0	0
Barnwell	0	0	42	5549	0	0
Beaufort	5	59	1	72	3	1109
Berkeley	8	607	13	673	2	825
Calhoun	0	0	13	504	0	0
Charleston	14	777	5	194	5	659
Cherokee	4	518	9	250	0	0
Chester	7	1685	5	248	2	243
Chesterfield	1	55	65	3011	0	0
Clarendon	3	243	32	865	3	336
Colleton	7	314	24	1183.5	3	141
Darlington	1	34	29	1119	3	537
Dillon	2	86	3	112	1	182
Dorchester	2	80	12	544	0	0
Edgefield	8	494	19	912	3	1721
Fairfield	6	362	6	342	2	110
Florence	8	295	41	1729	4	89
Georgetown	2	47	23	1399	0	0
Greenville	6	308	5	190	0	0
Greenwood	2	129.37	13	850	2	55
Hampton	4	222	25	1699	1	174
Horry	15	664	21	437	1	161
Jasper	5	497	13	2647	0	0
Kershaw	3	90	12	564	1	104
Lancaster	2	28	11	351	0	0
Laurens	4	85	17	1052.2	3	226
Lee	2	162	20	1085	0	0
Lexington	16	879	24	930	2	635
Marion	8	212	12	808	0	0
Marlboro	0	0	11	633	3	1356
McCormick	4	204	14	928	1	210
Newberry	8	931	40	2106	1	165
Oconee	1	29	6	342	0	0
Orangeburg	0	0	34	1477	2	360
Pickens	5	119	6	231	4	477
Richland	7	642	14	464	5	1026
Saluda	14	785	26	932	4	1255
Spartanburg	17	525	3	76	3	197
Sumter	2	206	11	388	2	1177
Union	5	613	15	953	3	1882
Williamsburg	9	952	54	2196	4	2295
York	4	190	9	475	5	1079
State Totals:	237	14,671	857	43,990	88	20,025

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 the past year, 91 Stewardship Plans were written in South Carolina on 20,994 acres. South Carolina Forestry Commission foresters authored 88 plans covering 20,025 acres. Private Forestry Consultants authored 3 plans covering 969 acres. Two landowners (comprising 117 acres) were recognized as Forest Stewards for FY2015-2016. In addition Forest Stewardship Staff completed FSP Implementation Monitoring conducting on the ground inspections on 26 Forest Stewardship Plans encompassing 5,682 acres. During FY2015-2016 it is estimated that 84.6% of all Forest Stewardship Plans are being implemented. In addition to adhering to the standard implementation monitoring protocol for FY2015-2016 the SCFC included additional evaluation of specific management outcomes that have resulted from the implementation of Forest Stewardship Plans. Results indicate that Forest Stewardship Plans are having a positive impact on specific management outcomes of interest in SC (see table below). In FY2015-2016 we also evaluated if the landowner being monitored was “highly engaged” at the time of monitoring. The Sustaining Family Forest Initiative (SFFI) classifies a landowner as “highly engaged” if they have reported doing several activities to protect and improve their woodlands. In SC the SFFI classifies that 8% of all family forest landowners owning 10+ acres are highly engaged. Results from Forest Stewardship Implementation Monitoring indicate that 31% of landowners with Forest Stewardship Plans are highly engaged. Thus landowners with Forest Stewardship Plans are significantly more likely to be engaged in the active management of their woodlands than the average landowner.

Forest Stewardship Monitoring Evaluation Results 2015-2016	
Management Outcome	Percent Implemented as Result of Plan
Timber Harvest	54
Tree Planting	23
Prescribed Burning	19
Wildfire Prevention Activity	35
Invasive Species Control	4
Wildlife Habitat Enhancement	62
Utilized Cost Share Assistance	19
Used Stewardship Plan to Qualify for Farm Bill Program	15
Used Forest Stewardship Plan to Qualify for Third Party Certification (Tree Farm, etc.)	0

Of the landowners who returned customer surveys during FY2015-2016, 97% of them indicated they were satisfied with the Forest Stewardship management plan they received and 100% of them indicated that they intended to complete most or all of the recommendations in their plan.

FORESTRY SERVICES

Through this program the SC Forestry 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 FY2015-2016:

Firebreak Plowing - performed by Forestry Commission employees using agency equipment for \$140 for the 1st hour and \$85 for each additional hour. In FY2006, separate rates were established for firebreaks constructed with a heavy tractor. For FY2015-2016, these rates were \$160 for the 1st hour and \$100 for each additional hour.

Prescribed Burning - performed by Forestry Commission employees using agency equipment for \$21 per acre for understory burns and \$30 per acre for site preparation burns and for understory burns in mountainous terrain. Firebreak plowing costs are not included. The minimum charge for this service was \$500 during FY2015-2016.

Prescribed Burning Standby - an agency tractor and employee on standby at burning site for \$80 for the 1st hour and \$30 for each additional hour while the landowner performs burning under an approved plan. The minimum charge for this service was \$110.

Equipment Rental Program – agency-owned tree planters and drum choppers made available to private landowners at rates of \$5 and \$20 per acre respectively. The minimum charges were \$25 and \$100.

Timber Marking - performed by Forestry Commission employees at the rate of \$10 per thousand board feet and \$5 per cord.

Forestry Services			
Service	Number of Tracts	Units of Measure	Receipts FY2015
Firebreak Plowing	228	539 miles	\$83,382.50
Prescribed Burning	89	8,035 acres	\$172,701.00
Prescribed Burning Standby	20	2,499 acres	\$6,653.00
Equipment Rental	1	5 acres	\$25.00
Water Bar Construction	2	32 bars	\$1,440.00
Timber Marking	0	-	\$0.00
Totals	340	-	\$264,201.50

The SC Forestry Commission sends customer surveys to all landowners who receive forestry services. In FY2015-2016, 97% of our customers reported they were satisfied with our forestry services and 96% of those responding indicated they plan to use our services again.

URBAN AND COMMUNITY FORESTRY

The Urban and Community Forestry program exists to provide technical, financial, and educational assistance to municipal and county governments and others for the purpose of creating, maintaining, and enhancing community forest conservation and management within their jurisdictions; to provide for, coordinate and/or conduct information, education and training regarding community forestry, wildland-urban interface issues, and arboricultural best management practices; and to provide grants to local governments, non-profit organizations, and educational institutions of higher learning to create, enhance and support long-term local and regional community forestry programs. This assistance is accomplished through a variety of ways: direct contact, diverse and cooperative partnerships, and the financial assistance grant program.

Expected results include, but are not limited to: improved air quality; energy conservation through reduced heat island effect in downtown areas; local government recognition and management of the community tree resource; sustained financial support on the local level for community tree management; more professional public tree managers to provide safe walkways, streets and parks; and more public trees planted and maintained to beautify, cool, and clean South Carolina communities. These results occur when a community or county government works toward accomplishing a natural resource inventory and management plan, employs professional urban forest staffing, adopts and implements natural resource policy, and works in partnership with local advocacy organizations.

Urban and Community Forestry Financial Assistance Program

The Community Forestry Financial Assistance and Partnership Program is a state program funded with federal-level monies appropriated each year by Congress. When available, these funds are funneled through the US Forest Service to the SC Forestry Commission to administer. SC received \$100,000.00 in federal funding this year as a special initiative to provide assistance to communities in the development of local green infrastructure asset maps and plans. Funding for 5 entities (1 council of government, 1 land trust, 1 city and 2 counties) was awarded through a competitive process based on the capability of the entity, efficient use of federal funding, and practicality of the project. The Urban and Community Forestry program also received \$20,000 in pass-through funds to Trees SC (urban and community forestry council) to assist with urban forestry and arboricultural training and continuing education for public tree managers and other professionals.

Tree City/Tree Line USA/Tree Campus

Sponsored on the national level by the Arbor Day Foundation and others, the Tree City USA program is administered in South Carolina by the SC Forestry Commission. This program seeks to stimulate and promote the management of community trees by recognizing towns and cities which meet the following criteria: (1) establishment of a municipal tree care ordinance, (2) expenditure of at least two dollars per capita on their community forestry program, (3) establishment of a legally constituted tree board or permanent staff to address tree issues, and (4) observance of Arbor Day by a mayoral proclamation and official ceremony. The SC Forestry Commission recognized and awarded 41 municipalities, 1 county, and 2 military bases under the Tree City USA program during FY2015-2016.

The Tree Line USA program, also sponsored by the National Arbor Day Foundation, seeks to stimulate and promote proper utility 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 16th consecutive year.

The Tree Campus USA program, sponsored by the National Arbor Day Foundation, encourages institutions of higher learning to promote proper management of campus trees. SC maintained 6 Tree Campus USA institutions in FY2015-2016.

Technical Assistance and Educational Program

Continued funding for a part-time Regional Urban Forester increases our program exposure and assistance to customers across the state of South Carolina. Through the direct technical assistance of the community forestry staff to municipalities, schools and partner organizations, the urban and community forestry program accomplished the following in FY2015-2016 (see next page):

Types of Technical Assistance	Program Accomplishments Community Forestry Staff	
	# of Entities	# of Assists
Program Development/Expansion		
Municipal Government	58	83
Non-profit/trade organizations	9	25
Educational Institutions	3	5
County Government	17	50
State Government	4	9
Others	16	27
TOTAL	107	199

Tree City USA	41
Tree Campus USA	6
Tree Line USA	1

Public Information/Education	Adults	Youth	Total
# Programs	28	1	29
# People	382	30	412
#Seat Hours	1,275	60	1,335

STATE FOREST / STATE LANDS

HARBISON STATE FOREST

Harbison State Forest (HSF), located approximately 9 miles from downtown Columbia, encompasses 2,176 acres. The Forest was purchased in 1951 and became the site of the agency headquarters in 1963. Following the adoption of a Master Plan in 1981, the Forest began to be developed as an Educational State Forest. Recreational use grew dramatically in the early 90's with Harbison soon gaining the reputation as a mountain biking mecca for the area.

Receipts for Operating Budget – FY2015-2016	
Activity	Receipts
Timber Sales	\$0.00
Conference Room Rentals	\$2,000.00
Trail Permits	\$63,803.50
Campsite Rentals	\$1,715.00
Trail Donations	\$630.41
Other	\$36.69
Total	\$68,185.50

Note: 25% of all receipts are paid to the Richland County School System. This amounted to \$15,950.88 for the fiscal year. (Donations and rental income are not included when calculating the total to be dispersed to the school system.)

Silvicultural Practices

Five prescribed burns were conducted during FY2015-2016 totaling 146 acres. No timber sales took place.

Forest Protection

No wildfires occurred during this fiscal year. Trees that were considered hazardous to forest visitors and/or to buildings were felled.

Recreation/Education

Several events were held on the trails at Harbison during the 2015-2016 fiscal year. The Friends of Harbison State Forest held their tenth annual "Take a Kid Mountain Biking" day. This event helped raise awareness of the sport to a younger generation and increased awareness of the state forest. HSF was also the site for seven races: one 5k, two 10k, one 12k, one 50k, two half marathon foot races, and two mountain biking races. HSF was the host site of the Blues, Berry, and BBQ Festival. This was the first event of its kind on Harbison.

In addition to these events, several trail work days were conducted during FY2015-2016. These events included improving the trails by pruning of overhanging branches and brush and the rehabilitation of wet areas and closed trails. Friends of Harbison State Forest (FoHSF) members have taken on more responsibility in the care of the trail system with reduced SCFC staffing. This group continues to meet on a monthly basis to plan events and promote the Forest. The mission of the Friends group is to "preserve and promote the recreational and educational aspects of this urban forest resource." Current membership of this group is estimated at 65 individuals.

Scouts and other organized groups continue to use the four primitive camping facilities at Harbison. Harbison's camping facilities were used by 53 groups this fiscal year for a total of 684 users.

The canoe landing at Harbison State Forest provides access to the Broad River. During the 2015-2016 fiscal year, 92 groups used this facility for a total of 213 paddlers.

Wildlife Management

Five wildlife viewing areas totaling 2 ½ acres are maintained each year.

Rare, Threatened, and Endangered Species Management

No threatened or endangered species have currently been found on Harbison State Forest.

Research

A graduate student at Winthrop University conducted a research project focused on frog biology.

MANCHESTER STATE FOREST

Manchester State Forest (MSF), located in Sumter County and Clarendon County, is currently comprised of 28,764 acres. From 1939 to 1955, MSF 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 – FY2015-2016	
Activity	Receipts
Timber Sales	\$810,081.53
Pine Straw Sales	\$ 69,875.00
Land Lease Payments	\$36,738.88
Wildlife Management Area	\$95,645.12
Trail and Special Use Permits	\$34,620.00
Year End Refund	\$1,974.97
Total	\$1,050,435.50

Note: 25% of all forest receipts are paid to Sumter and Clarendon County School Systems for a total of \$262,115.14. (Donations, prior year refunds, and rental income categories are not included when calculating the total to be dispersed to the school systems.)

Silvicultural Practices:

A total of 109 acres were prescribed burned for wildlife habitat enhancement, hazard reduction, hardwood control, aesthetic, and site preparation purposes. No final harvest cuts were conducted although 1,047 acres were sold for improvement cuts (thinning) and 761 acres were sold for pinestraw raking. Inventory data was collected on 603 plots which covered 1,355 acres on 64 different stands.

The following species and number of seedlings were planted:

	<u>Acres</u>	<u>Seedlings</u>
Containerized longleaf pine	232	126,440
Bareroot loblolly pine	37	23,014

Forest Protection:

No wildfires occurred this year. Personnel assisted regional personnel as well as local fire departments with several fires which were adjacent to the Forest as well as in and out of state assignments.

Recreation:

Recreational use continues to be heavy. Hunting, fishing, horseback riding, motorcycle/ATV riding, and use of the rifle/pistol range continue to be favorite activities. Mountain bike riding has all but ceased due to the increase of free mountain bike riding offered at Poinsett State Park which is managed by SCPRT.

Recreational permit sales consisted of 2,861 daily permits and 538 annual permits for a total of 3,399 permits. This does not include hunting or fishing users. Revenue from trail use permits totaled \$34,620.00

Four special use permits were issued for organized events.

1. Manchester Trail Riders Fall Ride on October 31, 2015; 128 riders
2. SERMA AMA East Hare Scramble Championship on January 30, 2016; 350 riders
3. SERMA 47th Annual Sumter National Enduro on February 7, 2016; 754 riders
4. Manchester Trail Riders Spring Ride on March 19, 2016; 102 riders

Education:

The MSF director is a member of Central Carolina Technical College's Natural Resource Management (NRM) Committee. The committee makes curriculum suggestions and works with school administration to improve the NRM program. Manchester also hosts some of the classes for field training labs (timber cruising, seedling planting density and survival, ecology, etc.)

Personnel participated in the Wood Magic Forest Fair.

Wildlife Management:

23,135 acres of MSF are presently included in the Wildlife Management Area Program through a cooperative agreement between the SC Department of Natural Resources (DNR), and the South Carolina Forestry Commission.

Four public dove fields consisting of 220 acres were planted in sunflowers, corn, and wheat. Six hundred forty acres are maintained as wildlife openings. MSF has a duck impoundment that consists of 297 acres.

Wildlife surveys are conducted in conjunction with DNR for fox squirrels, turkey, deer, quail, and other species.

Rare, Threatened, and Endangered Species Management:

Currently five clusters of red-cockaded woodpeckers are maintained. Colony sites continue to be monitored along with scouting for new cavity and start trees in cooperation with biologists from the neighboring Poinsett Weapons Range (US Air Force).

Research:

In coordination with the SCFC Nursery Section a number of sites are provided for clone banks, seed orchards, and progeny tests.

During this past year one research special use permit was issued for amphibian DNA sequencing and morphological analysis.

Infrastructure maintenance continued on approximately 106 miles of unimproved dirt roads on MSF including grading and mowing.

WEE TEE STATE FOREST

Wee Tee State Forest (WTSF), located on the Santee River in lower Williamsburg and Georgetown Counties, was acquired by the South Carolina Forestry Commission in November of 2003 through the partnership of eight participants. These partners included the South Carolina Forestry Commission, South Carolina Department of Natural Resources, The Conservation Fund, USDA Forest Service, Forest Legacy Program, US Fish and Wildlife Service, North American Wetlands Conservation Act Grant, Ducks Unlimited, National Wild Turkey Federation,

and Anheuser-Bush. Wee Tee contains 12,394 acres of which 770 acres is comprised of planted loblolly pine plantations and upland pine-hardwood types and the remaining 11,624 acres is comprised of bottomland hardwood types with the associated oxbow lakes and creeks. Being in the Santee River Focus Area of Ducks Unlimited's Lowcountry Initiative, it is a very significant, unfragmented bottomland hardwood forest. Its significance lies in its watershed and water supply protection, habitat for wildlife and a number of threatened and endangered species, and the opportunities it provides for recreation, forest practices demonstration, and education.

Receipts for Operating Budget FY2015-2016	
Activity	Receipts
Timber Sales	\$0.00
Wildlife Management Area	\$51,078.10
Total	\$51,078.10

Note: 25% of all forest receipts were paid to Williamsburg and Georgetown Counties for a total of \$12,769.53. (Donations, prior year refunds, and rental income categories are not included when calculating the total to be dispersed to the school systems.)

Silvicultural Practices:

No timber sales occurred this year. No prescribed burns were conducted this year.

Forest Protection:

Gates have been constructed and placed on all known entrances into WTFSF to control access for the protection of the property and infrastructure.

Recreation:

Hunting, fishing, canoeing, and kayaking continue to be the main recreational activities.

Wildlife Management:

All of WTFSF is included in the Wildlife Management Area Program through a cooperative agreement between the SC Department of Natural Resources, and the South Carolina Forestry Commission.

Research:

No research special use permits were issued.

SAND HILLS STATE FOREST

Sand Hills State Forest (SHSF) covers 46,838 acres with 45,338 acres in Chesterfield County; 1,000 acres in Darlington County; and 500 acres in Kershaw County. The Forest was operated under a use agreement with the federal government from 1939 until 1991. In July of 1991, title to SHSF was transferred to the South Carolina Forestry Commission.

Receipts for Operating Budget – FY2015-2016

Since 1967, SHSF has been totally self-supporting.

Receipts for Sand Hills Operating Budget	
Activity	FY2015-2016
Timber & Stump Sales	\$688,734.60
Pinestraw Sales	\$1,027,401.74
WMA Payment	\$38,396.92
Rent State Owned Property	\$4,698.75
Rent Farmland (CRP)	\$1,200.00
User Fees	\$4,476.00
Prior Year Refund	\$2,398.86
Donation	\$9.45
Total	\$1,767,316.32

Note: 25% of receipts were paid to Chesterfield, Darlington and Kershaw County School Systems. Donations, prior year refunds, and rental income categories are not included when calculating the total to be dispersed to the school systems.

County Payments	
County	FY2015-2016
Chesterfield	\$424,651.42
Darlington	\$10,763.29
Kershaw	\$4,337.61
Total	\$439,752.32

Silvicultural Practices

A total of 2,553 acres were prescribed burned for wildlife habitat enhancement, hardwood control, and fuel reduction. No seedlings were planted during FY2015-2016.

Forest Protection

No wildfires occurred in FY2015-2016.

Pinestraw and Timber

In 1999 SHSF started a pinestraw enhancement program. Under this program, an individual from the public can enter into a multi-year contract with the Forestry Commission to rid longleaf pine stands of scrub oaks for pinestraw production. The individual agrees to control 90% of all hardwoods on a tract of land using herbicides. In exchange, they may harvest all of the pinestraw that falls during the contract period. When the contract 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.

In FY2015-2016 SHSF issued 24 enhancement contracts which consisted of 36 pine stands for a total of 1,168 acres. At the end of FY2015-2016 there were a total of 40 active enhancement contracts which consisted of 142 pine stands that totaled 6,386 acres.

Pinestraw is sold through bid and negotiated sales. In FY2015-2016 there were 4,595 acres sold on bid sales for \$589,432.19 and 2,868 acres sold on negotiated sales for \$398,151.50.

As a result of increased pinestraw activity on SHSF, a vehicle registration system was implemented to ensure that licensed, insured vehicles were operating on the Forest. The registration stickers provide a visible means to those patrolling the Forest that the participant has complied with the program. Pinestraw registration stickers are used for a 30 day or 90 day pinestraw sales. The green registration stickers are used for state forest users that want to access the "authorized vehicles only" truck trails. The majority of the green registration stickers are issued to hunters. In FY2015-2016 Sand Hills State Forest issued 218 green stickers and 205 pinestraw stickers.

In FY2015-2016 there were five timber sales. One was a per unit sale on 77 acres for \$22.04 per ton for a total revenue of \$135,765.07. The remaining four sales were lump sum sales totaling 934 acres for a total of \$552,969.53.

Recreation

Recreational use of the Forest continues to be fairly heavy. Hunting, fishing, hiking, bird watching, and camping continue to be favorite activities. Equestrian use on SHSF remains low due to the free riding that is offered at H. Cooper Black Recreational Area under the management of SCPRT.

Sugarloaf Mountain provides seven primitive camping sites for family camping and eight primitive equestrian campsites. Personnel booked 158 reservations for these sites this year. An estimated 3,189 visitors used the campsites and trails. Campsites rental rates are \$15 per site for sites with shelters and \$10 per site for those without shelters. Sand Hills received \$4,698.75 in revenue from camping in FY2015-2016.

Trail use permits for horseback riding decreased to 123 permits in FY2015-2016. Forty-three annual/daily permits were sold online. Seventy-seven permits were purchased through the drop box outside the SHSF office. There were 3 All State Forest permits sold this year. Revenue from trail use permits totaled \$4,476.00. The permit holders came from South Carolina, North Carolina and Georgia.

**Number of visitors does not include day users nor does it include any visitors from any other user group (i.e. hunters, fishermen, birdwatchers, pinestraw workers, etc.).*

Free-use permits are issued for any activity at SHSF that does not have a fee. Personnel issued 17 free-use permits this year. Four of the permits were for raking pinestraw for personal use, 11 for gathering firewood, and one for gathering pine cones.

Four special-use permits were issued for organized events.

1. Sand Hills Stampede Endurance Ride on October 30-31, 2015: 81 riders and volunteers. Received \$405 in fees.
2. Rally Racing Clinic on March 3, 2016: 25 participants. Received \$125 in fees.
3. Sand Blast Rally on March 6 2016: 132 competitors' entries with 50 cars and 31 motorcycles. Received \$1,500 in fees.
4. Spring Fling Endurance Ride on April 9, 2016: 88 riders and volunteers. Received \$430 in fees.

These events bring many visitors to Sand Hills State Forest and surrounding areas and have a positive economic impact on the area. The local involvement and sponsorship have increased each year that these events have been held.

Education

Personnel visited and presented programs to the Darlington County Institute for Technology (9th-12th Grade), Long Middle School, McBee High School and the Palmetto Learning Center. In addition to visiting classrooms, SHSF personnel also spoke to several civic clubs and participated in the Wood Magic Forest Fair.

Wildlife Management

47,174 acres of the Forest is included in the Wildlife Management Area Program. This is a cooperative agreement between the SC Department of Natural Resources (DNR) and the SC Forestry Commission. SHSF has two public dove fields. The Wilkes Chapel field is 57 acres and planted in corn, sunflowers, and bicolor. The Davis Field is 40 acres and is planted in corn, sunflowers, and bicolor.

Sixty acres (50 plots) were planted as wildlife food plots. These plots were planted in wheat. All plantings were fertilized at the recommended rates. All manageable bicolor patches in Compartments 11, 12, 13 & 14 were bush hogged.

SHSF continues to conduct surveys for DNR. Ducks, turkey and quail were surveyed to track population trends.

Rare, Threatened and Endangered Species Management

Population Trends: There are currently 91 managed red-cockaded woodpecker clusters on SHSF. During 2016, 80 clusters were active. One new cluster was formed. Of those 80 active groups, 72 can be considered potential breeding groups, 5 are solitary males. Sixty-seven first nesting attempts were made; 4 re-nests. One hundred fourteen chicks fledged in 2016. Sixteen new trees were found and only 6 trees died.

Law Enforcement

Officers issued three citations for various crimes on the state forest with the common infraction being violation of SCFC Rules & Regulations.

Research

A longleaf pine natural regeneration research project in conjunction with the US Forest Service is still ongoing and has been in effect since 1978.

POE CREEK STATE FOREST

Poe Creek State Forest (PCSF) is composed of two tracts of land totaling 2,511 acres. The Poe Creek tract is located in Pickens County adjacent to SC Highway 11 and contains 1,806 acres. This property was purchased from Crescent Resources, Inc. on April 6, 1999. Approximately 800 acres is under forest management with 610 acres of planted pine and 190 acres have been clearcut and allowed to regenerate naturally to native hardwood species. The remaining 1,006 acres are in natural upland hardwood type and a mixture of white pine and hardwoods. The steep terrain in this area limits the forest management activities that can be implemented. The Piedmont Forestry Center tract, located 5 miles north of Salem in Oconee County, encompasses 705 acres. It includes a conference center, picnic shelter, and two houses that are available for rental groups. The timber on this property is managed along with that on Poe Creek.

Receipts for Operating Budget – FY2015-2016	
Revenue Sources	Dollar Amount
Timber Sales	\$0
WMA Payment	\$16,831.81
Rentals	\$6,945.00
Total	\$23,776.81

Note: 25% of all forest receipts were paid to Pickens and Oconee County Schools for a total of \$4,468 (Donations, prior year refunds, and rental income categories are not included when calculating the total to be dispersed to the school systems).

Silvicultural Practices

No timber sales occurred on Poe Creek State Forest during FY2015-2016 and no prescribed burns were conducted. White pine and Virginia pine cones were collected from the orchards for SC Forestry Commission and NC Forest Service nurseries.

Recreational/Education

Use of the PCSF during FY2015-2016 was heavy, with numerous individuals and groups taking advantage of this beautiful facility.

Poe Creek Use, FY2015-2016		
Use	Days	# of People
Gatehouse Rental	17	24
Cabin Rental	75	248
Conference Room	0	0
Scouts	8	222
Wood Magic Forest Fair	4	625
Dove Shoots	6	235
Other & Fishing Rodeo	21	524
TOTALS	131	1,878

Forest Protection

No wildfires occurred on Poe Creek State Forest this fiscal year.

Wildlife Management

The SC Forestry Commission and the Department of Natural Resources cooperate on the planting and management of a 40-acre dove field at the Piedmont Forestry Center. The Piedmont Forestry Center and Poe Creek State Forest are both in DNR's Wildlife Management Area program and are open to public hunting. DNR fisheries also stocks one mile of Cheohee Valley Creek that runs through the Piedmont Forestry Center property.

Rare, Threatened, and Endangered Species Management

Poe Creek State Forest continues to provide habitat for several populations of federally endangered plants.

Infrastructure

Road access at both the Piedmont Forestry Center and the Poe Creek tract was maintained through mowing of road shoulders and grading where needed.

Research

Dr. Patrick McMillan, professor at Clemson University, continues to conduct research on Poe Creek.

NIEDERHOF FORESTRY CENTER

Niederhof Forestry Center (NFC) is located just north of the town of Tillman and approximately 9 miles northwest of Ridgeland in Jasper County and encompasses 1,594 acres. The SCFC Nurseries Section manages some of the property for tree improvement and as a production seed orchard. The remaining acreage is managed as multiple use demonstration forest and for outreach activities that include specialized hunts.

Receipts

No revenue was generated this year.

Silvicultural Practices

Due to an unusually wet burning season, no prescribed burning was conducted on Niederhof during FY2015-2016.

Forest Protection

Controlled burning has improved the health of the young longleaf pine, stimulating height growth and reducing the incidence of brown spot needle disease. No wildfires occurred on NFC this fiscal year.

Wildlife Management

Approximately 10 acres of wildlife food plots were maintained with funding provided by Quality Deer Management Association (QDMA), National Wild Turkey Federation (NWTf), and Lowcountry RC&D.

Rare, Threatened, and Endangered Species Management

No rare, threatened, or endangered species are known to occur on Niederhof Forestry Center.

Infrastructure

Road access was maintained at the Niederhof Forestry Center through mowing.

Outreach

Niederhof Hunts FY2015-2016				
	Number of Hunt Participants	Others Attending	SCFC	Total
Deer Hunts (2 hunts)				
December Rack Pack	7	19	10	36
November QDMA Military	10	9	12	31
Total	17	28	22	67
Turkey Hunts (3 hunts)				
WITO April	4	4	8	16
March Military NWTf	5	3	8	16
March Youth	5	3	7	15
Total	14	10	23	47
Total: 5 Hunts	114 people			

STATE FOREST REVENUE

State Forest General Accounting Summary						
	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12
Gross Revenue		\$2,700,045	\$3,542,463	\$4,077,269	\$3,126,490	\$3,072,999
Operating Expenses		\$2,017,499	\$1,984,055	\$2,053,605	\$1,905,164	\$1,813,109
Payment to County Schools		\$668,182	\$877,430	\$980,462	\$750,485	\$747,630
Back to SCFC			\$409,493		\$837,065	
Annual Carry Over	\$219,227	\$14,365	\$271,485	\$1,043,203	(\$366,224)	\$512,260
	FY 13	FY 14	FY 15	FY2015-2016	Average	Total Current Carry Over
Gross Revenue	\$2,846,075	\$2,363,876	\$1,979,540	\$2,972,549	\$2,964,590	
Operating Expenses	\$1,996,717	\$2,084,033	\$1,848,539	\$1,921,155	\$1,958,209	
Payment to County Schools	\$699,817	\$581,427	\$477,609	\$734,796	\$724,204	
Back to SCFC		\$53,385			\$433,314	
Annual Carry Over	\$149,540	(\$354,970)	(\$346,608)	\$316,599	\$145,888	\$1,458,876

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. This assistance consisted of cruising, marking, management assistance, and administering timber sales. The agencies and facilities assisted were as follows:

State Lands Forest Management Assistance		
Agency	Acres	Tons
DOC		
Wateree	242	17,528
DNR		
Hamilton Ridge (marked)	77	1,571
Hamilton Ridge (assisted)	618	22,335
Palachucola WMA	966	23,906
Bear Branch	45	1,550
Botany Bay	388	
Cliff Pitts	53	2,385
Edisto River	147	6,615
Wateree WMA	-	-
Subtotal	2,294	58,362
PRT		
Aiken	200	
Other		
John DaLa Howe	70	3,314
Totals	2,806	79,204

Other Activities

In addition, the five state forests (Manchester, Sand Hills, Wee Tee, Harbison, and Poe Creek) maintained dual certification under the Sustainable Forestry Initiative (SFI) and the American Forest Foundation (AFF) standards of sustainability.

The State Lands Coordinator:

- Serves as primary contact and coordinator for all state forest certification activities
- Adheres to applicable reporting and data management requirements
- Serves as the primary contact and coordinator for State Forest harvest scheduling, modeling, mapping, and inventory collection
- Serves as lead instructor for Teachers Tour maintaining adjunct professor status with SACS accredited college
- Attends meetings with the National Enduro planning committee for Manchester State Forest
- Serves on the State Trails Committee
- Serves on the SFI State Implementation Committee (S.I.C.)
- Facilitates timber marking with regions where possible

COMMUNICATION & PUBLIC INFORMATION DIVISION

PUBLIC RELATIONS, OUTREACH AND EDUCATION

The Communication & Public Information (CPI) Division plans and implements communication strategies and long-range public information, marketing, and educational programs for the South Carolina Forestry Commission. These activities are designed to enhance the agency's and forestry's image while promoting the agency's mission and goals. Playing the lead role in communication and public information for the agency, CPI staff coordinate media interest in and public relations for the agency; prepare appropriate responses to media requests; coordinate FOIA requests/responses; prepare news releases, articles, scripts, speeches, letters and reports; support agency departments, programs and personnel with forestry-related promotional items and information; and design original publications, fact sheets and other collateral material for agency personnel, programs and departments.

Communication & Public Information Highlights

Drone training

Hosted an Unmanned Aircraft System (UAS, or “drone”) fundamentals training at Commission headquarters in February for several staff who may eventually fly the agency’s drone. Chief Pilot Sam Anderson and Public Information Coordinators Michelle Johnson and Justin Holt attended the day-long seminar, which was conducted by a licensed and certified drone training company. Attendees were prepared for all aspects of UAS use, including terminology, regulatory requirements, safety, airspace, parts, maintenance, setup and operation. Each attendee practiced flying the drone inside the large conference room because the SCFC could not legally fly its UAS outdoors at this time. The agency is currently going through a multistep certification and testing process to get the drone cleared for outdoor use. The Forestry Commission may ultimately use drones to perform photography and videography for informational, educational and promotional purposes; monitor water protection/quality compliance under Forestry Best Management Practices (BMPs) and Environmental Protection Agency (EPA) standards; observe and assist with wildfires; use as a monitoring tool for nursery/tree improvement purposes; monitor the health of South Carolina’s forests with regard to insects and disease; assist with Forest Inventory & Analysis (FIA) operations; and assess urban tree canopy health.

SAF Tree Farmer book distribution partnership

Partnered with the Society of American Foresters (SAF) and the American Tree Farm System (Tree Farm) on a project to place copies of the children’s book, *The Tree Farmer*, in all 712 public elementary school libraries in South Carolina. The book tells of a grandfather leading his grandson to understand how he can grow trees with care, to one day cut them down, sharing the story of conservation with elementary-age children in a way they can understand. Promotional, informational and educational materials were included with every shipment. In addition press releases were tailored for local media every time a shipment was made.

VFA check presentations

Assisted with check presentations to rural/volunteer fire departments as part of the Volunteer Fire Assistance (VFA) grant program administered by the agency. Presentations of checks made to River Falls Fire Department in Marietta, Patrick Rural Volunteer Fire Department in Patrick, and Glenn Springs-Pauline Fire Department in Pauline. The check presentations are held as community events to which legislators, residents and firefighters are invited to learn about not just about the VFA program, but about the agency’s mission and current budget requests.

“Don’t Move Firewood” support

Assisted with the agency’s Forest Health section to produce a multimedia campaign to promote the national “Don’t Move Firewood” campaign throughout South Carolina. In addition to creating print materials, signage and digital ads to support the campaign, the CPI staff worked with Forest Health to contract with the SC Radio Network and its 31 affiliates across the state to run two three-month series of radio commercials. The radio ads reinforce messaging for the busy spring and fall camping/burning seasons.

Fire prevention video and campaign

Produced a “Think Before You Burn” fire prevention video with help from personnel in several agency departments and Lexington County Fire Service (LCFS).

The video was made to support a larger statewide fire prevention campaign that SCFC personnel conducted from October through December and is continually shared on the agency’s website, through its social media outlets and in public service announcements on radio and television.

In addition to the video and traplines, billboards were contracted in areas of high fire occurrence around the state, and fire prevention-related printed materials were updated. A second video tailored to Lexington County audiences was produced for the LCFS to use.

Sign project w/National Wild Turkey Federation

Partnered with the National Wild Turkey Federation (NWTf) to provide forestry-related message for interpretive signage at various shooting stations around the NWTf’s new Palmetto Shooting Complex in Edgefield. These signs promote a wide range of forestry messaging, from the importance of BMPs and the effective use of Firewise principles to the multiple use benefits of forestry and active forest management. They will be used as part of the educational programs and tours being conducted by NWTf on the Hunting Heritage Center.

Other highlights:

- Upgraded select Wood Magic collateral materials, including signage for several of the learning stations.
- Sent promotional media kits (containing forest products and their derivatives) to Midlands-area print and broadcast media to entice them to cover the Wood Magic Forest Fair at Harbison State Forest.
- Developed two different full-page ads about Taylor Nursery for publication in SCFA’s bi-monthly journal.
- Produced and/or updated several new agency publications, fact sheets and collateral materials:
 - Careers, Prescribed Fire, Seedling Price Guide, Southern Pine Beetle, SC Forest Products Export Report, India: Forest Markets Profile, Forest Facts Pocket Cards, Flood Damage Assessment (Hurricane Joaquin), Hurricane Matthew Damage Assessment, Forest Management Calendar, Cost-Share Programs & Rates, Wildfire Suppression (Overview and Tactics). Spanish versions were produced for of four US Forest Service grant-funded programs: Stewardship, Urban Forestry, Prescribed Fire, FRP/SPB Cost-Share Rates.
- Wrote and distributed 23 press releases on a wide range of topics, including Red Flag Fire Alerts, Wood Magic Forest Fair, State Forests Checkoff Fund, BMP compliance, Firewise program, agency personnel (accomplishments and awards), payments to county school systems, law enforcement arrests, prescribed burning, Governor’s proclamations, seedling sales and promotion, stewardship recognition, training exercises, VFA grants and Tree Farm activity.
- Exceeded target of one daily social media message/post on Facebook and Twitter promoting agency, forestry and industry news, events and people.
- Updated list of local/rural/volunteer fire departments for the Red Flag Fire Alert system.
- Worked with SCFC Protection Chief and SC Prescribed Fire Council to promote March as Prescribed Fire Awareness Month by distributing a press release to media and coordinating media visits to prescribed fire sites in their areas.

EDUCATION

Environmental Education Coordinator & Assistant Coordinator Highlights

- Facilitated 10 Project Learning Tree workshops or presentations
- Coordinated 2 Wood Magic Forest Fair events
- Conducted 44 education programs, reaching 4,338 people (not including the Wood Magic Forest Fair event).
- Co-ordinated and taught South Carolina Sustainable Forestry Teachers Tour
- Held a forestry skills competition for the SC FFA program at Harbison State Forest

Project Learning Tree

In FY2015-2016, 23 workshops reached 371 educators. A total of 447 copies of the PLT modules were distributed at these workshops.

Project Learning Tree Workshops				
Workshop Type	# Of Workshops	% Of Workshops	# Of Participants	% Of Total Participants
Early Childhood	3	12%	51	11%
PreK-8	8	31%	137	31%
Focus On Forests	2	8%	30	7%
SE Forests & Climate Change	1	4%	14	3%
Forests of the World	1	4%	16	4%
Pre-service Early Childhood	1	4%	14	3%
Pre-service PreK-8	10	38%	185	41%
TOTALS	26	N/A	447	N/A

In order to show how many of each PLT module was distributed and how many workshops were conducted for each module, workshops that covered more than one module are shown as separate workshops for each module, making the total number of workshops 26.

Teachers' Tour

The 2016 South Carolina Teacher's Tour was held for 7 days in June with 32 participants. More applications were received than the Tour could accommodate. SCFC employees and forestry partners made the tour possible by being speakers, handling logistics, and conducting demonstrations.

Wood Magic Forest Fair

The 2015 Wood Magic Forest Fair was planned for 3 locations. The first event was held for 4 days in September at the Piedmont Forestry Center. The second event was planned for 5 days in October at Harbison State Forest but was canceled due to historic flooding. The third event was held for 3 days in November at Lynches River County Park. Almost 1000 students, teachers, and chaperones attended the events. Forty-two SCFC employees and 87 volunteers worked at the two events.

Wood Magic Participation						
Location	Applications Received	Classes Applied	Classes Attending	Children Attending	Teachers & Other Adults	Total Participants
Piedmont	14	43	25	456	85	541
Harbison	35	87	0	0	0	0
Lynches River	12	32	15	348	77	425
TOTALS	61	162	40	804	162	966

Students Participating in SCFC Educational Activities at Harbison State Forest

	Date	School/Organization	Grade Level/Age	# of Children	# of Adults
1	10/21/2015	Midlands Tech Ecology	college		12
2	10/22/2015	Midlands Tech Ecology	college		14
3	10/22/2015	Batesburg-Leesville HS Ag. Ed.	high school	9	1
4	3/1/2016	Dent Middle School	7 th	39	5
5	3/2/2016	Dent Middle School	7 th	28	3
6	3/8/2016	A.C. Moore Elementary	K	40	4
7	3/17/2016	Midlands Tech Ecology	College		17
8	3/21/2016	Dutch Fork Elementary	2 nd	47	10
9	3/22/2016	Logan Elementary	3 rd	24	3
10	3/23/2016	Dutch Fork Elementary	3 rd	45	6
11	3/23/2016	Midlands Tech Ecology	college		16
12	4/6/2016	Midlands Tech Ecology	college		20
13	4/19/2016	Lewis Greenview Elementary	1 st	69	3
14	4/21/2016	Springdale Elementary	1 st	72	10
15	4/23/2016	Boy Scout Forestry Merit Badge Day	6 th -12 th	25	13
16	4/27/2016	Deerfield Elementary	1 st	47	12
17	4/28/2016	Deerfield Elementary	1 st	50	12
18	5/3/2016	Cub Scouts-"Out in the Woods" Badge	4 th	5	3
19	5/9/2016	Windsor Elementary	4K	19	5
20	5/18/2016	Deerfield Elementary	K	48	9
21	5/19/2016	Deerfield Elementary	K	52	10
22	6/28/2016	Alderian Child Care	4K-5K	43	4
23	6/29/2016	Cub Scouts "Forester" Badge	5 th	16	8
24	6/30/2016	Alderian Child Care	1 st -5 th	37	4
		SUBTOTALS		715	204
		TOTAL		919	

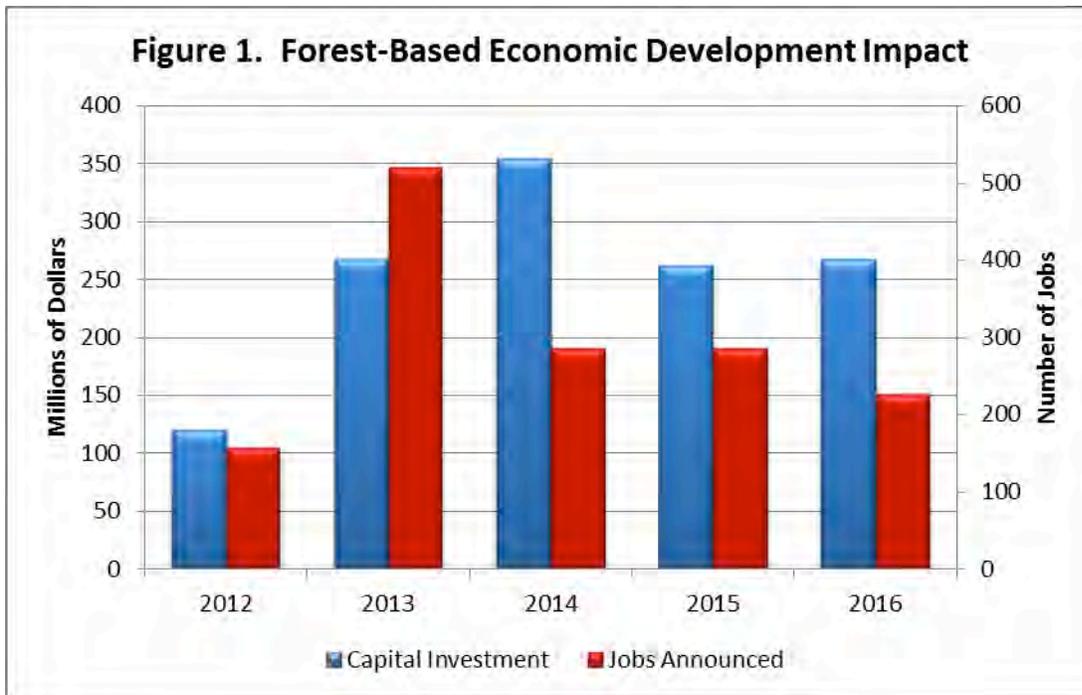
Students Participating in SCFC Educational Activities Outside of Harbison State Forest					
	Date	School/Organization	Grade Level/Age	# of Children	# of Adults
1	9/25/2015	Erwin Elementary	K-5th	500	30
2	10/21/2015	Batesburg-Leesville HS Ag. Ed.	high school	11	1
3	10/27/2015	St. Joseph Catholic	4th	41	3
4	11/20/2015	Irmo Middle Career Day	8 th	100	7
5	12/2/2015	Pleasant Hill Elem. Arbor Day	4 th	140	5
6	12/2/2015	White Knoll Elem. Arbor Day	4 th	130	5
7	12/16/2015	Dutch Fork Elem. Kit Club	K-5 th	71	4
8	1/20/2016	Dutch Fork Elem. Kit Club	K-5 th	65	4
9	2/17/2016	Dutch Fork Elem. Kit Club	K-5 th	60	4
10	2/19/2016	Central Carolina Tech NRM	college		20
11	3/11/2016	Pontiac Elementary Science Day	K-5 th	80	7
12	3/11/2016	Sandel Elementary Science Day	2 nd	100	4
13	3/24/2016	Harbison West Elem. STEM Day	5 th	200	10
14	3/25/2016	Gilbert Primary Farm Day	K-2 nd	800	75
15	4/6/2016	Chapin High Envirothon Practice	high school	18	1
16	4/7/2016	White Knoll Elementary	1 st	110	5
17	4/20/2016	Cutler Jewish Day School	K-1 st	24	4
18	4/16/2016	Lexington County Library	all ages	30	20
19	4/21/2016	Dutch Fork Elem. Envirofest	all ages	140	140
20	5/13/2016	Richland County Recycles Day	4 th -5 th	300	150
		SUBTOTALS		2920	499
		TOTAL		3,419	

RESOURCE DEVELOPMENT DIVISION

BUSINESS DEVELOPMENT

Interest in forestry-related economic development was steady throughout the year and the announced capital investment for FY2015-2016 was comparable to FY2015. A total of 13 different forestry-related projects were active during FY2015-2016. There was an increased interest in South Carolina by sawmill projects looking for available resources. There continues to be steady interest in the state by wood pellet projects. Together, sawmill and pellet projects accounted for 6 of the 13 forestry-related projects in South Carolina. The remaining projects were spread evenly among cross-laminated timber, medium-density fiberboard, poles and posts, bourbon barrel staves, flooring and furniture.

Five forestry projects were announced during FY2015-2016. KronotexUSA announced expansions plans for their Barnwell County plant creating 105 jobs. Parent company, Swiss Krono Group will invest \$230 million to build an HDF mill. Carolina Chips announced a \$32 million mill in Holly Hill that will process wood chips and bark for the Kapstone paper mill in North Charleston. Blackwater Barrels announced plans to manufacture white oak barrels for the bourbon industry in Bamberg County. Their \$3.6 million investment will create 57 jobs. Other announcements include the expansion of Central Packaging and Crating's pallet operation in Greenwood County and the expansion of Masonite International's operation in Bamberg County.



During FY2015-2016, the SCFC Resource Development Division represented the agency and the forestry community through 47 statewide and regional economic development organizations. We participated with Clemson's new Wood Utilization + Design (WU+D) Institute by speaking at regional meetings to a targeted audience of architects, engineers and foresters. We attended the SOFAC annual meeting and SRTS training by SOFAC staff to be able to model future wood supply in the state. Division staff also attended the Mass Timber Conference in Portland, Oregon. During FY2015-2016, 181 individual business assists were made to address single-issue requests.

Much progress was made in FY2015-2016 to develop a unique forest products marketing program. The name “Forest Products, South Carolina” was matched with a logo to brand the program. An India Market Report was developed as the first in a series of reports to provide data in support of forest product export. The Resource Development Division will be sponsoring the Southern Forest Products Export Conference in October, 2016 and made considerable preparations beginning nearly a year in advance. A US Forest Service grant was awarded to assist with the costs of the market reports and conference.

The Timber Products Output Survey for 2015 was completed by June, 2016. South Carolina was the first state in the South to complete the 2015 TPO survey. Primary and secondary mill directories were updated throughout the year. Future wood supply predictions were updated to account for the 2014 ice storm damage. In response to severe flooding and continued wet weather during Fall, 2015, Division staff conducted 2 mill surveys that quantified overall flood-related damages to forest industry at \$100 million. An “Advanced Woodbasket Analysis” training program was held for Division staff. A federal grant was written and approved to conduct this training regionally.

Forestry’s 2020 Vision has followed the successful 20/15 Initiative in bringing focus to continuing industry health and growth. A Forestry Summit was held in Columbia to release new data on the state’s future wood supply and the \$18.6 billion economic contribution of forestry to the state’s economy. The 2020 Vision has a three-pronged approach including (1) Supporting and attracting primary manufacturing, (2) Increasing secondary manufacturing, and (3) Improving public perception of forestry’s benefits.

FOREST INVENTORY & ANALYSIS

The Forest Inventory and Analysis (FIA) program is a cooperative program with the US Forest Service – Southern Research Station (SRS) to collect forest inventory and forest health monitoring data from a network of permanent sample plots. Funding for the program is provided through a 75% federal grant and a 25% state match of the federal grant funds. There are 3,452 total forest inventory plots located in South Carolina. Plots are sampled in 20% increments of the total, referred to as panels. Plots are measured for growth projections, mortality and harvest 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. This network of plot data collection is referred to as the Phase 2 portion of FIA field data collection. The information provided by FIA Phase 2 allows the evaluation of both quantity and quality of these important resources. The US Forest Service furnishes data analysis and reporting for this program.

Each year, during the summer growing season, a subset of the standard FIA plot grid is selected to collect forest health attributes. This part of the program is referred to as Phase 2+. Phase 2+ plots were set at one-sixteenth intensity of the standard FIA plot grid for the summer of 2015 and 2016. Phase 2+ plots include additional measurements that are collected to provide data on forest vegetative structure, down woody material, and tree crowns.

Currently, three full-time inventory crews, consisting of two employees each, are stationed throughout the state with field offices in Newberry, Florence, and Walterboro. The program coordinator is stationed in Columbia. All crewmembers 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 data collected by Forestry Commission field crews. During FY2015-2016, the average accuracy for all crewmembers was 93.03% with each crewmember exceeding the 87% yearly average required by SRS.

During fiscal year 2015-2016, field crews completed one panel of plots that began in fiscal year 2014-2015 and began the next subsequent panel. For the fiscal year, a total of 572 Phase 2 sample plots were completed by Forestry Commission crews with 19 Phase 2+ plots being a subset of these plots. SRS completed 109 plots, consisting of 70 nonforest plots and 39 plots classified as census water, identified in the office and not sent to the Forestry Commission field crews. The FIA program completed data collection on the fourth panel in the Cycle 11 inventory and has completed 54% of the fifth panel of the Cycle 11 inventory of data collection. The FIA program completed 23 product utilization studies on active logging operations across the state to develop factors for logging residues, logging damage, and utilization of the unmerchantable portion of harvested trees. In addition to the standard FIA plot grid, 41 FIA plots were installed on the Sumter and Francis Marion National Forests as intensification plots.

The Forestry Commission FIA program is 91% complete with the 11th inventory of the state through fiscal year 2016. Of the 13 southern states, South Carolina was the first state to complete the 8th inventory (2001), the 9th inventory (2006), and the 10th inventory (2011). Subsequently, South Carolina is the first state in the nation to initiate the 11th inventory. However, two other states, Arkansas and Georgia, have begun the 11th inventory as well. The SCFC FIA program is on schedule to complete the 11th inventory measurements in five years, with December 2016 as a target date for completion. Data for the 10th inventory are available online and the published report was released by SRS in January 2016.

NURSERY AND TREE IMPROVEMENT

The South Carolina Forestry Commission operates two Nursery and Tree Improvement (N&TI) facilities: Taylor Nursery in Edgefield County and Niederhof Forestry Center in Jasper County. The goal of the N&TI Program is to provide landowners with the highest-quality seed and seedlings available for timber production, wildlife habitat improvement, Christmas tree production, and restoration of valuable forested ecosystems.

TAYLOR NURSERY

Taylor Nursery, located one mile east of Trenton, SC in Edgefield County, produces bare-root and containerized seedlings for South Carolina landowners. Originally named Ridge Nursery when built in 1958, the facility was renamed Taylor Nursery in 1981 when the main office complex was rebuilt following a fire. The new name was in honor of A. Brandon Taylor Jr., an Upstate industrial leader in wood treatment, who served as a Commissioner from 1961-1982 and Commission Chairman from 1975-1981. The nursery property, including office complex, roads, & irrigation pond, consists of 345 acres. 106 acres are under irrigation and used for seedling production.

The SCFC conducts a nursery survey annually to determine the number of seedlings planted in South Carolina. During FY2015-2016, 64,670,714 pines and 327,481 hardwood and other seedlings were planted in South Carolina for a total of 64,998,195 seedlings from all nursery sources. This number is roughly equal to the number of seedlings planted the previous year. However, the number of seedlings planted in South Carolina remains about 62% the number of seedlings planted in FY1999-2000 due to fewer acres of final harvest, lower timber stumpage prices and a slowdown in government cost-share funding.

Taylor Nursery distributed 1,057,620 pines and 110,462 hardwood and other seedlings in FY2015-2016 for a total of 1,168,082 seedlings. Of this total, 21,693 seedlings were sold out of state. The total amount distributed represents 91% of the total number of bareroot and containerized seedlings grown at Taylor Nursery. The SCFC sold 1.8% of the seedlings distributed in South Carolina this year from all public and private sources. Taylor Nursery is one of the primary producers of hardwood and longleaf pine seedlings in the state. The nursery has the capacity to grow over 2 million containerized longleaf seedlings, depending on germination rates.

In past years, the SCFC has surveyed at least a 10% sample of seedling customers to determine general satisfaction with our seedlings and to target areas for improvement. This year the survey was e-mailed to all customers who supplied us with an e-mail address. Of the 380 surveys e-mailed out, 148 (39%) customers responded. The 2015 survey indicated that 96% of our customers were satisfied with our seedling quality and service. Of the customers who had a problem with their seedling order, 88% of the customers were satisfied with our response. Of the customer comments on returned survey forms, 73% of the comments were very complimentary of the nursery program.

Taylor Nursery keeps up-to-date with technology through association with the Auburn University Forest Nursery Management Cooperative, the Southern Forest Nursery Association and the Longleaf Alliance. In order to help restore the native ground cover plants of the longleaf pine ecosystem, a seed production area was established at the nursery in cooperation with the US Forest Service. As the plants become established the seed will be harvested and grown as container plugs or sold to interested land owners. Seedlings planted include *Coreopsis*, *Helianthus*, and *Liatris*.

NIEDERHOF FORESTRY CENTER

Niederhof Forestry Center (NFC) is located on a 1,593-acre tract of land that the SCFC purchased on December 1, 1983. Originally part of the Hoover Plantation, a 3,950-acre plantation north of Tillman, SC, Niederhof was acquired to establish second-generation seed orchards and to provide areas for future advanced-generation orchards. NFC was located in an area of the state that is well known for good seed production and minimal frost and ice damage. The facility was named for Cam Niederhof, a Westvaco executive, who served as a SCFC Commissioner for 24 years.

NFC is staffed by a full-time Seed Orchard Manager with assistance as needed by Coastal Region staff. A Forestry Technician I is assigned to NFC as part of his work duties when scheduled on-call on normal workdays. Additional personnel from the Edisto Unit assist as needed with seed orchard establishment and management. NFC attempts to operate solely based upon revenues generated through cone/seed sales and funding from research agreements.

Second-generation loblolly pine orchards were established from 1985-1989, totaling 322 acres; 30 acres of 1.5-generation longleaf pine were established from 1988-1992. NFC's loblolly orchards came into production in 1993 with some 4,542 bushels collected from both Coastal and Piedmont province orchards and the longleaf orchard has been in production since 2008. To date, some 70,981+ bushels have been collected. In 2004, as a result of budget cuts, a strategic change in goals for NFC resulted in the reduction of 2nd-generation orchards to 131.4 acres. It is worthy to note that during the years 1993-2005, NFC orchards consistently produced 25% of all second generation seed within the cooperative. In 2016, a 15 acre block of 2nd Generation Coastal loblolly pine orchard was harvested to provide some buffer area and expansion for 3rd Cycle Coastal loblolly pine seed orchard elite selections. Current 2nd Generation loblolly pine seed orchard acreage stands at 116.4 acres, which permits continuing interest in premier selections to be harvested for internal use and seed/cone sale revenue.

Third-cycle orchard establishment occurred between 2005-2011. These new orchards represent the culmination of over 40 years' breeding and testing work by our agency as part of the NCSU Cooperative Tree Improvement Program (NCSUCTIP) and will provide landowners in South Carolina with very high-quality genetically-improved seedlings that are specifically adapted to our state. There are 17.6 acres of coastal 3rd cycle loblolly pine orchard and 12.4 acres of piedmont 3rd cycle loblolly pine orchard.

Cone collection for 2015 yielded 280 bushels 2nd-Generation Coastal loblolly pine, 1,400 bushels 2nd-Generation Piedmont loblolly pine, 309 bushels 3rd-Cycle Coastal loblolly pine, 235 bushels 3rd-Cycle Piedmont loblolly pine and 2,100 bushels 1.5 generation longleaf pine. An additional 16.5 bushels of cones were collected from the Commission's Virginia pine orchard at Piedmont Forestry Center. Seed processing yielded 1,747.45 pounds of 1.5-Generation Improved Longleaf pine seed, 253.45 pounds of 3rd-Cycle Coastal loblolly pine, 246.85 pounds 3rd-Cycle Piedmont loblolly pine, 1,154.90 pounds 2nd-Generation Piedmont loblolly pine, 339.60 pounds of 2nd-Generation Coastal loblolly pine, and due to a combination of poor pollen cloud and insect damage, only 0.6 pounds of 1.5-Generation Virginia pine seed.

NFC's annual sale of seed and pine cones generated \$89,968.00 in revenue: to date, Niederhof's 2nd-generation orchards have created additional revenue in the amount of \$1,992,141.10 from cone and seed sales. The value of seed and pine cones sales is in addition to the value of seed delivered to Taylor Nursery for internal seedling production.

NFC staff established demonstration blocks consisting of seedlings produced from controlled crosses among the top three 3rd-cycle piedmont loblolly pine selections and crosses between the Commission's top 2nd generation coastal loblolly pine selection mated to these three piedmont selections. Demonstration blocks were established at Taylor Nursery in the Spring of 2015 and 2016; demonstration blocks were re-established at Niederhof Forestry Center in 2016, with a common checklot comprised of 1st generation piedmont loblolly seed orchard mix.

A block of elite 3rd-cycle piedmont loblolly pine selections was established in the spring of 2014. This orchard block is comprised of the top three selections plus a superior 3rd-cycle coastal loblolly selection for pollination. The elite block is established on a 45' x 30' spacing, to minimize self-pollination and to provide the flexibility of producing superior wind-pollinated seed, while lending itself to the employment of controlled mass pollination, if so desired.

Due to poor outplanting, survival realized from drought conditions experienced in 2014, seedlings from our top 2nd generation coastal loblolly selection were planted over the winter to provide stock for grafting in 2017.

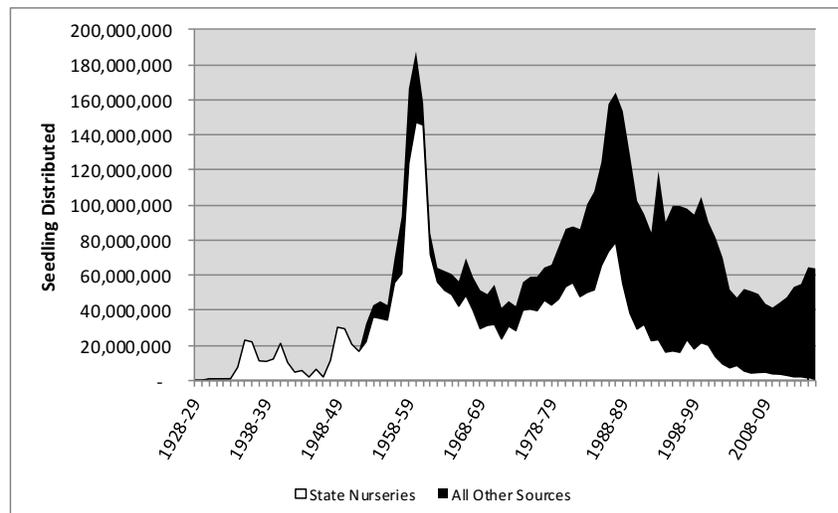
Tree Seedlings Planted by Landowner Classification 2015-2016				
Land Ownership	Pines Planted	Hardwoods & Others Planted	Total Number of Trees Planted	Percent of Total
Private Forestlands	63,325,983	313,771	63,639,754	97.9%
Public Forestlands	1,344,731	13,710	1,358,441	2.1%
Total	64,670,714	327,481	64,998,195	

Source of Seedlings Distributed in South Carolina				
Nurseries in South Carolina	Pines Distributed	Hardwoods & Others Distributed	Total Number of Trees Distributed	Percent of Grand Total
ArborGen (Bleinheim, SC)	33,800,829	202,550	34,003,379	52.3%
Weyerhaeuser	17,220,024	2,150	17,222,174	26.5%
South Carolina Forestry Commission	1,042,010	104,379	1,146,389	1.8%
Total	52,062,863	309,079	52,371,942	80.6%
Nurseries Outside of South Carolina				
Plum Creek	8,693,000	0	8,693,000	13.4%
Bodenhamer Farms & Nursery	1,500,000	0	1,500,000	2.3%
International Forest Company	674,548	0	674,548	1.0%
Meeks Farm & Nursery	623,000	0	623,000	1.0%
Georgia Forestry Commission	518,500	10,400	528,900	0.8%
North Carolina Forest Service	306,136	8,002	314,138	0.5%
Whitfield Farms & Nursery	142,667	0	142,667	0.2%
Bell Brothers Inc.	150,000	0	150,000	0.2%
Total	12,607,851	18,402	12,626,253	19.4%
Grand Total	64,670,714	327,481	64,998,195	100%

State Nursery Seedling Production & Sales for FY2015-2016			
Species	Seedlings Produced	Seedlings Sold	% Sold
Ash, Green	1,000	1,000	100%
Baldcypress	10,000	9,500	95%
Blue Ice CTR	1,152	1,152	100%
Carolina Sapphire CTR	1,728	1,728	100%
Cedar, Eastern Red	9,550	9,550	100%
Clemson Greenspire CTR	2,144	1,504	70%
Crabapple, Southern	1,040	1,040	100%
Dogwood	5,070	5,070	100%
Lespedeza	550	550	100%
Leyland Cypress CTR	9,000	8,256	92%
Loblolly Pine, Coastal 3rd gen	41,000	41,000	100%
Loblolly Pine, SCFC-C1, CTR	6,000	6,000	100%
Loblolly Pine, Coastal Best Family	335,420	335,420	100%
Loblolly Pine, Piedmont 3rd gen.	70,000	70,000	100%
Loblolly Pine, SCFC-P1, CTR	100	100	100%
Loblolly Pine, Piedmont Best Family	97,750	97,750	100%
Longleaf Pine	228,360	127,990	56%
Longleaf Pine Improved CTR	359,250	350,790	98%
Magnolia, Southern	180	180	100%
Murray Cypress CTR	3,872	3,872	100%
Oak, Cherrybark	5,375	5,375	100%
Oak, Chestnut	1,880	1,880	100%
Oak, Chinkapin	380	380	100%
Oak, Gobbler	1,970	1,970	100%
Oak, Live	2,710	2,710	100%
Oak, Northern Red	2,690	2,690	100%
Oak, Pin	2,500	2,500	100%
Oak, Sawtooth	11,000	8,525	78%
Oak, Shumard	2,000	1,820	91%
Oak, Southern Red	1,880	1,880	100%
Oak, Swamp Chestnut	4,910	4,910	100%
Oak, White	5,040	5,040	100%
Oak, Willow	8,000	8,000	100%
Persimmon	3,530	3,530	100%
Plum, Chickasaw	500	500	100%
Redbud, Eastern	1,010	1,010	100%
Shortleaf Pine	4,400	4,400	100%
Sycamore	20	20	100%
Virginia Pine Christmas Tree Stock	20,020	18,170	91%
Walnut, Black	710	710	100%
White Pine	6,000	6,000	100%
Wire Grass CTR	9,000	9,000	100%
Yellow Poplar	4,610	4,610	100%
	1,283,301	1,168,082	91%

Seedling Distribution 1928-2016

Total State			Total State		
Year	Nurseries	Total All Sources	Year	Nurseries	Total All Sources
1928-29	142,000	142,000	1972-73	30,978,000	45,239,000
1929-30	148,000	148,000	1973-74	28,443,000	42,306,000
1930-31	986,000	986,000	1974-75	40,082,000	55,997,000
1931-32	976,000	976,000	1975-76	40,664,000	59,063,000
1932-33	996,000	996,000	1976-77	39,795,000	59,238,000
1933-34	1,031,000	1,031,000	1977-78	45,735,000	64,380,000
1934-35	7,529,000	7,529,000	1978-79	43,010,000	65,937,000
1935-36	23,000,000	23,000,000	1979-80	46,375,000	76,207,000
1936-37	22,000,000	22,000,000	1980-81	53,513,000	86,420,000
1937-38	11,192,000	11,192,000	1981-82	55,728,000	87,793,000
1938-39	10,854,000	10,854,000	1982-83	47,799,000	86,265,000
1939-40	12,244,000	12,244,000	1983-84	50,170,000	100,394,000
1940-41	21,165,000	21,165,000	1984-85	51,636,000	107,718,000
1941-42	10,275,000	10,275,000	1985-86	65,465,000	124,381,000
1942-43	4,742,000	4,742,000	1986-87	73,555,000	157,523,000
1943-44	5,663,000	5,663,000	1987-88	78,788,000	164,095,000
1944-45	1,963,000	1,963,000	1988-89	55,052,000	153,450,000
1945-46	6,402,000	6,402,000	1989-90	38,356,000	128,475,000
1946-47	1,963,000	1,963,000	1990-91	29,297,000	102,384,000
1947-48	11,357,000	11,357,000	1991-92	31,984,000	94,710,000
1948-49	30,389,000	30,339,000	1992-93	22,665,000	84,287,000
1949-50	29,502,000	29,502,000	1993-94	23,286,000	119,311,000
1950-51	20,615,000	20,615,000	1994-95	16,154,000	90,336,000
1951-52	16,619,000	16,619,000	1995-96	16,841,000	99,549,000
1952-53	22,036,000	32,246,000	1996-97	16,058,000	99,439,000
1953-54	36,210,000	42,852,000	1997-98	23,278,000	97,963,000
1954-55	35,373,000	45,182,000	1998-99	17,955,000	94,539,000
1955-56	34,414,000	42,932,000	1999-00	21,524,000	104,594,000
1956-57	55,754,000	69,659,000	2000-01	20,095,000	90,346,000
1957-58	60,846,000	93,369,000	2001-02	13,500,000	81,431,000
1958-59	123,985,000	166,351,000	2002-03	9,376,000	69,989,000
1959-60	147,146,000	187,516,000	2003-04	7,202,000	51,823,000
1960-61	145,609,000	158,331,000	2004-05	8,563,000	47,243,000
1961-62	71,892,000	83,844,000	2005-06	5,437,000	52,165,000
1962-63	56,191,000	64,202,000	2006-07	4,206,000	50,900,000
1963-64	51,446,000	62,424,000	2007-08	4,539,842	49,320,517
1964-65	49,010,000	60,683,000	2008-09	4,739,783	43,692,314
1965-66	42,311,000	56,529,000	2009-10	3,762,989	41,549,345
1966-67	48,575,000	69,598,000	2010-11	3,629,610	44,374,915
1967-68	39,970,000	58,812,000	2011-12	2,922,880	47,468,239
1968-69	29,529,000	51,453,000	2012-13	2,091,256	53,342,588
1969-70	31,415,000	49,203,000	2013-14	2,125,576	54,971,881
1970-71	31,940,000	54,541,000	2014-15	1,473,558	64,582,487
1971-72	23,678,000	41,357,000	2015-16	1,146,389	64,998,195
Total State Nurseries			Total State Nurseries		
2,588,029,883			2,588,029,883		
Total All Sources			Total All Sources		
5,302,977,481			5,302,977,481		



SCFC Active Seed Orchards		
Orchard Type	Years Established	Acres
Creech Seed Orchard/Manchester State Forest		
Genetic Diversity Archives (Clone Banks)	1977-1983	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)	1986	2
Sawtooth Oak 1.0 Seedling	1990	2
Total		47
Niederhof Seed Orchard		
Genetic Archives, 3rd Cycle	2008-2009	4.2
Coastal Loblolly Pine 2.0	1985-1988	53.3
Piedmont Loblolly Pine 2.0	1985-1988	63.1
Longleaf Pine 1.5	1988-1990	30
Longleaf Pine 1.5 Expansion	2010-2011	1.6
Loblolly Pine Breeding Orchard 3.0	1997-2003	7.2
Longleaf Pine Seedling Seed Orchard	1998	8
Coastal Loblolly Pine 3.0	2005-2011	17.6
Piedmont Loblolly Pine 3.0	2005-2011	12.4
Total		197.4
Coastal Seed Orchard		
Sycamore 2.0	1992-1995	4
Sweetgum 2.0	1992-1995	6
Willow Oak Seedling Seed Orchard	1992-1995	1
Swamp Chestnut Oak Seedling Seed Orchard	1992-1995	1
Green Ash Seedling Seed Orchard	1992-1995	3
Red Maple Seedling Seed Orchard	1992-1995	1
Southern Red Oak Seedling Seed Orchard	1992-1995	2
White Oak Seedling Seed Orchard	1992-1995	2
Total		20
Piedmont Seed Orchard		
White Pine 1.5	1991-1993	4
Virginia Pine 1.0	1993	3
Northern Red Oak Seedling Seed Orchard	1993-1995	2
Total		9
Grand Total		273.4

ENVIRONMENTAL MANAGEMENT

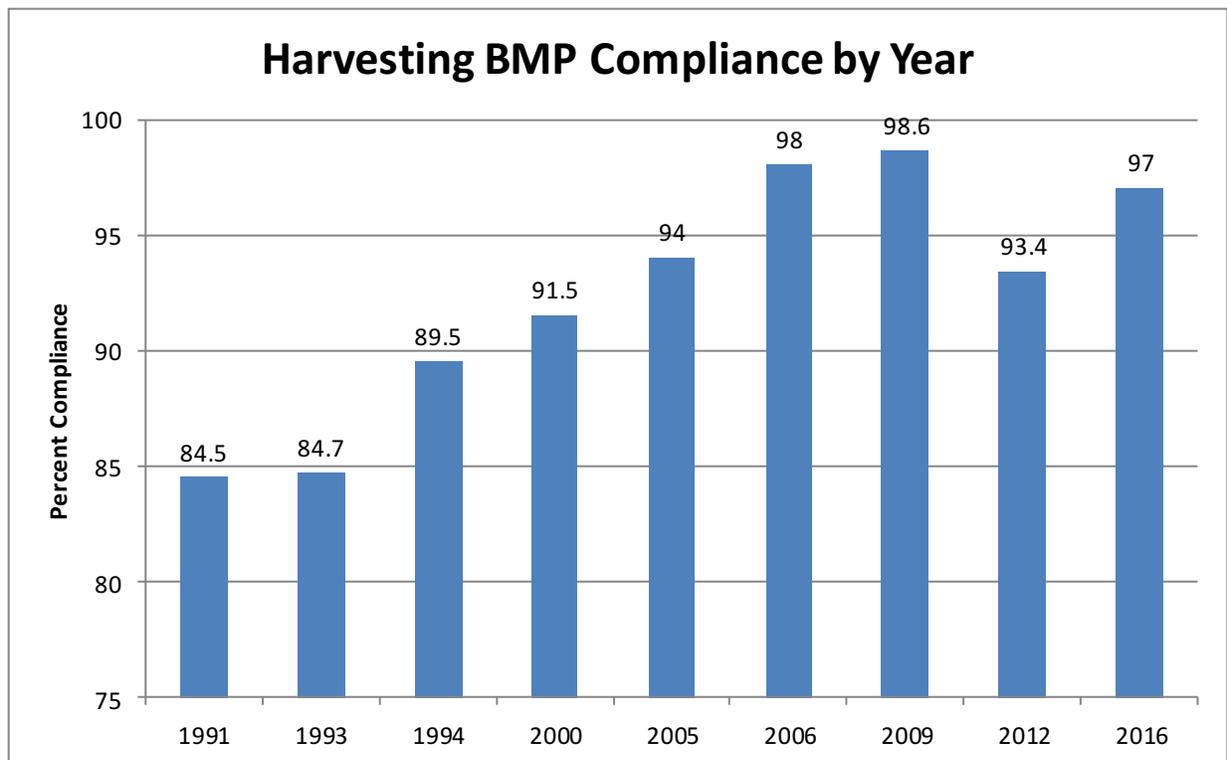
The Environmental Management Section is responsible for the development and implementation of South Carolina Forestry Commission programs that are related to the environmental protection of forest and associated natural resources. Issues that are addressed include the protection of water quality, site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

BMP Compliance and Implementation Monitoring

BMP monitoring in South Carolina is conducted in accordance with the Southern Group of State Foresters Water Resource Committee's *Silviculture Best Management Practices Implementation Monitoring – A Framework for State Forestry Agencies* published in 1997 and revised in 2002. This ensures consistency among the thirteen states in the southeastern United States.

The latest monitoring survey was conducted in the spring of 2016. Rather than using aerial detection, survey sites were located using LandSatFACT, a forest cover change detection tool developed by the North Carolina Forest Service. This method saved the agency approximately \$5,000 in flight time alone.

One hundred ninety-nine visits were made to sites that had been harvested within the prior year to evaluate BMP compliance and implementation. BMP Compliance for timber harvesting was found to be 97% which marks an improvement over the 2012 survey.



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, 34 training programs were held across the state reaching 934 loggers, landowners, contractors, and forest resource professionals. Included in these meetings were thirteen workshops for the Timber Operations Professional (TOP) logger training and education program.

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 this fiscal year, the BMP Foresters provided assistance during 967 visits to 467 sites and completed 233 courtesy exams. BMP Foresters also conducted 21.5 hours of aerial observation for active forestry operations and responded to 29 complaints.

Environmental Issues and Ecosystem Services

The Environmental Management Section monitored issues related to endangered species, wetlands, ecosystem services, EPA's proposed waters of the U.S. (WOTUS) rule and its' proposal to require permits for forest roads, and biomass harvesting. Comments providing information to the EPA concerning the efficacy of the agency's BMP program concerning compliance to BMPs for forest roads were submitted during the comment period in February 2016.

BMP Foresters are available to provide information and assistance to SCFC personnel, forestry professionals, and landowners. This assistance may include site visits, cooperation with other agencies, and assistance on state lands. BMP Foresters also provide forestry expertise to organizations and agencies addressing policy and regulation related to these issues.

Cooperation with Other Agencies

Programs related to environmental protection of forest resources require close cooperation with other agencies. The S.C. Forestry Commission has a Memorandum of Understanding with S.C. Department of Health and Environmental Control (DHEC) addressing cooperation on water quality issues. The Environmental Management Section serves as technical authority on silvicultural activities, and cooperates with DHEC on evaluation and remediation of possible impacts. In March 2010 SCFC entered a Memorandum of Understanding with the US Army Corps of Engineers to better serve forest landowners and jointly address silvicultural issues in jurisdictional wetlands. BMP Foresters often work with DHEC and the U.S. Army Corps of Engineers when those agencies have regulatory authority over issues which may affect forestry operations, such as wetlands and navigable waterways. BMP Foresters also provide assistance with planning and implementation of Best Management Practices on public lands managed by other agencies.

TECHNOLOGY DIVISION FY2015-2016 Accomplishments

This Division comprises the Information Technology Section, Geographic Information Systems (GIS) Section, Communications Section, and Dispatch Operations Section.

INFORMATION TECHNOLOGY

The Information Technology Section is responsible directly and indirectly for the maintenance, support, and security of the agency's local and wide area networks; nineteen (19) Windows servers; network storage devices; 300 computers and laptops in use by over 190 employees; software applications; and implementation of various initiatives to support agency operations and programs.

Major accomplishments this fiscal year was the hiring of an IT technician, evaluation and slow rollout of Microsoft new operating system Windows 10, the installation of a mobile device management solution, computers at each Unit and Regional offices for field employees to use for online training courses, migration of the Incident Management Team's Incident Qualification System (IQS) application and servers from DTO to the Forestry Commission, and work associated with the state mandates for implementation of policies, procedures, roles and responsibilities associated with information security and data privacy.

The agency purchased 7 desktops, 22 laptops, and 3 tablets in FY2015-2016 to support newly filled positions, refresh older equipment, or to support online computer training of field personnel.

In response to the hacking of the Department of Revenue computer system, thirteen (13) information security policies have been issued that all state agencies are required by Budget Proviso 101.32 to implement by July 1, 2016. Budget Proviso 117.132 required the agency to complete an information and security technology survey to the Division of State Technology by October 1, 2015. Each employee was tasked to complete an online cybersecurity awareness training course this fiscal year and will be an annual training requirement.

GIS

With assistance from the GIS Coordinating Council, the agency is receiving updated parcel, ownership and 911 address and road data from all of the counties in the state. The GIS Section merged individual county data into Unit administrative area layers in the agency's GIS Server and in formats to be utilized in other GIS applications. This information saves the agency time and money by allowing personnel to identify property ownership and boundary lines without having to visit individual county tax offices.

Leaf-off, color infrared aerial photography was acquired during the winter of 2016 for 12 counties in South Carolina. In cooperation with these counties and the vendor, imagery for Allendale, Bamberg, Barnwell, Clarendon, Greenville, Hampton, Jasper, Kershaw, Lee, Pickens and Beaufort counties will be received in July or August and imagery for Aiken County later in 2016.

A graduate level GIS internship program with the University of South Carolina was established in 2006. This program provides an opportunity for students to be exposed to state government activities and utilize GIS technology in a real world setting. During FY2015-2016, the intern position was collecting longleaf pine information and entering it into a spatial database; updating layers for the agency's computer aided dispatch system; and GIS support of various forest and fire management programs.

The GIS section helped coordinate and host in February the Southern Group of State Foresters GIS Committee Annual Winter Meeting.

In collaboration with the Southeastern Partnership for Forests and Water, the GIS section provided analysis for the selection of priority watersheds in South Carolina that will target stakeholders in those watersheds for conservation efforts.

South Carolina is the pilot for LandSatFact, a project using satellite data for quick detection of landscape change. Working with the BMP section we have analyzed 340 sample sites across the state.

The GIS section deployed with the IMT for the Columbia flood relief efforts.

The GIS section produced a GIS training course and taught the course at locations across the state.

COMMUNICATIONS

The agency maintains approximately 555 mobile radios, 7 base stations, 29 repeaters, and 300 portable radios. The Communications Section also supports the 19 communications consoles and related systems in the 3 regional dispatch centers and at Columbia Headquarters.

Corbin Mountain Repeater was relocated to the communications tower at the Spartanburg Office due to interference issues from a new radio trunking system for the Henderson County, NC Fire Department. This was the “least expensive” option and allowed time to investigate other sites to relocate the repeater.

The Andrews Repeater site was under 9 feet of water from the October 2015 floods associated with Hurricane Joaquin. Damage was limited to the repeater and electrical system at the site which both had to be replaced.

Forty (40) additional Kenwood portable radios were purchased this year. These were needed to rebuild inventory due to radios lost or destroyed over the years and to support an increase of 10 additional suppression unit operators hired in recent years.

Most of the agency’s repeater sites have been in service for over 20 years. Utilizing Federal grant funds, the antennas and coax cables at key sites were replaced or upgraded. Sites completed this fiscal year included Wallace and Andrews repeaters. Huger and Neeses repeater sites and the Lodge Communication site are to be upgraded in early FY2017. Stevens Federal Grant funds were used to purchase replacement repeaters at Union and Huger.

DISPATCH OPERATIONS

The Forestry Commission operates three (3) dispatch centers that handle between 26-55,000 phone calls annually for burn notifications and reporting of wildfires. The agency’s dispatch operations utilizes commercial, “off-the-shelf” dispatching software from Logistic Systems, Inc. This system incorporates many of the features and functionality of 9-1-1 dispatch systems. This system determines the closest available resource based on road mileage and travel speeds; automates the notification of personnel of wildfires; alerts dispatchers when certain dispatching timeframes are exceeded; and automates the compliance issues with smoke management regulations on forestry, wildlife and agricultural burn notifications.

As a performance measure in the Forestry Commission’s Accountability Report, the average time from receiving the wildfire call and assigning a firefighter (i.e. Dispatching) has been cut in half compared to the old software average - prior to FY2006 (see table below). The processing of smoke management notifications has also decreased by 40% compared to the FY2005 average. These time savings can be attributed to the new dispatch software’s automation of dispatching and compliance with smoke management guidelines.

Summary and Comparison of Dispatch Times For Fiscal Years 2004 through 2016													
TIMES	Fiscal Year Average Dispatching Times (Minutes)												
	2004	2005	2006*	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dispatching	5.10	6.33	4.18	3.56	3.53	3.22	3.13	3.39	3.28	3.57	3.38	3.23	2.37

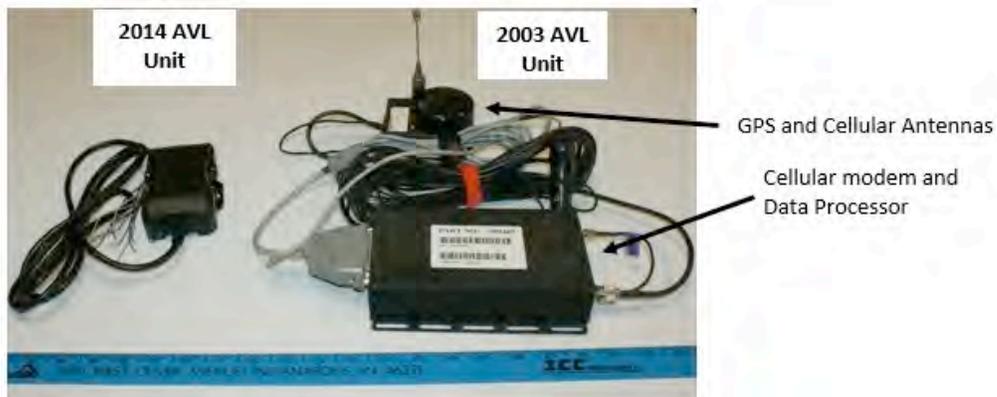
*New software implemented in FY2006

Summary and Comparison of Smoke Management Notifications Processing Times for Fiscal Years 2004 through 2016													
TIMES	Fiscal Year Average Notification Processing Times (Minutes)												
	2004	2005	2006*	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Processing Time	4.16	4.61	3.49	2.81	3.00	3.13	3.21	2.97	2.94	2.99	2.70	2.98	3.06

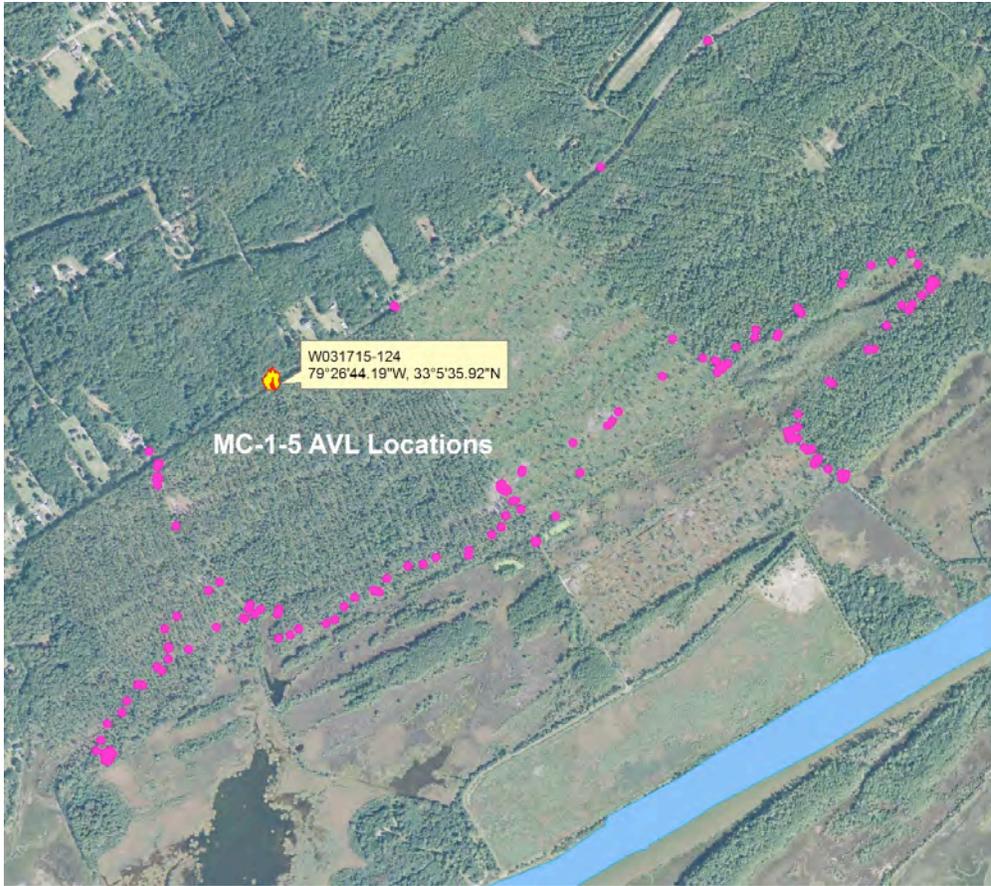
*New software implemented in FY2006

The computer aided dispatch system (CADS) also allows for real-time access to wildfire, prescribed fires, and resource activity by Fire Managers and Fire Information Officers for command and control functions and media requests. Current smoke management burn notifications and wildfires are available to the public on the agency's website in a web mapping application. This information is updated every 10 minutes.

A second pilot using current automatic vehicle location (AVL) technology was implemented in 2015. Implementation costs have dropped by 85% since AVL technology was first looked at by the agency in 2005. During a typical day, most of our field personnel work alone. Analyzing dispatch data for Fiscal Years 2010 through 2014, 60% of all dispatches to various incidents and 56% of dispatches to wildfires involved only a single agency employee being on scene. Incident locations are based on what the caller provides and could be a mile or more off from the actual employee's location. Should our employee become ill or injured, AVL technology can improve the ability to locate them when shrouded in smoke or especially at night.



Improvement in AVL technology over the last 10 years. New AVL devices are smaller with self-contained GPS and cellular antennas. Also included in the smaller package is a lithium-ion battery as a backup power source.



CADS location of wildfire and AVL data from suppression unit on scene. AVL data of suppression units can provide detailed information on suppression tactics and help in acreage determination.

ADMINISTRATION DIVISION

South Carolina Forestry Commission Financial Statement, FY2015-2016		
CARRY FORWARD - July, 1 2015	\$ 9,388,644	
REVENUES		
State Appropriations	\$ 15,366,655	
Federal Grants	\$ 3,423,586	
Earmarked Funds		
Hunting & Fishing License	\$201,952	
Refund of Prior Year Expenditure	\$5,727	
Burning Assistance Fee	\$255,163	
Fire Lane Fee	\$109,221	
Timber Marking Fee	\$2,513	
Training Conference - Registration Fee	\$5,150	
User Fee - State Park & Forest	\$102,900	
Forest Product Assessment	\$930,850	
Construction of Water Bar	\$1,440	
Stand By for Prescribed Burning	\$7,515	
Sale of Seedlings	\$289,328	
Sale of Timber	\$2,602,685	
Conviction Surcharge	\$16,029	
Other Penalties, Cost & Settlements	\$143	
Rent - Residence	\$13,340	
Rent - Farm Land	\$55,412	
Rent - State Owned Property	\$52,629	
Rent - Equipment	\$25	
Contributions & Donations	\$8,579	
Insurance Claims	\$32,629	
Sale of Services	\$20,643	
Sale of Nursery and Farm Products	--	
Sale of Recycling Material	--	
Sale of Vehicles (Capitalized)	214,782	
Sale of Machinery and Equipment (Capitalized)	52,084	
Sale of Buildings (Non-Capitalized)	--	
Sale of Land (Capitalized)	--	
Sale of Other Assets	--	
Insurance Premium Taxes - Firefighting Equipment	3,265,949	
Capital Reserve Funds - Firefighting Equipment	1,876,533	
Total Earmarked	\$10,125,489	
Total Revenue	\$28,915,730	
EXPENDITURES		
State	\$15,684,237	
Federal	\$3,697,769	
Other	\$9,433,268	
Total Expenditures	\$28,815,274	
Balance as of June 30, 2016	\$9,489,100	(1)

(1) Firefighting equipment ordered during Fiscal Year 2015 was not received by the end of the fiscal year, therefore those expenditures will reflect in Fiscal Year 2017 increasing the year-end balance for FY2015-2016.



South Carolina Forestry Commission

ORGANIZATIONAL CHART

