# South Carolina Forestry Commission FY 2021-2022 ANNUAL REPORT



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# STATE COMMISSION OF FORESTRY

# **Members of the Commission**

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Jesse Neville, Walhalla

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Charles Segars, Jr., Sumter

Eric Smith, Summerville

Dr. Keith Belli, representative for Dr. James P. Clements, Clemson University

# **Administration**

Scott L. Phillips, State Forester

Tom Patton, Deputy State Forester

Cathy Nordeen, Director of Administration

# Mission

Protect, promote, and enhance South Carolina's forests for the benefit of all.

# **Vision**

Healthy forests, resilient communities, impeccable service

<u>Values</u> Safety, Integrity, Community, Service, Commitment

# FOREST PROTECTION

This section encompasses the 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 2,103 wildfires that burned 16,677.9 acres of forestland and grassland during the fiscal year.

In FY2020-21 wildfires destroyed 18 homes and damaged 12 others. In addition, 94 other buildings were destroyed and 15 buildings were damaged. Agency firefighters saved 603 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 FY2021-22 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, SCFC resources were mobilized to assist Texas under the Compact. No resources were dispatched in FY 22 under the Compact.

# SC EMERGENCY MANAGEMENT DIVISION

SCFC personnel, including incident management teams, participated in several emergency response training sessions throughout the year. Members of the IMT participated in a wildfire seminar and a State full scale exercise with EMD and SC Highway patrol. assisted the SC Department of Health and Human Services in the operation of a Statewide 3 month Covid Vaccination clinic in response to the Covid-19 pandemic.

# 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 and 2,000 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. In May of 2022, a one-daytraining event was held at Manchester State Forest with SC Army National Guard Blackhawk units to cross train personnel from both agencies on the use and direction of aerial firefighting resources.

# **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: 8487 Fire Departments requested \$326,820324,359worth of firefighting equipment of which 75666 fire departments were funded for \$258,314.250,438.

# 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 and SCFC personnel have requested. The total value of inventoried federal excess property (including both FEPP and FFP) now stands at \$26,400,510 for 740 items, most of which are assigned to Volunteer Fire Departments. During the fiscal year there were 4 FEPP Auctions/GSA Sales. A total of 74 items were sold for a purchased value of \$91,568. 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.

# 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 this fiscal year for wildfires, but did participate in coordination meetings with the NWS.

# **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. This five-year agreement was renewed in November, 2018. 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 did not respond to any fires 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, and provided support for the Council, as well as presentations, for the annual meeting held virtually in September, 2021.

# 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. Forestry Commission 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 Forestry Commission and to ensure consistency among three multi-disciplinary (non-SCFC) Type 3 IMTs located in 3 SLED regions of the State. The IMT assisted the Clemson Universities Division of Livestock and Poultry Health with a Statewide Avian Flu outbreak exercise. The IMT also prepared for and handled the Southern Group of State Foresters annual meeting that was held in Greenville. The type 3 Regional team was dispatched to Allendale County to assist with a tornado that touched down in that area.SC Department of Health and Human Services in the operation of a 3 month Covid vaccination clinic in response to the Covid-19 pandemic. IMT members also worked with Clemson Livestock & Poultry Health staff in support of a national exercise to be held in late 2021, and developed plans for the Southern Blue Ridge TREX that was scheduled for the fall of 2021.

#### 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 22 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. Annual maintenance was completed on SCFC owned weather stations in October and November of 2021.

Inches of preci	Inches of precipitation, FY2021-2022 (GHCN-D 5km data)									
Month	Precipitation (inches)	Departure from normal								
July	6.76	-1.41								
August	5.72	-0.87								
September	4.60	=0.69								
October	3.74	-0.61								
November	1.93	0.83								
December	3.27	0.43								
January, 2021	3.86	037								
February	2.44	0.95								
March	3.92	035								
April	4.37	-1.54								
May	3.31	0.19								
June	3.33	1.64								
Total	47.25	1.80								

Source: National Climate Data Center

Inches of precipitation, last five years (GHCN-D 5km data)									
Fiscal year Precipitation (inches) Departure from normal									
2017-18 45.44 -1.98									
2018-19	2018-19 55.42 7.78								
2019-20	57.02	9.08							
2020-21	46.05	0.81							
2021-22	47.25	1.80							
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 FY2021-2022 are as follows:

Readiness levels, by region									
Readiness level/Region	Coastal	Pee Dee	Piedmont						
Readiness 1 (no wildfire danger)	0 days	0 days	0 days						
Readiness 2 (Low wildfire danger	196 days	54 days	286days						
Readiness 3 (Moderate wildfire danger)	163 days	301 days	73 days						
Readiness 4 (High wildfire danger)	6 days	10 days	6 days						
Readiness 5 (Extreme wildfire danger)	0 days	0 days	0 days						

#### BURNING BANS AND RED FLAG FIRE ALERTS

Two Red Flag Fire Alerts were issued in FY 22. On March 7,2022, a statewide Red Flag was issued due to elevated fire danger and high wind gusts. The Red Flag was lifted on March 8 for most of the state, but remained in place until March 9 for all counties in the Pee Dee Region. after conditions improved. Another Red Flag was issued for the entire state from March 26-30, 2022 due to forecasted low relative humidity and higher than normal wind gusts, and was lifted as relative humidity increased and increqasing cloud cover and moist air moved into the state. No State Forester's Burning Bans were issued during this fiscal year.

# **Dispatch and Air Operations**

# DISPATCH

Forestry Commission dispatch centers use a commercial computer aided dispatch (CAD) software to document calls for service, notifications for prescribed fires, generate fire reports, tracking resource availability, and identifying the closest available resources when wildfires occur. Dispatch centers are located in each administrative region, located in Walterboro, Florence, and Newberry.

#### AVIATION

During the year, SCFC pilots flew 10 different Federal Excess Property aircraft for a total of 304 missions for 776 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. This year, SCFC pilots flew a total of 776 hours (Coastal- 127 hours, Pee Dee-393 hours, Piedmont- 256 hours.

#### **Prescribed Fire**

# CERTIFIED PRESCRIBED FIRE MANAGER PROGRAM

Five Certified Prescribed Fire Manager Programs were conducted during the year with 111 participants. This course focuses of planning prescribed burns to comply with mandated air quality standards.

Prescribe	Prescribed burning for forestry, wildlife and agriculture, FY2019-20												
Forest understory Forestry site prep Wildlife Agriculture													
Region	Number	Acres	Number	Acres	Number	Acres	Number	Acres					
Coastal	1627	123,701	959	7,450	1,267	94,572	943	16,374					
Pee Dee	820	38,813	921	4,789	925	46,552	1,079	16,534					
Piedmont	657	64,511	1,022	4,085	320	13,609	410	3,579					
State Total	3,104	227,025	2,902	16,324	2,512	154,733	2,432	36,487					
		Total forestry.	wildlife & aq	riculture burns: 10	).950 for 434	.568 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 Berkeley, Aiken, Oconee, Spartanburg, York and Chester Counties. Large-scale Community Wildfire Protection Plans (CWPP) were initiated for Horry, Berkeley and Oconee Counties. The Paris Mountain CWPP is mostly completed, and the Indian Creek CWPP is still in process. These "landscape" plans will involve multiple counties, and municipalities, and cooperation between multiple agencies. Submitted application for funds from the Community Wildfire Defense Grant (CWDG) as part of the infrastructure bill to fund CWPP creation efforts in Berkeley, Horry and Oconee Counties. Notification should be received by late 2022 whether or not application is approved. 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, 10 Firewise presentations, community and homeowner workshops with ~175 in attendance due to social distancing guidelines. . Presentations included information about Firewise and the Ready, Set, Go! Program and general SC Wildfire risk and mitigation strategies.. 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) were not used this year, howeverSCFC personnel did attend 9 public events to spread our prevention and mitigation efforts to the public Fuels mitigation plans, workdays and assessments were conducted throughout the state. SCFC has conducted a total of 1468 community assessments to date with 1413 of those rating at moderate to extreme wildfire risk. 63 new assessments of communities were completed across the state. There continued to be discussions and progress in finalizing large scale Community Wildfire Protections Plans for Charleston and Berkeley counties. Oconee county and the city of Seneca are also showing interest in the CWPP as well. To date 248 Community Wildfire Protection Plans have been written in which 795 communities have benefited.

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

National Fire Plan grant funds were awarded to 35 communities in the amount of \$178,481.38 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 fuelbreak

installation for a total of 2,128 acres for \$191,066.37. WUI and region personnel were able to substantially increase fuel mitigation projects for private landowners.

# WILDFIRE PREVENTION

A statewide wildfire prevention awareness campaign was was implemented in the fall and declared October Wildfire Prevention Month in SC. The campaign was named Cancel Wildfires SC. Using this slogan commercials were produced and run in targeted areas across the state for the month, as well as social media and in person community event messaging. One of the main goals of prevention messaging was to promote safe debris burning, since escaped debris burns are the number one cause of wildfires in the state.

Another important event conducted during prevention efforts was Community Wildfire Preparedness Day. This is a nationally recognized day sponsored by the NFPA and it is focused on community preparedness and prevention. This year there were several events across the state. In the upstate, personnel worked with the local fire department to have a community day around the Paris Mountain area. Home assessments were conducted and met with the public to handout wildfire information. In Aiken delivered a CWPP to a community and hosted a community event to show residents how they could be prepared for a wildfire. In Georgetown, worked with a boys home to complete some fuel mitigation projects around their campus to reduce their risk from wildfire. This particular campus had a wildfire burn the forest around their borders in March of 2022, so this was a good project that will help them reduce the risk from a fire in the future.

Throughout the year personnel continued normal prevention efforts of cooperation with local fire departments and distributed "Think Before You Burn" (TBYB) promotional materials to businesses and public buildings throughout the state. 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. Some phone interviews were conducted with local media to increase public awareness.

Fires by cause, FY2021-22									
			Average Acres	Percent of Total					
Cause	Fires	Acres Burned	per Fire	Fires FY2019-20					
LIGHTNING	34	310.7	9.13	1.62%					
CAMPFIRE	16	84.9	5.30	.76%					
SMOKING	24	130.6	5.44	1.14%					
DEBRIS BURNING	1,254	9,822.8	7.83	59.79%					
INCENDIARY	291	3,232.4	11.1	13.87%					
EQUIPMENT USE	113	794.1	7.02	5.38%					
RAILROAD	20	136.7	6.38	.95%					

CHILDREN	34	97.2	2.85	1.62%
MISCELLANEOUS	192	1617.4	8.42	9.15%
FIREWORKS	7	22.6	3.22	.33%
POWER LINE	72	286.7	3.98	3.43%
STRUCTURE	40	107.6	2.69	1.90%
Totals	2,097	16,643.7	7.93	100.00%

Five-year summar	Five-year summary: all fires FY2021-22								
Fiscal Year	Acres Protected	# Fires	Acres Burned	Avg. Acres/Fire	% Area Burned				
2017-8	13,657,033	1,616	10,363.3	6.4	0.08%				
2018-19	13,657,033	995	4,836.8	4.9	0.04%				
2019-20	13,657,033	1,089	6,231.5	5.7	0.05%				
2020-21	13,657,033	1,075	7,739.8	7.2	0.056%				
2021-2022	13,657,033	2,097	16,643.7	7.9	.012%				
Five Year Averages		1,364	9,163	6.4	0.07%				

Total fires by ca	ause, b	v count	tv - F	Y2021	-22																					
		HTNING		IPFIRE		OKING	DEBBE	DIMAMA	DICTO	TOTATO	POTE	DI CEDE	DATE	DO4D	CITI	DREN		risc	WD.	WORKS	DOM	ER LINE	OTTOTAL	CTURE	m1	m1
COLINARY			1					BURNING		DIARY		PMENT		ROAD											Total	Total
COUNTY	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			8	15.6	3	4.6			1	0.3			2	7.7									15	28.3
ALLENDALE	1	0.1	3	6	51	278.8	18	243.4	1	1	11	94	2	3	1	15	1	2			2	0.8	6	4.1	97	648.2
ALLENDALE	_				4	5.5	1	1			1	10					1	3							7	19.5
ANDERSON	2	3.5			8	15.6					1	1.5			1	10									12	30.6
BAMBERG					8	15	1	20			1	11	1	2											11	48
BARNWELL					9	210.7	2	72.5					2	3.5			2	9					1	10	16	305.7
BEAUFORT					12	49.4					1	0.5			1	1									14	50.9
BERKELEY			1	0.5	31	730.1	4	19.5	2	6	14	342.2	1	40	1	10	2	3.5	2	1.5			1	2	59	1155.3
CALHOUN					7	22.8					1	0.5	1	5								1	1	2	10	30.3
CHARLESTON			2	9	3	47					1	0.1													6	56.1
CHEROKEE	1	1.5	-		7	14					4	3.3			1	0.2									13	19
CHESTER	-		<u> </u>		2	61.5	1	2							1	2.5			2	2.1	<u> </u>	1			6	68.1
CHESTERFIELD	1	10		-	23	107.9	3	7			7	69.5			2	4					-	1	1	4	37	202.4
CLARENDON	1	3	1	2.5	24	36.6	1	0.1			5	12			1	3	2	2.2	2	6.5	-	1			37	65.9
COLLETON	-	ļ	1	1.5	31	122.1	3	1.2			4	64	3	1.7			-		1	1		1	1	0.5	44	192
DARLINGTON	1	1.6			16	72.7	6	95			3	28.1			3	37						1	2	0.7	31	235.1
DILLON					6	15.3							1	0.2	5	37.3	1	2	1	2	<u> </u>	ļ			14	56.8
DORCHESTER	1	3.5			13	36.2	1	0.1			1	1													16	40.8
EDGEFIELD					5	12.1	1	52																	6	64.1
FAIRFIELD					3	3.2									2	2.5	1	0.3							6	6
FLORENCE					24	51.4	3	3.4	1	3	6	30			3	23.5									37	111.3
GEORGETOWN			1	0.5	38	587.3	4	41			10	28.1	1	15	1	0.1	1	1.5	1	20	2	22.3			59	715.8
GREENVILLE			1	0.2	8	23.8					1	1			1	0.5							1	0.2	12	25.7
GREENWOOD					3	20.6					2	62			4	23.6			3	3.2			1	1	13	110.4
HAMPTON					17	80.8	1	5			3	34	2	2.1			2	4					1	0.1	26	126
HORRY			3	1.1	17	72.9	3	8.5			6	4			1	1							1	0.2	31	87.7
JASPER					26	207.7					2	60													28	267.7
KERSHAW			1	5	20	59.5					1	12			8	19.2	3	3.5					2	1.2	35	100.4
LANCASTER			1	0.2	3	4.1					1	0.5	1	2											6	6.8
LAURENS					5	42.5							3	10.3			2	11			1	2	1	1	12	66.8
LEE					17	129.8	2	4			2	4.5			3	25.6	1	0.5					2	1.1	27	165.5
LEXINGTON	1	2.2	4	16.7	14	48.5	1	0.3			_		1	3.5	4	5.6		0.0	2	16.2					27	93
MARION					5	10.5	2	5			7	398.5		3.0	2	2.5									16	416.5
MARLBORO			1	20	10	46.7	5	100.7			<u> </u>				6	37.1	1	4							23	208.5
MCCORMICK			1	1	3	98		100.7							1	9.6	1	0.3				1			6	108.9
NEWBERRY			<u> </u>		2	3.1									1	2	2	1.5				1			5	6.6
OCONEE	1	0.5			4	10.5					3	6.2			4	151.2		1.5	1	0.2		1	1	2.5	14	171.1
ORANGEBURG	+ '	0.5	1	5	36	174.3	13	70.5			2	46			2	8	1	0.1		0.2		1	2	0.6	57	304.5
			1	5			13	70.5			2	3			3		1	0.1				1	1			
PICKENS					11 7	52.1					1					2.2						1	1	0.1	16	57.4
RICHLAND						102.8					2	2.6			2	76	_	0.0				1			11	181.4
SALUDA					6	11.5					1	5	-		1	2.5	2	2.3				1			10	21.3
SPARTANBURG	-	1	1		3	7.5	1	0.1							2	10.2	2	0.6				+			8	18.4
SUMTER	-				23	57.9					5	40.5			2	11	2	0.8	1	5	2	1			35	116.2
UNION	-	-	-	-	3	6	1	0.5	1	2	-		-	-	1	0.5	-	-	-	-	-	<del>                                     </del>	-		6	9
WILLIAMSBURG	-				55	260.9	4	46			27	347.1	2	201	2	2.1	1	0.2	<b> </b>		-	<del>                                     </del>			91	857.3
YORK					2	4					1	35			3	13.5	1	10							7	62.5
State Total	11	26	22	69.2	633	4046.8	85	803.4	5	12	139	1758	21	289.3	78	557.7	32	62.3	16	57.7	7	26.1	26	31.3	1075	7739.8

Total burning notificat	tions by county - FY2021-	22	
County	Acres protected	Smoke mgt. notifications	Other notifications
Abbeville County	248,551	101	2,719
Aiken County	524,743	372	21,701
Allendale County	199,005	256	745
Anderson County	216,023	107	15,639
Bamberg County	202,862	215	1,661
Barnwell County	266,959	178	3,102
Beaufort County	130,448	156	8,547
Berkeley County	595,291	381	17,134
Calhoun County	151,294	160	3,707
Charleston County	318,526	194	7,455
Cherokee County	168,077	39	4,086
Chester County	315,565	88	2,880
Chesterfield County	416,239	305	5,895
Clarendon County	238,952	305	5,527
Colleton County	560,896	521	10,492
Darlington County	176,333	166	8,467
Dillon County	163,935	83	2,357
Dorchester County	272,524	178	10,363
Edgefield County	279,433	186	3,052
Fairfield County	408,433	164	2,490
Florence County	308,707	195	9,989
Georgetown County	400,136	307	9,372
Greenville County	296,082	100	14,965
Greenwood County	205,593	65	3,930
Hampton County	303,663	390	2,380
Horry County	493,012	244	20,881
Jasper County	341,036	399	2,846
Kershaw County	376,376	156	14,331
Lancaster County	291,845	191	4,819
Laurens County	337,499	77	5,023
Lee County	121,735	169	1,588
Lexington County	256,939	219	30,474
Marion County	226,896	69	5,497
Marlboro County	226,676	59	3,271
McCormick County	223,394	95	1,081
Newberry County	334,566	120	3,555
Oconee County	292,590	85	13,445
Orangeburg County	446,887	503	12,724
Pickens County	236,029	49	13,392
Richland County	352,904	118	7,723
Saluda County	196,376	187	1,912
Spartanburg County	286,496	92	10,134
Sumter County	268,338	161	11,121
Union County	277,640	40	465
Williamsburg County	407,761	548	6,898
York County	293,768	102	12,802
Total	13,657,033	8,895	362,637
Total Smoke Mgt. &		-,500	32,00.
Other Notifications			371,532

# Equipment

	ACT 273 Budget		
Number	ltem	Per Unit	Extended
1	Western Star Truck Tractor	\$117,219.00	\$117,219.00
10	Western Star Transport	\$115,340.00	\$1,153,400.00
10	Truck Bodies	\$28,325.00	\$283,250.00
1	F-450 Service Truck	\$64,073.00	\$64,073.00
9	Fire Plows	\$20,392.00	\$1183,528.0017,719.00

Capital Reserve Fund \$100,000.00

**TOTAL** \$1,284,576.00

Equipment Budget

	Equipment buaget		
Number	Item	Per Unit	Extended
1	Holden Lowboy Trailer	\$31,683.00	\$31,863.00
4	Slip-on Units	\$13,930.00	\$55,720.00
9	Cat D2 Dozers w/Winch	\$160,272.00	\$1,445,148.00
3	Cat D2 Dozersw/Plow	\$162,920.00	\$488,760.00
2	Front Mount Winch	\$13,600.00	\$27,200.00

 Sand Hills
 Manchester

 \$87,618.50
 \$87,618.50

**Auction Budget** 

	rtaction Dauget		
Number	Item	Per Unit	Extended
1	Prinoth Fire Track	\$200,063.53	\$200,063.53
1	Ford F-150 (WUI)	\$27,721.00	\$27,721.00

**FFP Budget** \$5,962.50

# Economic Development Budget

Number	Item	Per Unit	Extended
1	Ford F-250	\$32,262.00	\$32,262.00
1	Ford F-150 (FIA)	\$29,857.00	\$29,857.00

	Sand Hills		
Number	Item	Per Unit	Extended
2	Ford F-150	\$32,500.00	\$65,000.00

	Manchester		
Number	Item	Per Unit	Extended
1	Ford F-150	\$31,912.00	\$31,912.00

The Forestry Commission prepared and organized equipment for auction. The auction process now takes place exclusively online at <a href="www.govdeals.com">www.govdeals.com</a>. The sale of equipment netted the Forestry Commission approximately \$954,035.87.

# Law Enforcement

During FY 2022 the Forestry Commission had 42sworn Law Enforcement Officers statewide. Four of these were investigators that focused primarily on complex timber theft, timber fraud and woods arson cases.

Officers prosecuted 90 fire cases, 4violations of state forest regulations, 8 miscellaneous cases and 4 game and fish cases. Total fines collected were \$24,027.50. Fines collected from these cases are retained in the county where the offense occurred.

Forestry Commission Law Enforcement Investigators investigated 98 timber theft/ fraud cases which represented a loss of \$211,949.60 to the victims. Investigators collected and returned 75% or \$159,415.37 to the affected landowners. During the year there were 436 fire investigations conducted with 246 of them escaped debris burns. There were 26 Burn Site Inspections and 36 Smoke Management Investigations and 214 warning tickets issued.

In May 2021, Governor McMaster signed H3541 into law, clarifying the State Forester's Burning Ban and providing the ability for SCFC officers to issue warning tickets. Law Enforcement staff worked to develop warning tickets and to provide training for SCFC officers. The use of formal warning tickets allow officers the option of issuing a formal, written warning ticket instead of a citation or verbal warning in situations where it is appropriate.

# FOREST MANAGEMENT

There are 12.9 million acres of commercial forestland in South Carolina. According to 2018 National Woodlands Owner data (<a href="https://www.fia.fs.fed.us/nwos/results/">https://www.fia.fs.fed.us/nwos/results/</a>), 87% of South Carolina's forests are privately owned, 60% of private forests are family-owned, and 47% of these owners live on the land. Forest industry has sold much of its forestland during the last 20 years and now owns only 329,600 acres (2.6%), which is a 38% increase from 2013 but down 85% since 2000. Public agencies (municipal, county, and federal) control 13% 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, 1,241 management plans were prepared for 70,719 acres. Beginning in July of 1999, customer satisfaction surveys were sent to every landowner that received a forest management plan. In FY22, 100% of the landowners that responded to the survey indicated that they were satisfied with the management plan they received. Of these landowners, 100% also indicated that they intended to complete most or all 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 61 cases were referred to consulting foresters and 3 were referred to industrial foresters.

	Non-Co	Non-Cost-Share		Cost-Share		Forest Stewardship	
County	Exams	Acres		Acres	Plans	Acres	
Abbeville	20	1059	28	1848	4	796	
Aiken	6	408	10	543	1	45	
Allendale	0	0	10	736	0	0	
Anderson	6	284	26	867	1	82	
Bamberg	2	168	5	306	0	0	
Barnwell	0	0	11	413	0	0	
Beaufort	5	142	1	21	1	251	
Berkeley	14	811	6	487	0	0	
Calhoun	2	174	9	709	1	46	
Charleston	17	1090	67	134	3	133	
Cherokee	0	0	7	195	0	0	
Chester	4	212	15	632	0	0	
Chesterfield	13	627	78	2989	1	750	
Clarendon	4	80	9	410	2	283	
Colleton	19	985	62	2580	4	401	
Darlington	10	385	29	1468	1	127	
Dillon	5	349	15	501	0	0	
Dorchester	5	227	8	496	2	59	
Edgefield	7	607	11	795	4	1016	
Fairfield	12	1223	20	1000	1	237	
Florence	21	1770	37	1029	5	323	
Georgetown	6	352	25	1090	2	653	
Greenville	4	351	6	118	2	121	
Greenwood	22	1112	24	1149	4	563	
Hampton	3	238	16	905	0	0	
Horry	15	671	16	401	1	103	
Jasper	1	99	4	151	0	0	
Kershaw	7	336	38	1205	0	0	
Lancaster	4	249	11	686	2	363	

State Totals:	376	21999	789	35885	76	12835
York	2	93	10	634	2	643
Williamsburg	23	1827	29	1542	3	813
Union	5	583	10	729	0	0
Sumter	4	74	22	1064	0	0
Spartanburg	10	414	3	150	0	0
Saluda	8	913	17	538	1	181
Richland	8	246	9	276	0	0
Pickens	5	179	3	62	1	186
Orangeburg	15	578	48	1952	12	1270
Oconee	4	157	6	151	4	221
Newberry	11	989	16	901	2	363
McCormick	2	60	8	806	1	612
Marlboro	8	273	8	294	2	1358
Marion	8	358	12	218	2	233
Lexington	14	545	5	197	3	499
Lee	0	0	17	920	0	0
Laurens	15	701	23	1587	1	104

# **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. During FY22, SCFC foresters wrote 121 plans for 3,292 acres.

# Conservation Reserve Program (CRP) - Federal

The Conservation Reserve Program (CRP) began with crop year 1986 and was renewed with the passage of the 2018 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. During FY22, SCFC foresters wrote 121 forest management plans for CRP encompassing 3,292 acres.

# **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. EQIP is administered by the USDA Natural Resources Conservation Service, with the SC Forestry Commission providing technical assistance for forestry practices. During FY22, SCFC foresters wrote 130 forest management plans for EQIP encompassing 6,458 acres.

# **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. This program is funded by the USDA Forest Service and is administered in South Carolina by the SC Forestry Commission.

Statewide accomplishments for SCFC-administered cost-share programs, FY2021-22  -Reforestation and timber stand improvement							
Program	Number of Landowners	Acres Planted	Acres of Prescribed Burning	TSI Acres	Acres of Commercial Thinning	Acres of Precommercial Thinning	Cost Share Payments
FRP	264	11,718	269	136	0	0	\$1,031,663
SPB	77	2664	147	0	1,875	164	\$289,999
Totals	341	14,382	416	136	1,875	164	\$1,321,662

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 64.3% of customers were satisfied with the assistance they received initially, and the follow-up survey indicated that 87.3% were satisfied with the assistance received at the end of the process.

# FRP monitoring

The purpose of monitoring FRP applications is to fulfill the agency's regulatory responsibility regarding maintenance of FRP practices. SC Code of Laws 48-28-80 requires that landowners

who receive FRP cost-share assistance maintain the land in a forested condition for 10 years or until a commercial harvest. SC Code of Laws 48-28-50 requires the SCFC to initiate recollection of FRP cost-share funds if a landowner does not meet the requirements of SC Code of Laws 48-28-80. SCFC Procedure 3214.17 was established to provide guidance regarding the monitoring of FRP practices.

Due to Covid-19 social distancing requirements, and since FRP monitoring can largely be done remotely viewing aerial photography, during FY21 the Forestry Commission completed 2 years' worth of monitoring, including FY22, to ensure foresters were able to work, checking 617 sites for compliance with FRP maintenance requirements. Six sites, comprising 193 acres, were found to be out of compliance and recollection of the cost-share funds was initiated. Because the FY22 monitoring was carried out during FY22, no additional monitoring was done in FY22.

# Seedling survival

Survival checks were made on cost-share plantings using a row count or 100th acre plot method for determining survival. An average of all survival checks was used to determine the statewide survival of 84% for loblolly pine plantings. Survival rates for longleaf pine plantings were tabulated separately. Plantings with longleaf seedlings had a survival rate of 81% 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 FY22.

# Forest Stewardship Program

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 forestry consultants in South Carolina to encourage the long-term stewardship of non-industrial private forest lands. Landowners are provided technical assistance through the development of a multiple resource management plan for their property addressing their management objectives.

During the past year, 76 Stewardship Plans were written in South Carolina on 12,835 acres. South Carolina Forestry Commission foresters authored all these plans and recognized 1 past plan recipient as a Forest Steward during FY22.

Forest Stewardship staff also completed FSP Implementation Monitoring, conducting on the ground inspections on 24 Forest Stewardship Plans encompassing 5,039 acres. During FY22 it is estimated that 88% of all Forest Stewardship Plans are being implemented. In addition to adhering to the standard implementation monitoring protocol for FY22, 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 South Carolina (see table below). In FY22 we also evaluated whether 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 South Carolina the SFFI classifies that 8% of all family forest landowners owning 10+ acres are highly engaged. Results from Forest Stewardship Implementation Monitoring indicate that 38% 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.

Management Outcome	Percent Implemented as Result of Plan
Timber Harvest	50
Tree Planting	29
Prescribed Burning	13
Wildfire Prevention Activity	33
Invasive Species Control	25
Wildlife Habitat Enhancement	54
Utilized Cost Share Assistance	13
Used Stewardship Plan to Qualify for Farm Bill Program	0
Used Forest Stewardship Plan to Qualify for Third Party Certification (Tree Farm, etc.)	0

Not enough landowners returned customer surveys in FY22 to have a meaningful analysis. Landowners are emailed a link to the survey after receiving their Forest Stewardship management plan. The lack of results is due to a low response rate and a glitch in the survey that has since been corrected. FY23 should provide enough results for a meaningful analysis.

# 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 FY22:

**Firebreak Plowing** - performed by Forestry Commission employees using agency equipment for \$140 for the 1st hour and \$85 for each additional hour. In FY06, separate rates were established for firebreaks constructed with a heavy tractor. For FY22, 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 \$25 per acre for understory burns and \$35 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 FY22.

**Prescribed Burning Standby** - an agency tractor and employee on standby at a burning site for \$80 for the 1st hour and \$40 for each additional hour while the landowner performs burning under an approved plan. The minimum charge for this service was \$120.

**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.

**Extracting Mired Forestry Equipment-** performed by Forestry Commission employees using agency equipment for \$200 for the 1st hour and \$120 for each additional hour using a medium tractor and \$250 for the 1st hour and \$150 for each additional hour using a heavy tractor. This service is limited to equipment performing forestry services.

Forestry services accomplishments – FY22						
Service	Number of Tracts	Units of Measure	Receipts FY22			
Firebreak Plowing	481	1,123 miles	\$187,619.35			
Prescribed Burning	145	9,799 acres	\$256,215.00			
Prescribed Burning Standby	10	1,646 acres	\$3,190.00			
Equipment Rental	2	43 acres	\$225.00			
Water Bar Construction	11	127 bars	\$3,207.50			
Mired Equipment Extraction	30	-	\$7,355.00			
Timber Marking	0	0 acres	\$0.00			
Totals	679	-	\$457,811.85			

The SC Forestry Commission sends customer surveys to all landowners who receive forestry services. In FY22, 96% of the customers who responded reported they were satisfied with our forestry services and 95% of those responding indicated they plan to use our services again.

# 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 FY22, losses due to the Southern Pine Beetle (SPB) were minimal. Aerial surveys were limited to Edgefield, McCormick and Berkeley counties, areas where our spring trapping predicted there might be some activity. An outbreak that had been ongoing probably since 2019 continued on the Francis Marion National Forest and the Forestry Commission helped them salvage some of the timber to mitigate the impacts of SPB.

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 FY22 2,664 acres of pine planting at a reduced tree density was completed and 264 acres were pre-commercially thinned.

# ASIAN LONGHORNED BEETLE

On May 29, 2020 a homeowner in Hollywood, SC, discovered a beetle that was confirmed to be *Anoplophora glabripennis*, the Asian longhorned beetle. It is thought the beetle has been in Charleston since at least 2008. This beetle is an invasive destroyer of hardwoods that has been reported in New York, New Jersey, Massachusetts, Illinois, and Ohio, as well as Canada. It has been eradicated from Canada, Ilinois, New Jersey, large parts of Massachusetts and New York, so eradication is feasible. USDAAnimal and Plant Health Inspection Service (APHIS) and Clemson Department of Plant Industry (DPI) are leading surveys to map the infestation and coordinate the eradication. Quarantines restricting the movement of hardwood have been imposed, covering 76.38 square miles, though we expect it to expand soon. So far, 156,121 host trees have been surveyed on 7,616 acres, of which 6,511 host trees have been confirmed positive for infestation. By imposing a mile-and-a-half buffer around infested trees, 76.38 square miles are deemed infested.

#### EMERALD ASH BORER

As of June 2022 emerald ash borer was found in Oconee, Spartanburg, Pickens, Anderson, Cherokee, York, Greenville and Laurens counties. Emerald ash borer has also been 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. We continue to monitor stressed, dying, or dead ash trees in South Carolina brought to our attention by the public. So far, infested trees have only been detected in Greenville, Pickens, Laurens and York counties.

# 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, but is has been nine years since a walnut tree in these states has tested positive for the fungus. Clemson's Cooperative Agricultural Pest Survey (CAPS) has placed early detection traps in 12 counties and has 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. Trapping has been discontinued, but southern state forestry 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 Eichoff, 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 twenty (20) South Carolina counties: Dillon, Lee, Jasper, Beaufort, Hampton, Colleton, Charleston, Bamberg, Barnwell, Allendale, Dorchester, Marion, Orangeburg, Horry, Georgetown, Berkeley, Lexington, Aiken, Newberry, and Sumter. The beetle and fungus have also been found in Georgia, Florida, Mississippi, Tennessee, Kentucky and Alabama. Unfortunately, in the areas where the beetle has been found, there has been a large loss of redbay (up to 90% in some locations). Most infestations are now in sassafras.

# **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. However, this disease has not been detected in South Carolina since the 1980s 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 are monitored periodically to determine the rate of spread of this potentially devastating disease.

#### SUDDEN OAK DEATH

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 2022. 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.

### INSECT AND DISEASE LABORATORY

Commission foresters and Insect and Disease staff made more than 200 field checks of insect and disease problems and made recommendations for prevention and control. Other inquiries were handled by telephone, mail, and personal contact.

#### FOREST HEALTH SURVEYS

The SCFC entered into an agreement with the USFS to evaluate permanent Forest Health plots throughout South Carolina. This was carried out by the Resource Development Section and reported in their section of this annual report. 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.

# Urban & 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 USDA Forest Service to the SC Forestry Commission to administer. South Carolina received \$125,000 in federal funding through the competitive grant process (Landscape Scale Restoration).

The goal of the grant project is to create resilient coastal forests in the Southeastern US. The project will use GIS to map extent and intactness of current forest cover for several coastal communities, develop risk assessments and future forest cover projections and develop a coastal forest resiliency plan for each pilot community.

This project aided communities in better planning to meet these challenges by assessing the current extent and health of coastal forests, associated benefits provided (environmental, social and economic), risk factor assessment (development, pests and storm surge) and developed plans for meeting these challenges. This was a regional effort with South Carolina as the lead state and Georgia and Virginia as partners. The second funded LSR project is for "Healthy Trees Healthy Lives" in which all 13 southern states participated.

The purpose of the grant provided an outreach and awareness initiative where state forestry agencies shared research that supports the message that trees have a positive impact on human health with partners in the health community. South Carolina received \$10,000 from this grant to create educational videos, one geared toward children, and the other to an adult audience.. The third funded LSR project was the "Economic Impact of Urban and Community Forestry in the Southern Region."

The total amount of the federal award is \$150,000 which will fund a study for all 13 states that gathered data on the value of the resource and job creation to help solidify why investing in community forestry is essential. The region-wide analysis will coordinate with the Northeastern Area LSR grant project and help define the importance of the industry on a broader scale.

The Urban and Community Forestry program also partnered with 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. SCFC provided a speaker for the Trees SC annual conference and partnered with Trees SC to provide two SC Arborist Workshops.

The U&CF program closed out 5 grant projects to conduct tree inventories with the following communities: North Augusta, Camden, Greenville, Bennettsville, and Florence.. Also, the U&CF closed out grant agreements with: Camden, Trees SC, and Trees Greenville..completed a tree

inventory. Trees SC received funding to improve urban and community forestry content on their website. Trees Greenville received funding for a community tree planting.

The U&CF program partnered with the Green Infrastructure Center (GIC), a non-profit organization, on a Community Tree Planning and Planting Campaign. The project included partnering with Greenville, Irmo, and Summerville to assist communities with strategic tree planning and planting. This project demonstrated the use of data in planning where, when and how to plant trees, as well as where to retain canopy and how to motivate planning across both public and private sectors. GIC worked with communities to make land cover maps and planting strategy maps. A strategic planting map wasdeveloped in collaboration with municipalities, local agencies and non-profit groups.

The SCFC U&CF program partnered with GIC to develop a Planners Forest Toolkit to provide planners with a suite of policy tools and practices to expand and/or conserve forests. The Toolkit included examples of successful forest conservation policies from across SC as well as best policy practices.

The U&CF program completed a project called Canopy Coaching in partnership with GIC to assist communities with technical support to map their urban canopy, plantable areas and set urban canopy goals. Participating communities that received assistance were Richland County, Mt. Pleasant, Santee-Lynches COG, Beaufort County and Simpsonville. After the first cohort was completed, GIC worked with City of Charleston and Charleston County and provided technical support for coaching staff to work with their urban canopy.

SCFC and GIC are collaborating with state, regional and local governments, and federal and state agencies to create a strategic green infrastructure network and plan for SC. Maps of forests and other large habitats across the South have indicated that land conversion is the number one threat facing our forests and natural landscapes. Key, large habitat areas known as core habitats to identify and plan for connectivity have been mapped. The resulting GI Strategic Plan will provide new tools and planning strategies for use by state agencies and regional and local governments. All local and regional stakeholder meetings have been completed. The first state committee meeting will be held in December 2022, with another slated for early 2023. In these meetings, SCFC and GIC will present the statewide model, demonstrate how to use it, and determine other state agency priorities. SCFC and GIC will note key ideas, concerns, and areas of statewide importance for inclusion in the map and strategy.

SCFC is providing competitive matching subawards directly to communities to fund projects such as tree inventories, development of management plans, and other projects that will contribute to the management and protection of urban forests. Communities that have just completed urban forest canopy studies are: Rock Hill, Conway, North Augusta, University of SC, Clemson, Goose Creek, Orangeburg, Folly Beach, Hilton Head, Travelers Rest, Awendaw, Cayce, and Clinton. SCFC will outreach to those communities that have been historically underserved by previous urban forestry efforts, using available GIS and other data sources to identify communities that would benefit from the program and encourage them to submit applications for eligible projects. All participating communities will be provided project assistance through the Technical Assistance to Communities activity in partnership with GIC.

SCFC is waiting for community self-assessments to be returned before making decisions on requests for a full application. SCFC has currently obligated funding to the Cities of Mt. Pleasant and Summerville for urban forest management plans.

Through partnership with Plan Green initiated in FY20, SCFC continues to work with local, regional, and state partners (e.g. Councils of Government, municipal and county planners/stormwater engineers/public works, Municipal Association of SC) on issues where trees and forests can help address common objectives such as energy conservation, green infrastructure implementation, storm planning and mitigation, economic development, and air quality and stormwater management through a series of informational webinars. The training offers planning credits for planning commissioners and advisory board members and focuses on commissioner decision-making processes when reviewing tree planting and urban forest site plans. The webinar series has been developed, and three webinar sessions have been held, and the webinars are available on SCFC's website. The fourth webinar offering is near completion. The following webinars have been developed with this funding allocation: Urban Forestry and Environmental Justice: Ensuring Common Benefits for All, Food Forests and Food Security, and Invasive Species in the Urban Forest.

# 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 43 municipalities under the Tree City USA program during FY22.

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 and the Arbor Foundation recognized 3 municipally owned utilities as Tree Line USA certified in FY22.

The Tree Campus USA program, sponsored by the National Arbor Day Foundation, encourages institutions of higher learning to promote proper management of campus trees. South Carolina maintained 7 Tree Campus USA institutions in FY22.

# **Technical Assistance and Educational Program**

The South Carolina General Assembly provided state funding for an Urban Coordinator position and three Regional Urban Forester positions beginning in July 2019 which 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 FY22:

Types of technical assistance	Program accomplishments		
Program Development/Expansion	# of Entities	# of Assists	
Municipal Government	86	220	
Non-profit/trade organizations	12	90	
Educational Institutions	12	26	
County Government	44	63	
State Government	19	37	
Others	16	24	
TOTAL	217	451	

Type of Tree City Program	Number
Tree City USA	43
Tree Campus USA	7
Tree Line USA	3
TOTAL	53

Public Info/Education	Adults	Youth	Total
# Programs	18	0	18
# People	1,118	0	1,118
# Seat Hours	3,137	0	3,137

# State Forests/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 '90s with Harbison soon gaining the reputation as a mountain biking mecca for the area. A yearlong vehicle survey was conducted during FY17 which estimated 132,000 user visits during that time.

Receipts for operating budget				
Receipts				
\$0.00				
\$488.08				
\$72,020.61				
\$1,112.87				
\$0.00				
\$1,361.36				
\$1,603.75				
\$0.00				
\$76,546.67				

Note: 25% of all receipts are paid to the Richland County School System. This amounted to \$18,283.52 for the fiscal year (donations and rental income are not included when calculating the total to be dispersed to the school system).

# SILVICULTURAL PRACTICES

A total of four acres were prescribed burned as a longleaf pine demonstration area.

# FOREST PROTECTION

One wildfire occurred during this fiscal year, burning five acres. Trees that were considered hazardous to forest visitors and/or to buildings were felled.

# RECREATION/EDUCATION

Recreational use has dropped from the COVID-19 pandemic high but has stabilized above prepandemic levels. HSF was the host site for only 5 competitive events: two 50k races, one

half-marathon, one 10K race, and one mountain biking race. In addition to competitive events, HSF hosted several educational events, including Wood Magic Forest Fair, the 4H Forestry Skills Clinic, and Clemson's Women in the Woods chainsaw class.

Monthly trail workdays were conducted during FY22. These events included improving the trails by pruning overhanging branches and brush and rehabilitating 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 monthly 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." The current membership of this group is estimated at 90 individuals.

Harbison State Forest maintains two primitive campsites for boy scouts and similar groups. The campsites were used by seven groups totaling 105 campers in FY22.

The canoe landing at Harbison State Forest provides access to the Broad River. Fifteen groups filed float plans for 44 paddlers.

### WILDLIFE MANAGEMENT

Five wildlife viewing areas totaling two and a half acres are maintained each year.

# RARE, THREATENED AND ENDANGERED SPECIES MANAGEMENT

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

# RESEARCH

SC DNR continued collecting samples for the North American Bat Monitoring Program. SCDHEC and UofSC conducted a tick collection project, studying tick-borne diseases.

# **Berry Forestry Center**

The Berry Forestry Center (BFC), located in central Saluda County, encompasses 566 acres on two separate tracts, which was willed to the South Carolina Forestry Commission by Gene Berry in 2022.

Receipts for operating budget		
Activity	Receipts	
Wildlife Management Area Payments	\$0.00	
Prior Year Refund	\$0.00	
User Fees	\$0.00	
Sale of Timber	\$0.00	
Sale of Pine Straw	\$0.00	
Donations	\$0.00	
Rental of State Property	\$0.00	
Other	\$0.00	
Total	\$0.00	

Note: 25% of all receipts are paid to the Saluda County School System. This amounted to \$0.00 for the fiscal year (donations and rental income are not included when calculating the total to be dispersed to the school system).

# SILVICULTURAL PRACTICES

Forty-six acres were prescribed burned.

#### FOREST PROTECTION

No forest protections activities took place

### RECREATION/EDUCATION

The Windy Hill Rod and Gun Club retains hunting and fishing rights for 18 years on the Padgett's Pond tract and 23 years on the Murphy Farms Tract.

### WILDLIFE MANAGEMENT

Several food plots are being maintained by the Rod and Gun Club for the purpose of deer management.

# RARE, THREATENED, AND ENDANGERED SPECIES MANAGEMENT

There are several G2 and S2 species, with last known occurrences on Berry Forestry Center. These species are mainly associated with Padgett's Pond and Cloud Creek.

#### RESEARCH

No research took place.

#### **Manchester State Forest**

Manchester State Forest, located in Sumter County and Clarendon County, is currently comprised of approximately 28,764 acres. From 1939 to 1955, Manchester was leased by the State of South Carolina from the federal government and managed by the South Carolina Forestry Commission. The State received title to the property on June 28, 1955.

Receipts for operating budget	
Activity	Receipts
Wildlife Management Area Payments	\$167,912.48
Prior Year Refund	\$3,967.11
User Fees	\$17,404.00
Sale of Timber	\$372,977.69
Sale of Pine Straw	\$188,797.00
Donations	\$15.00
Rental of State Property	\$41,491.89
Other	\$19,936.45
Total	\$812,501.62

Note: 25% of all forest receipts are paid to Sumter and Clarendon County School Systems for a total of \$186,772.79 (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 440 acres were prescribed burned for wildlife habitat enhancement, hazard reduction, hardwood control, aesthetic, and site preparation purposes. Two hundred and thirteen acres were sold for final harvest cuts and 77 acres were sold for improvement cuts (thinning). 1,515One thousand five hundred and fifteen acres were sold for pine straw raking and 280 acres were placed into pine straw enhancement. Inventory data was collected on 965 plots, using a combination of fixed and variable radius, which covered 3,252 acres on 102 different stands.

The following species and number of seedlings were planted:

<u>Species</u>	Acres	Seedlings
Containerized longleaf pine	451	280,522
Bareroot loblolly pine	79	44,162

# FOREST PROTECTION

MSF had 3 wildfires during FY22 totaling 0.4 acres. Manchester personnel assisted regional personnel as well as the local fire departments with several fires which were adjacent to the State Forest as well as in- and out-of-state assignments.

# RECREATION/EDUCATION

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 1,163 daily permits and 239 annual permits. This does not include hunting or fishing users.

The Manchester State Forest director is a member of Central Carolina Technical College's Natural Resource Management 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.)

Five special use permits were issued for organized events:

- Manchester Trail Riders Fall Ride on October 30, 2021; 185 riders
- Carolina XC AMA Burnt Gin Hare Scramble on January 30, 2022; 154 riders
- SERMA Annual Sumter National Enduro on February 6, 2022; 768 riders
- Manchester Trail Riders Spring Ride on March 19, 2022; 219 riders

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# WILDLIFE MANAGEMENT

Approximately 28,000 acres of the forest are presently included in the Wildlife Management Area Program through a cooperative agreement between the SC Department of Natural Resources (SCDNR) and the South Carolina Forestry Commission.

MSF has three public dove fields consisting of 259 acres planted in sunflowers, corn, and wheat. 586 acres are maintained as wildlife openings. MSF also has a category II duck impoundment that consists of 297 acres.

Wildlife surveys are conducted in conjunction with SCDNR for fox squirrels, turkey, deer, quail, etc.

# RARE, THREATENED AND ENDANGERED SPECIES MANAGEMENT

Manchester currently maintains 5 clusters of red-cockaded woodpeckers. 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

Manchester continues to cooperate with the SCFC Nursery & Tree Improvement Section by providing sites for clone banks, seed orchards, and progeny tests.

Manchester issued one research special-use permit related to bat surveying.

# **Wee Tee State Forest**

Wee Tee State Forest, 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, U. S. Forest Service, Forest Legacy Program, U. S. Fish and Wildlife Service, North American Wetlands Conservation Act grant, Ducks Unlimited, National Wild Turkey Federation, and Anheuser-Busch. 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 as well as the opportunities it provides for recreation, forest practices and education.

Receipts for operating budget	
Activity	Receipts
Wildlife Management Area Payments	\$63,860.48
Prior Year Refund	\$640.00
User Fees	\$0.00
Sale of Timber	\$0.00
Sale of Pine Straw	\$0.00
Donations	\$0.00
Rental of State Property	\$0.00
Other	\$0.00
Total	\$64,500.48

Note: 25% of all forest receipts are paid to Williamsburg and Georgetown County School Systems for a total of \$15,965.12 (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 activities occurred in FY22.

# **FOREST PROTECTION**

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

# **RECREATION**

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

# WILDLIFE MANAGEMENT

Wee Tee State Forest is included in the Wildlife Management Area Program through a cooperative agreement between the SC Department of Natural Resources (SCDNR), and the South Carolina Forestry Commission.

#### RESEARCH

No research special use permits were issued.

# **Sand Hills State Forest**

Sand Hills State Forest (SHSF) encompasses 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 Sand Hills State Forest was transferred to the South Carolina Forestry Commission.

Receipts for operating budget				
Activity	Receipts			
Wildlife Management Area Payments	\$93,122.40			
Prior Year Refund	\$1,358.95			
User Fees	\$4,685.00			
Sale of Timber	\$649,797.23			
Sale of Pine Straw	\$3,154,520.32			
Sale of Green Pine	\$65,000.00			
Donations	\$12.00			
Rental of State Property	\$8,525.00			
Other	\$800.00			
Total	\$3,977,820.90			

Note: 25% of all forest receipts are paid to Chesterfield, Darlington, and Kershaw County School Systems for a total of \$991,656.24 (donations, prior year refunds, and rental income categories are not included when calculating the total to be dispersed to the school systems).

### SILVICULTURAL PRACTICES

During FY22, 263 acres were chemically site prepared and planted with containerized longleaf pine seedlings. A total of 721 acres were prescribed burned for wildlife habitat enhancement, hardwood control, and fuel reduction within 10 burn units.

# **FOREST PROTECTION**

Sand Hills State Forest had two wildfires totaling 13 acres.

# PINE STRAW & TIMBER

Sand Hills State Forest sells pine straw through advertised bid sales and negotiated sales. There were 7,514 acres sold on advertised bid sales for \$1,453,100.13 and 8,899 acres sold on negotiated sales for \$1,701,420.19. There was a total of \$3,154,520.32 worth of pine straw sold on Sand Hills State Forest.

In 1999 Sand Hills started a pine straw 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 pine straw production. The individual agrees to eradicate 90% of all hardwoods on a tract of land using herbicides. In exchange, they may harvest all the pine straw 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 typically offered for sale on a lump sum, sealed bid basis.

Sand Hills issued 10 new pine straw enhancement contracts for a total of 1,886 acres. At the end of FY22 there were a total of 28 active enhancement contracts that totaled 4,854 acres.

As a result of increased pine straw activity on Sand Hills State Forest, 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. The registration stickers are used for pine straw sales and for state forest users that want to access the "authorized vehicles only" truck trails. Sand Hills State Forest issued 215 stickers.

Sand Hills had a total of six advertised timber sales for 646 acres were sold for improvement cuts (thinning). These sales were sold on a per unit basis totaling \$663,405.76.

### RECREATION

Recreational use of the forest continues to be 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. Sand Hills personnel booked 220 reservations for these sites this year. An estimated 4,053 visitors\* used the campsites and trails. The number of visitors does not include day users, nor does it include any visitors from any other user group (i.e. hunters, fishermen, birdwatchers, pine straw workers, etc.). Campsites rental rates are \$15 per site for

sites with shelters and \$10 per site for those without shelters. Sand Hills received \$8,455.00 in revenue from camping.

One hundred thirty-one trail use permits were issued for horseback riding. Revenue from trail use permits totaled \$5,069.00.

Free-use permits are issued for any activity at Sand Hills State Forest that does not have a fee. SHSF personnel issued 19 free use permits this year. One of the permits were for raking pine straw for personal use and 18 were for gathering firewood.

Four special-use permits were issued for organized events.

- · Sand Hills Stampede Endurance Ride on October 30, 2021 53 riders.
- · Sand Hills Spring Fling Endurance Ride on February 26, 2022 61 riders.
- · Sand Blast Rally on March 5, 2022 89 competitors' entries with 28 cars, 22 motorcycles.
- · Ride in the Pines Endurance Ride on April 22-23, 2022 69 riders.

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 are held.

#### **EDUCATION**

SHSF staff made visits/presentations to the Darlington County Institute for Technology (9<sup>th</sup>-12<sup>th</sup> grade). SHSF also assisted with the Future Farmers of America Forestry Camp at Cherry Grove Beach, SC.

#### WILDLIFE MANAGEMENT

Approximately 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 by SCDNR.

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

## RARE, THREATENED AND ENDANGERED SPECIES MANAGEMENT

There are currently 131 managed Red-cockaded woodpecker clusters on SHSF. One hundred and twenty-one clusters were active and ten clusters were inactive. There were 120 recorded potential breeding groups (PBG's), with 120 total nest attempts. Thirteen of these nest attempts failed. Among these, two PBG's had second nest attempts that successfully produced fledglings. In all, there were 109 successful nests.

#### LAW ENFORCEMENT

Officers issued 0 citations.

#### 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 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 (PFC) 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 PCSF.

Receipts for operating budget	
Activity	Receipts
Wildlife Management Area Payments	\$21,044.00
Prior Year Refund	\$0.00
User Fees	\$0.00
Sale of Timber	\$0.00
Sale of Pine Straw	\$0.00
Donations	\$0.00
Rental of State Property	\$5,525.00
Other	\$0.00
Total	\$26,569.00

Note: 25% of all forest receipts were paid to Pickens and Oconee County schools for a total of \$5,261.00 (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 PCSF. Multiple prescribed burns were conducted on PCSF totaling 65 acres.

#### RECREATION/EDUCATION

Use of PCSF was moderate, with numerous groups and outreach programs using the facility. The gate house was rented for three days and used by 20 people. The cabin was rented for 30 days and used by 208 people. The conference center was rented for one day and used by 100 people. Two scout groups utilized the facility. The annual fishing rodeo was back with 295 participants, and the conference center and grounds were rented out for a wedding.

#### FOREST PROTECTION

No wildfires occurred on PCSF.

#### WILDLIFE MANAGEMENT

The SC Forestry Commission and the Department of Natural Resources cooperated on the planting of multiple wildlife openings & cool season plantings throughout both properties. Both tracts of the PCSF are 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.

Feral hog trapping was conducted at the Piedmont Forestry Center.

#### 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 the Piedmont Forestry Center was maintained by mowing of road shoulders and grading where needed. Daylighting of roads at Poe Creek is a joint project with SCDNR to improve wild turkey habitat.

#### RESEARCH

DNR requested permits to study occurrences of several T&E species.

#### OTHER USES

The SC Army National Guard based out of Donaldson Center uses the landing zones at Piedmont Forestry Center for military training. They operate a company each of Lakota, Blackhawk and Chinook helicopters.

The SC Army National Guard used the grounds at the Piedmont Forestry Center for a two-day training operation. Chinnok helicopters practiced heavy lifting in the open fields at the center. A refueling station and mobile communications were set up at the PFC. Approximately 45 soldiers and pilots camped and were self-sufficient during this drill.

## **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 Tree Improvement and 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**

N/A

## SILVICULTURAL PRACTICES

Personnel prescribed burned 152 acres.

## FOREST PROTECTION

No wildfires occurred on NFC this fiscal year.

## WILDLIFE MANAGEMENT

Fifteen acres of wildlife food plots were maintained with funding provided by the National Deer Association (NDA) and National Wild Turkey Federation (NWTF).

## RARE, THREATENED AND ENDANGERED SPECIES MANAGEMENT

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

## <u>Infrastructure</u>

Personnel added 9 loads of rock to improve the road system. Also, a 30' x 50' enclosed shed was added to the property.

#### OUTREACH

Niederhof hunts				
	Number of Hunt Participants	Others Attending	SCFC	Total
Deer Hunts (2 hunts)				
December Rack Pack	10	27	7	44
Oct. QDMA Military Appreciation	8	4	13	25
Total	18	31	20	69
Turkey Hunts (3 hunt)				
Youth Turkey March	3	4	4	11
March Military Appreciation NWTF	3	2	7	12
WITO Turkey Hunt	4	2	7	13
Total: 5 Hunts	28	39	38	105

State forest re	venue					
	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16
Gross Revenue	\$3,126,490	\$3,072,999	\$2,846,075	\$2,363,876	\$1,979,540	\$2,972,549
Operating Expenses	(\$1,905,16)	(\$1,813,10)	(\$1,996,717)	(\$2,084,033)	(\$1,848,539)	(\$1,921,155)
Payment to County Schools	(\$750,485)	(\$747,630)	(\$699,817)	(\$581,427)	(\$477,609)	(\$734,796)
Agency Funds Transfer	(\$837,065)			(\$53,385)		
Annual Carry Over	(\$366,224)	\$512,260	\$149,540	(\$354,970)	(\$346,608)	\$316,599
	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22
Gross Revenue	\$2,956,143	\$3,016,529	\$3,799,215	\$3,780,727	\$3,944,638	\$5,228,921
Operating Expenses	(\$1,879,296 )	(\$1,953,005	(\$1,954,788)	(\$1,720,946)	(\$2,012,778)	(\$2,094,961)
Payment to County Schools	(\$731,757)	(\$743,762)	(\$939,931)	(\$917,677)	(\$952,187)	(\$1,276,853)
Agency Funds Transfer				\$575,698		
Annual Carry Over	\$345,090	\$319,762	\$904,496	\$1,142,104	\$979,662	\$1,857,107
		Total Cur	rent Carry Over:	\$7,025,836		

# 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, as well as to the U.S. Forest Service through the Good Neighbor Authority program. This assistance consisted of cruising, marking, management assistance, and administering timber sales. The agencies and facilities assisted during FY22 were as follows:

State lands forest management assistance		
Agency	Acres	Tons
DNR		
Jocassee Gorges	40	
PRT		
Aiken State Park	212	2,700
DNR/GNA		
GNA – Francis Marion NF		
Tree Planting	44	
SPB Timber Sale 1	65	8,667
Dept. of Corrections		
Total	3,026	29,766

#### **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 USDA Forest Service and the SCFC entered into a Good Neighbor Agreement in FY19. The Forest Service contracts with the SCFC to have the agency perform / administer agreed upon forest management activities under the SCFC procedures.

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 on the State Trails Committee
- Serves on the SFI State Implementation Committee (S.I.C.)
- Facilitates timber marking with regions where possible
- Serves as the agency G.N.A primary contact
- Serves as a forest management / timber sale resource for all other agencies as well as counties and municipalities as requested

# RESOURCE DEVELOPMENT DIVISION

## **Business Development**

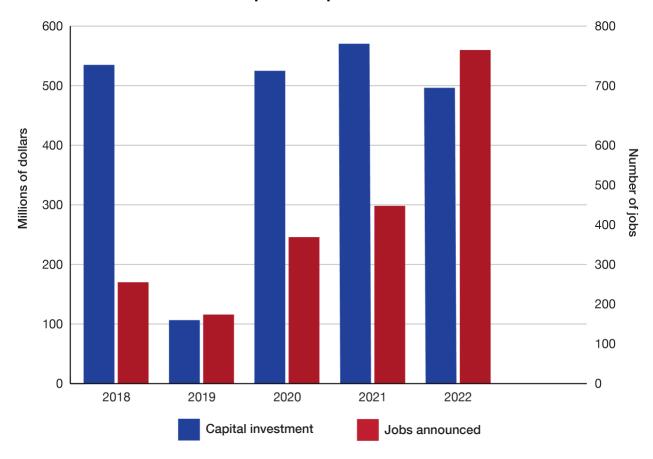
The goal of the Forestry Commission's Business Development Program is to enhance the contribution of South Carolina's forest resources and forest product-related businesses to the state's economy. We accomplish this goal by: 1) producing current forest resource information, 2) describing the health of the existing forest industry, 3) promoting South Carolina forest products to global markets, and 4) assisting as needed in the expansion of forest product manufacturing. The Business Development Group has three positions that work as a team, including a forest resource analyst, forest products marketing specialist, and industry recruitment lead.

The agency maintains directories of all primary and secondary forest product mills in South Carolina. Primary mills, such as sawmills, plywood plants or paper mills convert logs into commodity forest products such as lumber, panels and paper. Secondary plants produce value-added forest products like furniture, trusses and prefabricated structures. By the end of June 2022, there were 89 primary and 782 secondary forest product mills in South Carolina. Division personnel met with a sample of 38 primary mills as a part of the national Timber Products Output Program to estimate production levels in 2020. Early estimates indicate just under a 2% increase in production for solid wood products mills from 2019 to 2020.

During FY2022, the COVID-19 pandemic continued to impact forest products marketing in its ability to conduct domestic and international programs. In Fall, 2021, a virtual trade mission was held to match South Carolina log exporters to Indian buyers as an alternative to an inbounds trade mission. By March 2022, the Brazil Market Report was completed. The market report was distributed, and plans were in the works for an out-bound trade mission to Brazil. However, in June 2022, the Forest Products Marketing Specialist resigned to work in industry. The position has been advertised and the decision on holding the trade mission to Brazil postponed until the marketing position is filled. An Export University 101 for the forest products industry was postponed also.

Finally, the agency cooperates with the SC Department of Commerce as well as regional and local economic developers to help grow the economic contribution of forestry to South Carolina's economy. During FY '22, there were 11 announcements totaling \$497.5 million in capital investments that resulted in 767 new jobs created by the forest products industry in South Carolina. 84% of the capital investment was for three of the 11 projects, involving upgrades and expansion of an OSB plant and pine sawmill in addition to the start-up of an offsite construction company for wood-framed homes. The new industry announcements were evenly divided between manufacturing startups and expansion of existing projects with five and six announcements, respectively.

## Forest-based economic development impact



## Nursery and Tree Improvement

The South Carolina Forestry Commission owns 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. The agency actively operates Niederhof Forestry Center, but on April 2, 2018, ArborGen took over the management and operation of Taylor Nursery under a 10-year contract with the South Carolina Forestry Commission.

## **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.

During FY2017-18, the agency put out a Request for Proposals (RFP) for the management and operation of Taylor Nursery. As a result of this RFP, on April 2, 2018, ArborGen was awarded a 10-year contract for oversight of Taylor Nursery. The South Carolina Forestry Commission has retained the right to have up to five million seedlings grown annually by ArborGen for South Carolina landowners at agency-approved pricing. For the 2021-2022 planting season, ArborGen was requested to produce and market 4,121,400 seedlings under the terms of the contract.

The SCFC conducts a nursery survey annually to determine the number of seedlings planted in South Carolina. During FY2021-22, 881,342,673 pines and 508,732 hardwood and other seedlings were planted in South Carolina for a total of 81,851,405 seedlings from all nursery sources. This number is 4.4% lower than the number of seedlings planted the previous year. Tree planting has been stable recently with an average of 84.0 million seedlings being planted each of the past three years.

ArborGen distributed 3,384,021 pines and 82,530 hardwood and other seedlings to Forestry Commission customers from Taylor Nursery in FY2021-22 for a total of 3,466,551 seedlings. The total amount distributed represents 84.1% of the total number of bareroot and containerized seedlings requested to be grown at Taylor Nursery for SCFC customers. The seedlings sold under the ArborGen contract amounted to 4.2% of the seedlings distributed in South Carolina from all public and private sources.

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 ArborGen with an e-mail address. Of the 363 surveys e-mailed out, 196 (54%) customers responded. The 2022 survey indicated that 92.8% of our customers were satisfied with Taylor Nursery's seedling quality and service. Of the 42 customers who had a problem with their seedling order, 81% of the customers were satisfied with Taylor Nursery's response. The courtesy and professionalism of Taylor Nursery employees earned the highest rating of this survey (97.4% satisfied). Of the 70 customer comments on returned survey forms, 88.6% of the comments were positive about the nursery program. The main concern expressed involved poor seedling survival due to perceived seedling quality issues by 6 customers. Three customers expressed concern about miscommunication with the nursery staff.

#### **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 and a Tree Improvement Specialist 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 81,851.5 bushels have been collected. In 2004, as a result of budget cuts, a strategic change in goals for NFC resulted in the reduction of 2<sup>nd</sup>-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 2<sup>nd</sup> Generation Coastal loblolly pine orchard was harvested to provide some buffer area and expansion for 3<sup>rd</sup> Cycle Coastal loblolly pine seed orchard elite selections. Current 2<sup>nd</sup> Generation loblolly pine seed orchard acreage stands at 33.25 acres, which permits continuing interest in premier selections to be harvested for internal use and seed/cone sale revenue, while freeing up old orchard acreage for new orchard establishment in the coming years.

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 3<sup>rd</sup> cycle loblolly pine orchard and 12.4 acres of piedmont 3<sup>rd</sup> cycle loblolly pine orchard. Initial rogueing was performed across 25% of the 3<sup>rd</sup>-Cycle Coastal loblolly pine seed orchard last year to remove poorer performing selections while opening up vital space for nutrient uptake and crown establishment of selections having greater genetic value.

Cone collection for 2021 yielded 0 bushels 2<sup>nd</sup>-Generation Coastal loblolly pine, 460 bushels 3<sup>rd</sup>-Cycle Coastal loblolly pine, 872 bushels 3<sup>rd</sup>-Cycle Piedmont loblolly pine and 1,816 bushels 1.5 generation longleaf pine, and 5.3 bushels Imp. Va. pine. Of the 1,712 bushels of cones processed by the Forestry Commission, seed yields were as follows: 800 bushels of 1.5 Generation Longleaf pine cones yielded 552.10 pounds seed, 96 bushels of 3<sup>rd</sup>-Cycle Coastal loblolly selections yielded 73.20 pounds seed, and 816 bushels of 3<sup>rd</sup>-Cycle Piedmont loblolly selections yielded 576.40 pounds seed. 5.3 bushels of Imp. Va. Pine yielded 0.30 pounds seed.

NFC's annual sale of seed and pine cones generated \$232,466.97 in revenue: since 1993, Niederhof Forestry Center's advanced generation seed orchards have created additional revenue in the amount of \$3,174,172.30 from green and empty cone sales, seed sales, and sale of pine pollen. The value of this revenue does not account for the value of pine seed delivered to Taylor Nursery for internal seedling production during our operation of the nursery.

In addition to the operational orchards, the Tree Improvement Program (TIP) is also located at NFC. As a full member of the North Carolina State University Cooperative Tree Improvement Program, the SCFC is responsible for  $1/10^{th}$  of the cooperative's workload. In order to guide the program, a 5-year plan was developed in 2021 for progeny testing and other tree improvement activities. The plan created a prioritized list of progeny test sites to be used in the coming years by SCFC. To date, the TIP has established a total of 7 active progeny tests in the Coastal (2) and Piedmont (5) regions. These tests were established (2), maintained (7), and measured (2) in a timely fashion during the year.

This spring, the tree improvement program started to provide operational support at the cooperative's Arrowhead, located in Georgia, with controlled pollination for the NCSUTI breeding program and graft maintenance. The TIP members also have been planning for the establishment of a Pollen Cloud Study for the NCSUTI Program and two demonstration plantings with loblolly pine and shortleaf pine selections during Fall of 2022. The demo plantings will be used in the future on educational events to show landowners the importance of tree improvement, shortleaf pine conservation, and the genetic advancing we are making during the orchards' expansion.

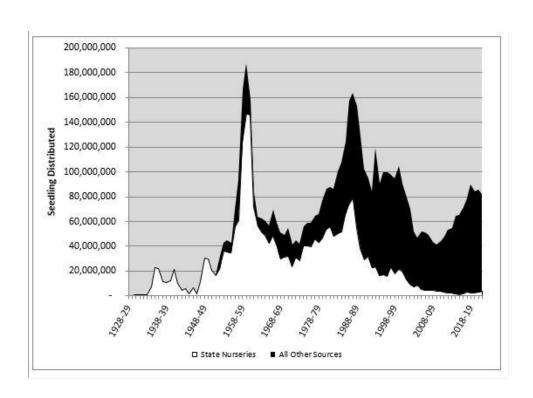
Source of seedlings distributed in South Carolina, FY2021-22				
Seedling Provider	Pines Distributed	Hardwoods & Others Distributed	Total Number of Trees Distributed	Percent of Grand Total
ArborGen (Blenheim & Taylor Nurseries in SC + others)	45,578,108	508,732	46,086,840	56.3%
Weyerhaeuser (Quail Ridge)	17,650,000	0	17,650,000	21.6%
International Forest Company (2 GA & 1 NC nursery)	13,832,065		13,832,065	16.9%
Bodenhamer Farms & Nursery	1,900,000	0	1,900,000	2.3%
Meeks Farm & Nursery	1,671,000	0	1,671,000	2.0%
Georgia Forestry Commission	547,250		547,250	0.7%
North Carolina Forest Service (Claridge Nursery)	164,250	0	164,250	%
Total	81,342,673	508,732	81,851,405	100%

Tree seedlings planted by landowner classification, FY2021-22				
Land Ownership	Pines Planted	Hardwoods & Others Planted	Total Number of Trees Planted	Percent of Total
Private Forestlands	80,175,022	487,132	80,662,154	98.6%
Public Forestlands	1,167,651	21,600	1,189,251	1.4%
Total	81,342,673	508,732	81,851,405	100%

State nursery seedling production & s	ales, FY2021-22		
Species	Seedling Quotas	Seedlings Sold	% Sold
Baldcypress	10,000	10,000	100%
Carolina Sapphire CTR	1,200	704	59%
Cedar, Eastern Red	12,000	12,000	100%
Clemson Greenspire CTR	1,200	800	67%%
Crabapple, Southern	4,000	2,970	74%
Dogwood	4,000	3,960	99%
Leyland Cypress CTR	5,000	1,504	30%
Loblolly Pine, OP Elite	1,500,000	1,447,910	97%
Loblolly Pine, OP Select	1.500,000	1,027,180	68%
Longleaf Pine Improved CTR	1,000,000	879,751	88%
Murray Cypress CTR	5,000	4,512	90%
Oak, Cherrybark	5,000	4,140	83%
Oak, Gobbler	3,000	3,000	100%
Oak, Live	3,000	1,190	40%
Oak, Northern Red	2,000	2,000	100%
Oak, Pin	2,000	1,960	98%
Oak, Sawtooth	6,000	6,300	100%
Oak, Shumard	2,000	2,000	100%
Oak, Swamp Chestnut	4,000	4,790	100%
Oak, White	3,000	3,200	100%
Oak, Willow	4,000	4,000	100%
	5,000	5,000	100%
Plum, Chickasaw	2,000	0	0%
Redbud, Eastern	2,000	1,900	95%
Shortleaf Pine	10,000	10,000	100%
Sycamore	1,000	1,000	100%
Virginia Pine Christmas Tree Stock	12,000	11,250	94%
Walnut, Black	1,000	1,600	100%
White Pine	8,000	7,930	99%
Yellow Poplar	4,000	4,000	100%
Totals	400	3,466,551	84%

# Seedling Distribution 1928-2022

200	Total State	SEE SERVICE	250.512	Total State	pers sections
Year	Nurseries	Total All Sources	Year	Nurseries	Total All Sources
1928-29	142,000	142,000	1975-76	40,664,000	59,063,000
1929-30	148,000	148,000	1976-77	39,795,000	59,238,000
1930-31	986,000	986,000	1977-78	45,735,000	64,380,000
1931-32	976,000	976,000	1978-79	43,010,000	65,937,000
1932-33	996,000	996,000	1979-80	46,375,000	76,207,000
1933-34	1,031,000	1,031,000	1980-81	53,513,000	86,420,000
1934-35	7,529,000	7,529,000	1981-82	55,728,000	87,793,000
1935-36	23,000,000	23,000,000	1982-83	47,799,000	86,265,000
1936-37	22,000,000	22,000,000	1983-84	50,170,000	
1937-38	11,192,000	11,192,000	1984-85	51,636,000	V_2/10077000134-11480
1938-39	10,854,000	10,854,000	1985-86	65,465,000	
1939-40	12,244,000	12,244,000	1986-87	73,555,000	V(10000170017007101114)
1940-41	21,165,000	21,165,000	1987-88	78,788,000	The state of the s
1941-42	10,275,000	10,275,000	1988-89	55,052,000	
1942-43	4,742,000	4,742,000	1989-90	38,356,000	
1943-44	5,663,000	5,663,000	1990-91	29,297,000	
1944-45	1,963,000	1.963.000	1991-92	31,984,000	N. 50 miles (1995)
1945-46	6,402,000	6,402,000	1992-93	22,665,000	
1945-40	1,963,000	1,963,000	1993-94	23,286,000	0.000.000.000.000.000.000
1947-48	11,357,000	11,357,000	1993-94	16,154,000	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	15,000,000,000,000,000,000	Control of the contro		Control Control Control Control	S2.7625Ch DC 2027Gh
1948-49	30,389,000	30,339,000	1995-96	16,841,000	50.000000000000000000000000000000000000
1949-50	29,502,000	29,502,000	1996-97	16,058,000	202001570001300077110000
1950-51	20,615,000	20,615,000	1997-98	23,278,000	157733555555555
1951-52	16,619,000	16,619,000	1998-99	17,955,000	(/_nscalinglinglinglingling
1952-53	22,036,000	32,246,000	1999-00	21,524,000	200,000,000
1953-54	36,210,000	42,852,000	2000-01	20,095,000	ACC 275/3/201900
1954-55	35,373,000	45,182,000	2001-02	13,500,000	300 P. CARLO P. CHELLE
1955-56	34,414,000	42,932,000	2002-03	9,376,000	
1956-57	55,754,000	69,659,000	2003-04	7,202,000	
1957-58	60,846,000	93,369,000	2004-05	8,563,000	1 T + O 10 T
1958-59	123,985,000	166,351,000	2005-06	5,437,000	V2374/423 CV254/30 0 CO
1959-60	147,146,000	187,516,000	2006-07	4,206,000	PATRONES DE L'ESCO.
1960-61	145,609,000	158,331,000	2007-08	4,539,842	49,320,517
1961-62	71,892,000	83,844,000	2008-09	4,739,783	
1962-63	56,191,000	64,202,000	2009-10	3,762,989	41,549,345
1963-64	51,446,000	62,424,000	2010-11	3,629,610	44,374,915
1964-65	49,010,000	60,683,000	2011-12	2,922,880	47,468,239
1965-66	42,311,000	56,529,000	2012-13	2,091,256	53,342,588
1966-67	48,575,000	69,598,000	2013-14	2,125,576	54,971,881
1967-68	39,970,000	58,812,000	2014-15	1,473,558	64,582,487
1968-69	29,529,000	51,453,000	2015-16	1,146,389	64,998,195
1969-70	31,415,000	49,203,000	2016-17	1,902,620	71,971,811
1970-71	31,940,000	TO THE PARTY OF TH	2017-18	3,265,745	
1971-72	23,678,000	5500,000,000,000	2018-19	2,284,917	89,767,176
1972-73	30,978,000		2019-20	2,621,548	84,510,019
1973-74	28,443,000		2020-21	3,015,294	85,632,616
1974-75	40,082,000		2021-22	3,466,551	81,851,405
The second secon	e Nurseries	2,604,586,558		2,100,231	22,032,403
Total All		5,795,205,913			



SCFC active seed orchards		
Orchard Type	Years Established	Acres
Creech Seed Orchard/Manchester State Forest		
Genetic Diversity Archives (Clone Banks)	1977-1983	19.7
Virginia Pine 1.0 (Creech)	1980	1
Virginia Pine 1.0 (Manchester)	1986	2
Sawtooth Oak 1.0 Seedling	1990	2
Total	1332	30
- 10		
Niederhof Seed Orchard		
Genetic Archives, 3rd Cycle	2008-2009	4.2
Coastal Loblolly Pine 2.0	1985-1988	33.2
Longleaf Pine 1.5	1988-1990	30
Loblolly Pine Breeding Orchard 3.0	1997-2003	7.2
Longleaf Pine Seedling Seed Orchard	1998	8
Coastal Loblolly Pine 3.0	2005-2011	16.1
Piedmont Loblolly Pine 3.0	2005-2011	12.4
Total		111.1
Piedmont Seed Orchard		
Virginia Pine 1.0	1993	3
Northern Red Oak Seedling Seed Orchard	1993-1995	2
Total		5
Grand Total		146.1

## 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. In addition, there are 224 intensification plots that are located on the Sumter and Francis Marion National Forests. 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 U.S. 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 2021. Phase 2+ plots include additional measurements that are collected to provide data on forest vegetative structure, down woody material, and tree crowns. Phase 2+ plots were not collected during the summer of 2022 due to the program being behind in production in the current panel and the next panel of plots not being started until fall of 2022.

Currently, three full-time inventory crews, consisting of two employees each, are stationed throughout the state with field offices in Newberry, Florence, and Columbia. An additional temporary position, to aid in data collection production, was located in Columbia. The temporary position was vacated in August 2021 and not replaced. The program coordinator is stationed in Columbia. All crewmembers are required to exceed a minimal accuracy average of 87% for all inventory plots. U.S. Forest Service personnel conduct quality assurance and quality control checks, on a sample of plots, to ensure the accuracy of the data collected by Forestry Commission field crews. During FY 2021-22, the average accuracy for all crewmembers was 97.29% with each crewmember exceeding the 87% yearly average required by SRS.

During FY 2021-22 a total of 421 Phase 2 sample plots were completed by Forestry Commission crews with 17 Phase 2+ plots being a subset of these plots. SRS completed 1 plot. The FIA program has completed 84% of the fifth panel of the Cycle 12 inventory of data collection. The FIA program completed 25 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, 35 FIA plots were collected on the Sumter and Francis Marion National Forests as intensification plots.

Of the 13 southern states, South Carolina was the first state to complete the 8th inventory (2001), the 9th inventory (2006), the 10th inventory (2011), and the 11th inventory (2017).

Subsequently, South Carolina is the first state in the nation to initiate the 12th inventory. The SCFC FIA program is slightly behind schedule to complete the 12th inventory measurements in five years due to program vacancies and employee lost time associated with the Covid-19 pandemic. The Cycle 12th inventory is expected to be completed fall 2022.

## **Environmental Management**

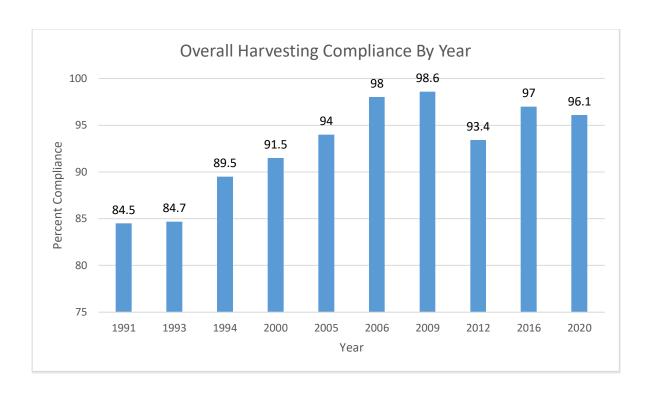
The Environmental Management Section is responsible for the development and implementation of South Carolina Forestry Commission programs that are related to the environmental protection of forest and associated natural resources. Issues that are addressed include the protection of water quality, site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

Sites for the 2019/2020 monitoring study were located in November 2019 using SouthFACT, a forest cover change detection tool developed by the North Carolina Forest Service. BMP compliance and implementation was evaluated on 179 tracts that had been harvested within the prior year. Overall BMP compliance for timber harvesting was found to be 96.1% which is a slight decrease from 97% compliance in 2016. The final monitoring report was printed and distributed in 2020.

Site location for the next round of monitoring will occur in November 2022 and site evaluations will be completed from January-March of 2023. Results from the 2023 monitoring study will be published by June of 2023.



## **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, 18 training programs were held across the state reaching 455 loggers, landowners, contractors, forest resource professionals, and the general public. In addition, the Environmental Program produced two videos for the TOP Logger continuing education video. One focused on conservation easements and the second was an overview of the SCFC portable bridge rental program. This training videos was viewed by 840 people.

## **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, BMP Foresters provided assistance during 690 visits to 373 sites and completed 271 courtesy exams. The 271 sites reported combined for 21,261 acres of timberland harvested, including clearcuts and thinnings. Approximately 84.5 miles of perennial, intermittent, and ephemeral streams were evaluated during this grant period. BMP compliance on sites visited by a BMP Forester was 99.6%. BMP Foresters also conducted 10.9 hours of aerial observation for active forestry operations and responded to 18 complaints.

## **Metal Bridge Program**

Historically, stream crossings have been the area with the lowest BMP compliance across the state. Stream crossings are critical for water quality protection since they often involve the use of heavy equipment and soil disturbance near water bodies. Temporary bridges can significantly improve BMP compliance if installed and utilized correctly, however, they are cost prohibitive for many logging crews. This year, the bridge loan program successfully assisted logging contractors across the state with stream crossing BMP compliance. The bridges were rented out to 12 contractors and were used on 15 different tracts to access approximately 2,940 acres of timberland. On each site contractors were asked how they would have crossed if the bridges weren't available. The most common response (60%) was that a debris crossing would have been installed and the remaining 40% of the time a culvert would have been used. Both alternatives have a much higher risk of water quality impacts than a portable bridge. These bridges are housed at the Walterboro and Columbia Forestry Commission office and are available to any logging contractor that needs them.

## **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 biomass harvesting. The Forestry Commission, through an MOA with the SC Rural Water Association and the Long Leaf Alliance, continued to promote source water protection in priority watersheds throughout South Carolina with a focus on the Lake Wateree, Lake Greenwood and the Savannah River watersheds. Work was focused on building a case and demonstrating that forestland is beneficial for water quality and may reduce water treatment costs. Emphasis was also placed on encouraging collaboration with forest landowners, residents, drinking water utilities and the industries that use these watersheds as a drinking water source. The Environmental Management Section is also involved in several other initiatives and collaborations including but not limited to, the South Carolina Forests and Water Initiative, the Southeastern Partnership for Forests and Water, and the Keeping Forests initiative. In addition, BMP Foresters remain involved in the state water planning efforts by serving as Agency Representatives on the River Basin Council in the Edisto, Pee Dee, and Broad River basins. 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.

# **COMMUNICATIONS & PUBLIC INFORMATION**

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.

## Public Relations & Information

#### **Information services**

## MEDIA RELEASES

The Communications & Public Information Division wrote and distributed 14 press releases and/or media advisories on a wide range of topics, including fire danger announcements, two of which were Red Flag Fire Alerts, the announcement of the agency's new website, a law enforcement arrest, SC Outstanding Educator of the Year Award winner, a partnership with the SC Department of Parks, Recreation & Tourism (SCPRT) about prescribed burns on Table Rock State Park, the agency's Junior Forester program, tornado damage assessments, State Forests Checkoff Fund, BMP compliance, payments to county school districts, SC/National Forest Products Week, Wood Magic dates and media/VIP days, and seedling sales and availability.

#### PRESCRIBED FIRE AWARENESS MONTH

March was Prescribed Fire Awareness Month, and Forestry Commission employees answered the call to help raise awareness of the practice by inviting media to their burns. From the mountains to the coast, ample coverage of prescribed burns could be found in newspapers and on radio and television, thanks in large part to ambitious foresters, fire management officers and other agency personnel who took the time and went to great effort to coordinate their schedules with reporters.

More than 20 stories from newspaper and broadcast media highlighted various prescribed burns around the state, 4 of which were TV packages that resulted from the agency's campaign to promote prescribed burning.

#### SOCIAL MEDIA

The Forestry Commission's Facebook page has 26,081 followers, including 3,370 new followers, and the agency's Twitter account has 2,193 followers, including 148 new followers. CPI staff published 292 posts on Facebook and 192 posts on Twitter, exceeding the target of one social media message/post each business day promoting the agency, forestry and industry news, events and people.

## FREEDOM OF INFORMATION ACT REQUESTS

The Director of Communications & Public Information responded to, gathered agency information and data related to (with the assistance of various division directors and program managers) and resolved nine FOIA requests.

#### **Creative services**

After nearly a year of collaboration with web development firm Beam & Hinge, the agency launched its new web presence at scfc.gov. The new site is the product of a complete makeover, in both design and content, that still offers the same helpful, information-rich experience for visitors while also being easier to navigate and locate relevant content.

Among the improvements is a slimmed-down main menu at the top right of the screen, corralling all of the same, previously available information into five primary silos, which was one of the original aims of the redesign project.

Not only is the new website sporting a much-needed facelift, but it also has a new address: scfc.gov, which now conveniently matches employee's email addresses. The website is also fluid and responsive, meaning it was engineered to present the best possible viewing experience for users, regardless of the device being used to access the site, be it a phone, tablet or desktop computer. All of the changes amount to a very user-friendly and -oriented experience, examples of which can be seen in the calls to action on the right side of most top-level pages that act as helpful prompts for people looking for information about everything from seedlings and prescribed burning to rental services and fire notification maps.

CPI staff re-ran its 13 radio and TV public service announcements on most stations across the state from March to June as part of the agency's participation in the South Carolina Broadcasters Association Public Education Program (PEP). Voiced by retired Urban Forestry Coordinator Lowe Sharpe and Piedmont Region BMP Forester Holly Welch, the commercials range in topics from the agency's multifaceted mission and our wildfire suppression responsibilities to forest management assistance for landowners as well as the overall economic impact of forestry in the state. In addition to airing on 110 radio stations and 37 TV outlets for three months, the spots were used as recruitment tools at career fairs and other expositions.

CPI staff played a lead role in planning for and hosting the SGSF 2022 annual meeting in Greenville, specifically setting up and running the registration website, producing all printed materials and designing/contracting for all graphics/signage.

#### **Publications and videos**

The Communications & Public Information Division produced a variety of publications for nearly every department and purpose this fiscal year. In addition to the ad hoc and periodic publications the division produces, which include monthly installments of the *Tree Country* employee newsletter, quarterly installments of the *Best of Tree Country* external newsletter, and annual updates of the agency's Seedling Price Guide, Project Learning Tree annual report

and Wood Magic Forest Fair annual report, CPI staff completed the following other publications and videos:

- · FY2020-21 Services brochure
- · FY2020-21 FRP/SPB cost-share brochure
- · FY2020-21 By The Numbers agency fact sheet
- · Sand Hills State Forest brochure (updates to previous publication)
- · Careers brochure (updates to previous publication)
- · Forest Health manual update
- · Agency overview/legislative budget request publication for County Board meetings
- · Tree planting guidelines
- · Project Learning Tree gate-fold brochure
- · BK M150 Radio Operation training video
- · Conservation Easements in South Carolina video
- · A Virtual Field Trip: Forest Ecosystems at Harbison State Forest educational video

## Other highlights

- CPI staff won for the sixth time in seven years awards for the Forestry Commission in the South Carolina State Library's prestigious Notable State Documents Awards program. Two agency submissions won awards in two of the three competition categories. The award-winning publication in the monograph category, *The Pinnacle Mountain Fire: A Five-Year Retrospective*, was produced by the Division of Communications & Public Information with the input and review of fire staff.
  - The second winning entry, fittingly enough in the website category, was the agency's new website, scfc.gov. The new web presence is the product of a complete makeover, in both design and content, that still offers the same helpful, information-rich experience for visitors while also being easier to navigate and locate relevant content. Everything from the design and the content to the responsiveness and functionality are significant improvements over the site we've had for more than 20 years.
  - Only 1 percent of all South Carolina state agency publications are recognized as notable documents each year. The State Library's Notable Documents Awards recognize state governmental publications of outstanding merit and usefulness to SC citizens.
- · Director of Communications & Public Information played a lead role in the planning, rollout and execution of the agency's inaugural Employee Recognition Awards.
- · Director of Communications & Public Information began term as chair of the Southern Group of State Foresters' Communications Committee.
- Designed and produced all of the tree menus and most of the other collateral printed items for a series of three Bradford Pear Bounty events held in conjunction with Clemson University, the City of Goose Creek and the City of Lexington.
- · Sold 123"Forest Trees of South Carolina" Tree ID books, collecting \$870 in revenue.
- · Exhibited at Forestry Association of South Carolina (FASC) annual meeting.
- · Secured a proclamation from the governor designating the third week in October SC Forest Products Week, a campaign that was supported with promotion to statewide media.
- · Secured a proclamation from the governor designating the month of March as Prescribed Fire Awareness Month. 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.

· Updated list of local/rural/volunteer fire departments for the Red Flag Fire Alert system.

## **Environmental Education**

Harbison State Forest Environmental Education Center was awarded the 2021-2022 Outstanding Elementary School Business Partner for Lexington-Richland School District 5 for the education outreach and SC Green Steps Schools mentoring work done by Environmental Education staff.

SCFC Environmental Education Coordinator, Matt Schnabel, and Assistant Environmental Education Coordinator, Beth Foley, were selected as the 2021-2022 SC Green Steps Schools Mentors of the Year by the Environmental Education Association of SC.

SCFC Environmental Education Coordinator, Matt Schnabel, was a speaker for the opening session, "Fire and Climate Resiliency: Healthy Forests and Community Engagement," of the 2022 Sustainable Forestry Initiative/Project Learning Tree joint conference. Matt Schnabel and SCFC Assistant Environmental Education Coordinator, Beth Foley, also were speakers for the Project Learning Tree session "Trees & Me & You."

## **Environmental Education Highlights**

- Facilitated 24 Project Learning Tree professional development events or presentations/exhibits
- · Conducted 41 education programs, reaching 3,227 people (not including the Wood Magic Forest Fair event, Project Learning Tree participants, or Teachers Tour participants)
- · Held an in-person Project Learning Tree facilitator professional development event at a past SC Tree Farmer of Year (Mike Meetze) property with a field tour
- Mentored habitat restoration and other conservation projects for White Knoll High, Dutch Fork Elementary, Saxe Gotha Elementary, HERO Homeschoolers through the SC Green Steps Schools program
- Conducted all activities for the SC Future Farmers of America (FFA) forestry camp for 32 high school agriculture education students and held the FFA state forestry competition at Harbison State Forest
- · Held the "Forestry" badge workshop for the Boy Scouts of America Indian Waters District and the "Tree" badge workshop for the Girl Scouts of America Mountains to Midlands District
- · Communication and Environmental Education staff produced three Project Learning Tree marketing banners with themes covering general program information, kindergarten through eighth-grade resources, and secondary & careers resources.

## **Project Learning Tree**

In FY2021-2022, 38 professional development (PD) events reached 478 educators.

Project Learning Tree professional development events				
Workshop Type	# of PD events	% of PD events	# Of Participants	% Of Total Participants
Early Childhood	4	11	83	17
Pre-service Early Childhood	5	13	102	21
K-8	13	34	118	25
Pre-service K-8	11	29	108	23
K-2, 3-5, & 6-8 E-Units	1	3	14	2
Secondary Modules	2	5	28	6
Facilitator Training and Refresher	2	5	25	5
TOTALS	38	N/A	478	N/A

#### **Teachers' Tour**

The 2022 South Carolina Teacher's Tour was held in Georgetown in June with 26 applicants, 25 accepted applicants, and 16 participants completed the Tour. Selection for participation was focused on the target audience of full-time certified K-12 teachers with an interest in environmental studies, life sciences, biology, tech-prep, and/or natural resource education. The Tour was five days and included 60 SC Department of Education renewal credits or 3.0 nondegree graduate credits through the College of Charleston. Participants had to complete online pre-Tour coursework about forestry and Project Learning Tree. SCFC employees and forestry partners made the tour possible by being speakers, handling logistics, and conducting demonstrations.

## **Wood Magic Forest Fair**

The 2021 Wood Magic Forest Fair was planned for 3 locations but was canceled due to the COVID-19 pandemic.

Grade Level/Age	# of events	Hours	Children	Adults
Elementary	9	10	383	38
Middle	1	5	24	10
High	1	4	56	0
College	1	2	0	7
Adults	4	9	0	63
Geocache participants			63	63
Grand Total	16	30	526	181

Grade Level/Age	# of events	Hours	Children	Adults
reschool	1	1	22	4
lementary	7	20	510	39
1iddle	6	22.5	1026	36
ligh	2	21.5	52	6
College	1	0.5		30
dults	1	0.5		20
amilies	4	17	160	165

# **TECHNOLOGY DIVISION**

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

## <u>Information Technology</u>

The Information Technology Section is responsible for the maintenance, support, and security of the agency's local and wide area networks; Windows servers; network storage devices; computers; laptops, tablets; software applications; and implementation of various initiatives to support agency operations and programs.

One of the most noticeable accomplishments was the migration to Office 365. Office 365 not only replaces a legacy on premises email server but provides better collaboration via Teams and OneDrive.

Work associated with the State's mandates for implementation of policies, procedures, roles and responsibilities associated with information security and data privacy continued throughout the year. Agency employees are required to complete the SCEIS online cybersecurity awareness training each year to maintain awareness and we have implemented the SCEIS online privacy training. The Technology Division sent periodic reminder emails and warnings of current cybersecurity threats especially telephone and text message scams and ransomware imbedded in emails and websites.

## <u>GIS</u>

The GIS Section provides support for all agency GIS needs. Hardware and software were upgraded this fiscal year along with supporting software used in day-to-day operations. Additional ArcGIS Desktop licenses and ArcGIS online accounts were created to extend mapping capabilities to additional field users. With assistant from the GIS Coordinating Council, the agency is receiving updated parcel, ownership and 911 address and road data for all counties in the state. The GIS Section merged individual county data into administrative area layers in the agency's GIS Server and in formats to be utilized in other GIS applications.

Ongoing maintenance and data updates were performed for ArcGIS online applications: Current Wildfire Activity Dashboard, Current Prescribed Burn Activity Dashboard, Wildfire Occurrence and Hotspot, and the WUI Treatment Status app.

New ArcGIS Online applications were created and maintained for Stewardship Parcel Qualification Analysis, SC Primary Mills viewer, Severe Weather (Tornado and Ice storm) viewers, and Dozer Operator/Bridge Weight Limits (beta). New Survey123 forms and reporting features were created for BMP Courtesy Exams, Ice Damage Reporting, and Tornado Damage Ground Checks.

SCFC owned properties reviewed and data provided to the Legislative Oversight Committee; 2021 NAIP imagery downloaded and statewide RGB and Infrared mosaics created; updated parcel, roads, and address point data obtained for the entire state; Preliminary analysis provided

for the acquisition of new state forest lands; new web services created for residential burn counts (abn data) and weather station danger levels (wims data)

## Communications

The Communications Section maintains approximately five-hundred fifty-five mobile radios, seven base stations, twenty-nine control stations, twenty-nine repeaters, three-hundred portable radios, and nineteen communications consoles and related systems at the three regional dispatch centers and Columbia Headquarters.

Agency VHF mobile radios were upgraded to a multi-channel higher powered radio that can operate on the public safety standard digital mode. In addition to being a current production model, it is compatible with other state and federal wildfire agencies. We have procured 275 of the needed 315 Bendix King BKR-5000 portable radios to replace the aging Kenwood radios. These new radios are more powerful and are P25 ready. This year we are replacing aging repeaters with digital capable units.

Starting in 2021, agency unit offices have more reliable, faster internet connectivity using FirstNet connected routers at these offices. We are also using this technology as backup to some repeater control stations around the state.

# **ADMINISTRATION DIVISION**

Carry Forward - July 1, 2021			\$12,595,969
			<b>4.1</b> ,000,000
Revenues			
State Appropriations	\$24,112,125	Reimbursement of PY Disaster Expenditures - Retention	\$5,616
Federal Grants	\$3,684,127	Rent - Residence	\$16,695
Earmarked Funds		Rent - Farm Land	\$48,514
Hunting & Fishing License	\$345,939	Rent - State Owned Property	\$147,110
Refund of Prior Year Expenditure	\$7,063	Rent - Equipment	\$8,819
Burning Assistance Fee	\$263,253	Contribution & Donations	\$106,322
Fire Lane Fee	\$191,530	Insurance Claims	\$46,499
Timber Marking Fee	\$520	Sale of Services	\$271,424
Training Conference - Registration Fee	\$5,600	Sale of Publications & Brochures	\$3,880
User Fee - State Park & Forest	\$94,110	Sale of Recycling Material	\$454
Forest Product Assessment	\$950,300	Sale of Vehicles (Capitalized)	\$817,803
Construction of Water Bar	\$3,208	Sale of Machinery and Equipment (Capitalized)	\$117,625
Stand By for Prescribed Burning	\$3,150	Other Operating Grants - Restricted	\$4,000
Sale of Seedlings	\$231,067	Miscellaneous Reveneu	\$300
Sale of Timber	\$4,662,865	Sale of Land	\$174,518
Conviction Surcharge	\$12,823	State Operating Grants - Restricted	\$5,040
Other Penalties, Cost & Settlements	\$500	Insurance Premium Taxes - Firefighting Equipment	\$2,067,379
		General Fund Appropriation Revenue Transfer	\$60,000
Total Earmarked			\$10,673,926
Total Revenue			\$38,470,178
Expenditures			
State	\$24,156,928		
Federal	\$3,697,711		
Other	\$7,961,029		
Total Expenditures			\$35,815,66
	Balance as of June 30, 2022		

# South Carolina Forestry Commission organizational chart

