

SOUTHERN GEOGRAPHIC AREA

ANNUAL FIRE REPORT

2003



Asheville Hotshots





The picture* around the shuttle is a dedication to the seven souls that risked their lives for humanity. The circle represents the circle of life that all of us must walk. The triangle represents the path in which each of us as human beings choose to walk. The feathers represent one for each of the souls that were on board and also carry the soul back home. The Tee-Pee represents the home from which each of us originate and will someday return. These seven souls completed their walk of life with dignity and honor.

Marcus Dominguez
Putnam Crew
Shoshoni/Bannock



Columbia Shuttle Recovery

February–April 2003

The Southern Geographic Area Mobilized More than 15,000 Persons for the
Columbia Shuttle Recovery Operation

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Preface

This document was prepared for the Southern Area Coordinating Group by the Southern Geographic Area Coordination Center, Atlanta, Georgia. Wildland fire statistics were taken from agency reports and dispatcher logs, unless otherwise noted. Resource mobilization statistics were taken from the National Interagency Coordination Center's (NICC) database, and from the Southern Geographic Area Coordination Center's (SACC) Isuite database. Individual agency reports are reprinted without modification except for those required for clarification of intent and continuity of style.

Southern Geographic Area Coordination Center



Atlanta, Georgia

Appreciation — Cover Photo

The Asheville Hotshot Crew, based in Asheville, North Carolina, provides a comprehensive wildland fire management training opportunity for personnel from all firefighting agencies. The 2003 Asheville Hotshots consisted of 17 personnel detailed from the Forest Service, the Bureau of Indian Affairs, and the National Park Service. The Southern Geographic Area appreciates the hard work and dedication of each member of the 4 Interagency Type 1 Crews based in the Southeastern States.

Southern Area Coordinating Group

The purpose of the Southern Area Coordinating Group (SACG) is to coordinate the fire management programs of participating agencies. The Southern Area Coordinating Group (SACG) is made up of the USDA Forest Service; four Department of the Interior agencies: the National Park Service (NPS), the Bureau of Indian Affairs (BIA), the Bureau of Land Management (BLM), the Fish and Wildlife Service (FWS), and the Southern Group of State Foresters.

The SACG coordinates programs of the participating wildland fire management agencies to avoid wasteful duplication and to provide a means of constructively working together. SACG's goal is to provide the effective execution of each agency's fire management program. The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions.

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Annual Fire Report

2003

Southern Geographic Area

Fire Season Review

Two major all-risk incidents occurred in the first quarter of 2003 which demanded the full-time attention of the Southern Geographic Area. The Federal Emergency Management Agency's (FEMA) *Columbia Space Shuttle* recovery mission occurred in Texas and Louisiana. The Animal and Plant Health Inspection Service's (APHIS) *Exotic Newcastle Disease* response took place in Texas. More than 15,000 personnel were mobilized through the Southern Geographic Area Coordination Center for the Columbia Shuttle incident—the largest search and recovery operation ever undertaken in the United States.

Wildfire events for 2003 were determined, for most of the Southern Geographic Area, by the El Niño oscillation of 2002. El Niño seemed bent upon making the standard rain gauge obsolete, in capacity, as record amounts of precipitation poured onto Southern Area states. As a result, the Southern Geographic Area continued a five-year downward trend in fire frequency and acres burned. Arkansas, Louisiana, Oklahoma and Texas were slightly drier than their neighboring states to the east. Wildfire occurrence and wildfire intensity reflected the drier conditions.

A red flag event on April 1, spawned several fires, the most significant of which occurred on Hot Springs National Park, Arkansas. This fire threatened a business district in the city of Hot Springs. An aggressive interagency response, both from the air and from the ground, held the *West Mountain* fire to 19 acres.

Wildfires were also detected in Oklahoma on April 1, and burned more than 10,000 acres of land protected by the Bureau of Indian Affairs. The multiple fires of April 1, 2003, fanned by red flag winds, created a need to mobilize all available fire suppression resources. Fire managers were forced to withdraw personnel and equipment from the shuttle recovery effort to combat the wildfires.



Urban-Interface Wildfire Threatens Business District Hot Springs National Park, Arkansas

During the summer and fall of CY 2003, the Southern Geographic Area was heavily involved in supporting Western wildfires. The fall season began with Hurricane Isabel (mid-September), which severely impacted North Carolina coastal lands. The North Carolina State Type 2 Incident management Team was mobilized to manage the hurricane relief effort.

The week-long *First Flight Centennial* was held in December 2003, at Wright Brothers National Memorial, Kitty Hawk, North Carolina. The centennial was held on the 100th anniversary of the first human engineered, heavier-than-air, powered flight. The North Carolina Coordination Center provided support and resources needed to make the event a success.

Pulaski Award



In February 2003, the Virginia Multi-agency Coordinating Group (VMAC) was presented with the Pulaski Award. The award is presented annually on the recommendation of the National Interagency Fire Center ...for a group's outstanding contribution to wildland firefighting and America's wildland firefighters.

The Virginia Multi-agency Coordinating Group (VMAC) is composed of representatives of the Virginia Department of Forestry, the National Park Service, the Fish and Wildlife Service and the USDA Forest Service. VMAC was recognized for its efforts in coordinating suppression and prevention activities during the 2001 fall fire season; during which fire season, more than 1,000 fires burned 11,000 acres in the State of Virginia.



Weather Summary

Wet conditions prevailed overall, with some exceptions noted, across most of the Southern Geographic Area from January through August. Significant observations:

- January: dry periods were evident across the Area.
- February: showed normal to above normal rainfall across the entire Area.
- March: a dry signature developed from the Ohio River Valley southwestward to the middle and lower Mississippi River Valleys.
- April and May: the Southern Plains were dry.
- June: the tropical season began during June 2003, with most of the Southern Geographic Area states experiencing normal and/or above normal rainfall.
- July, August and September: generally wet months, although pockets of dryness were noted in Oklahoma in July, and across the Florida Panhandle in September.
- October, November, December: the wet trend that had been in place for 12 months came to an end as a dry signature returned.

The tropical season was very active. Sixteen storms were of significant intensity to warrant naming, the most notable of which was Hurricane Isabel, which made landfall on the Outer Banks of North Carolina in mid-September.



**Hurricane Isabel Landfall
September 2003**

Pronounced dryness occurred across Oklahoma, Arkansas, northern Texas, Louisiana and the Appalachian Mountains during October. Fire risk remained low, however, due to the periodic rains that these areas received. During November, the driest areas were along the Gulf and Atlantic Coasts from Alabama to North Carolina. Coastal Virginia and a small area in South Florida were the only areas that documented precipitation levels in excess of the norm during December. For the rest of the Southern Region, precipitation gauges were under-utilized during December.

During the last quarter of 2002, the El Niño Southern Oscillation (ENSO) signature in the Central Pacific Ocean transitioned from the persistent La Niña that had been in place for the previous four years to a very weak El Niño. The ENSO signature remained as a weak El Niño during the spring and summer of CY 2003. By the last quarter of 2003, the ENSO signature had transitioned to a near-neutral state, generating a trend toward drier conditions for most of the Southern Geographic Area.

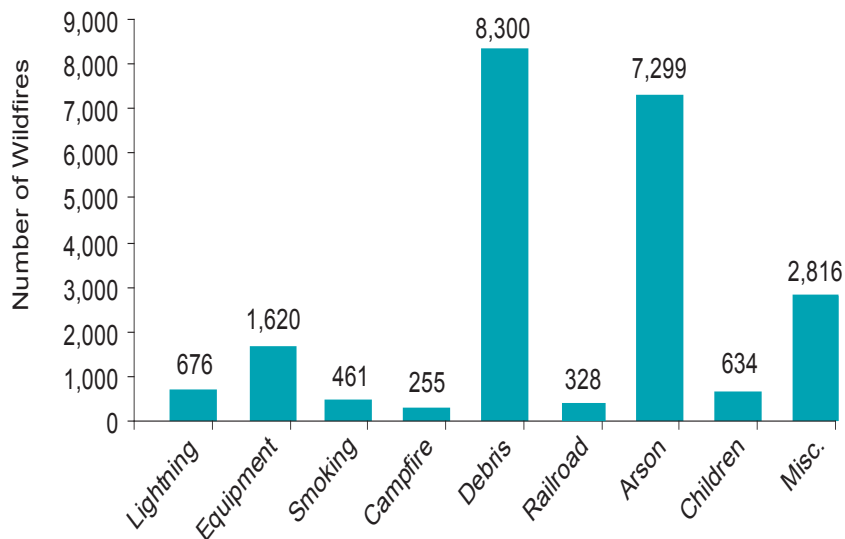
ADIOS A EL NIÑO, HOLA A LA NIÑA

Fire Occurrence Statistics

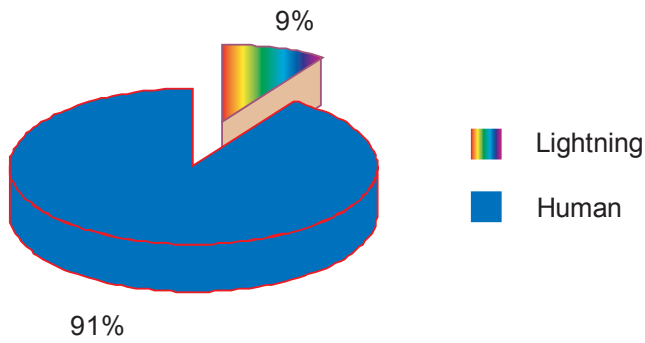
Fires By Cause: All Southern Geographic Area Agencies													
CY 2002		Lightning	Equipment	Smoking	Campfire	Debris	Railroad	Arson	Children	Misc.	Fires	Acres	Acres /Fire
Fish & Wildlife Service ^a	Fires	0	0	0	0	0	0	0	0	50	50		648
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%			
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32,403		32,403	
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%			
Forest Service	Fires	38	62	8	24	64	8	257	3	115	579		22
	Percent	7%	11%	1%	4%	11%	1%	44%	1%	20%			
	Acres	865	2,639	2	97	723	73	3,956	1.2	4,665		13,022	
	Percent	7%	20%	0%	1%	6%	1%	30%	0%	36%			
Bureau of Indian Affairs ^{ab}	Fires	1	0	0	0	0	0	0	0	181	182		131
	Percent	1%	0	0	0	0	0	0	0	99%			
	Acres	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23,842		23,862	
	Percent	0.0	0	0	0	0	0	0	0	100%			
National Park Service	Fires	66	12	4	19	7	0	13	2	101	224		331
	Percent	29%	5%	2%	8%	3%	0%	6%	1%	45%			
	Acres	2,790	465	44	4.5	129	0.0	594	0.2	70,049		74,077	
	Percent	4%	1%	0%	0%	0%	0%	1%	0%	95%			
State & Private Forestry ^c	Fires	571	1,546	449	212	8,229	320	7,029	629	2,341	21,326		12
	Percent	3	7	2	1	39	2	33	3	11			
	Acres	34,329	9,305	1,908	1,247	56,108	1,530	129,294	1,594	25,191		260,506	
	Percent	13	4	1	0	22	1	50	1	10			
Dept. of Defense ^{ab}	Fires	0	0	0	0	0	0	0	0	28	28		191
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%			
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,342		5,342	
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%			
Total Fires	Fires	676	1,620	461	255	8,300	328	7,299	634	2,816	22,389		18
	Percent	3%	7%	2%	1%	37%	1%	33%	3%	13%			
Total Acres	Acres	38,005	12,409	1,954	1,348	56,960	1,603	133,844	1,595	161,492		409,212	
	Percent	9%	3%	0%	0%	14%	0%	33%	0%	39%			

^aCategory totals not available. ^bData taken from SGA Situation Report, 12/31/03; all other data from agency fire reports or agency databases. ^cSource for State and Private 2003 Wildland Fire Statistics: USDA Forest Service 2003 *Annual Wildfire Summary*; "wfs.sum.pff."

Wildfires by Cause
All Southern Geographic Area Agencies 2003



Lightning Fires Compared to Human Caused Wildfires



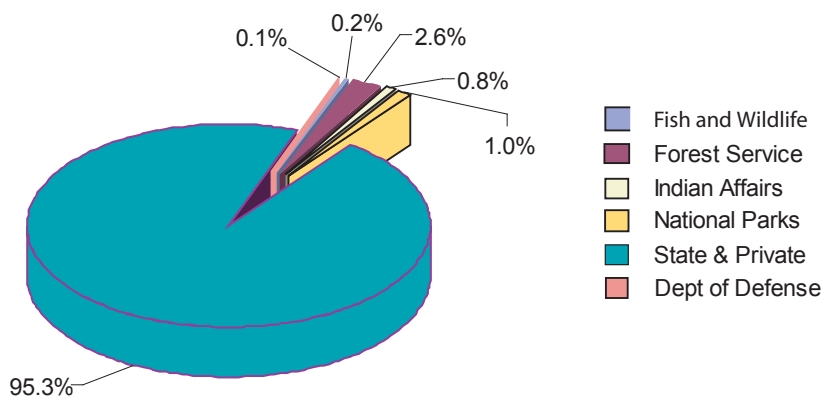
Digging Line

The Asheville Hotshots are the subject of the photos on this page, and the following page.

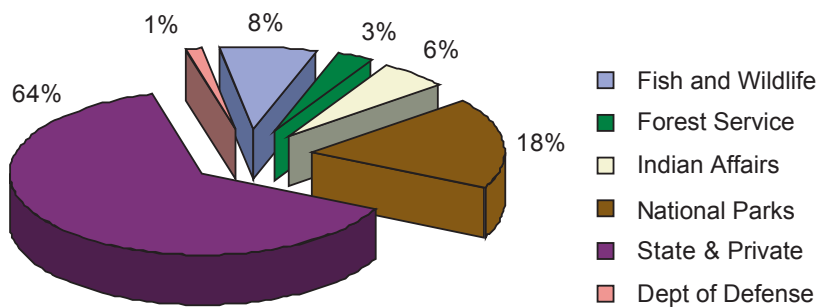


Firing the Line
Prescribed Burn

Wildland Fires by Agency

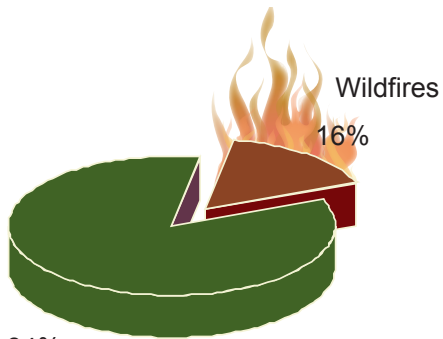


Acres Burned by Agency



Hiking the Line

Wildfire Acres Compared to Prescribed Fire Acres



84%
Prescribed Fires

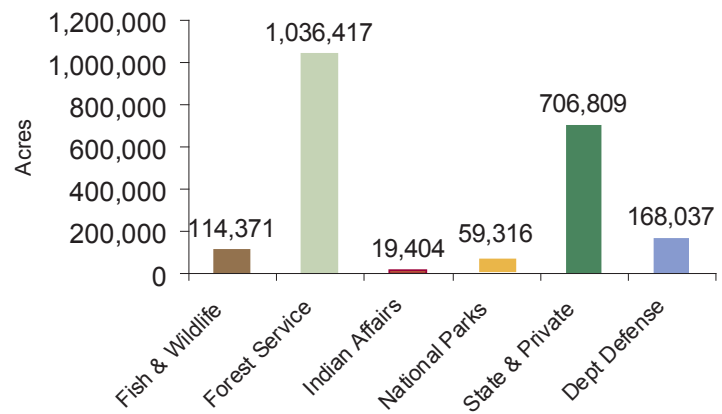


Night Firing



Monitoring Prescribed Fire

Prescribed Fire Acres by Agency



**Asheville Hotshots 2003
Southern Geographic Area**

Southern Area Coordination Center

Workload 2003			
	Winter-Spring*	Summer-Fall**	Total
Incidents Supported	168	112	280
Natural Disaster	3	14	17
Other (support, etc.)	78	33	111
Preparedness	18	12	30
Prescribed Fire	23	6	29
Training	8	2	10
Wildfire	38	45	83
Requests Filled	3,623	1,940	5,563
IMT1 (incident mgmt)	10	1	11
Shuttle Review	6	—	6
IMT2 (incident mgmt)	10	6	16
Shuttle Review	12	—	12
Aircraft	81	21	102
Hel 2	1	—	1
Hel 3	50	5	55
Fixed Wing & Recon	7	16	16
AA	11	—	11
ASM	1	—	1
Other Air Requests	18	—	18
Crews, Total	544	51	595
Type 1	61	6	66
Type 2	268	37	305
Type 2IA	—	5	5
Search Crew	157	—	157
Camp Crew	59	3	62
Resource Crew	1	—	1
Equipment ^a	9	262	271
Transportation	—	132	—
Engine	6	7	13
Miscellaneous	3	123	126
Overhead	2,990	1,593	4,583
Dispatch Positions	123	134	257
DivGrp Sup	91	27	118
Strike Team Ldr Crew	251	—	251
Tech Spec	375	326	701
Computer/GIS Spec	88	—	88

*SACC ISUITE database; **ROSS database. Note: SACC used the ISUITE database 1/1/03 through 6/7/03. ROSS was ignited on 6/8/03. ISUITE continued tracking resources through the resource demob date.

^aISUITE equipment data incomplete.

Southern Geographic Area Incident Support Cache

The Southern Area Incident Support Cache (SAK), located in London, Kentucky, processed 506 issues during calendar year 2003. This represents 3,556 line items with an inventory value of 3.5 million dollars. Returns totaled 2,899 line items with a value of 2.1 million. Six of the eight 250-person mobile cache vans, prepositioned throughout the Southern Area, were deployed, and returned to SAK for refurbishment.

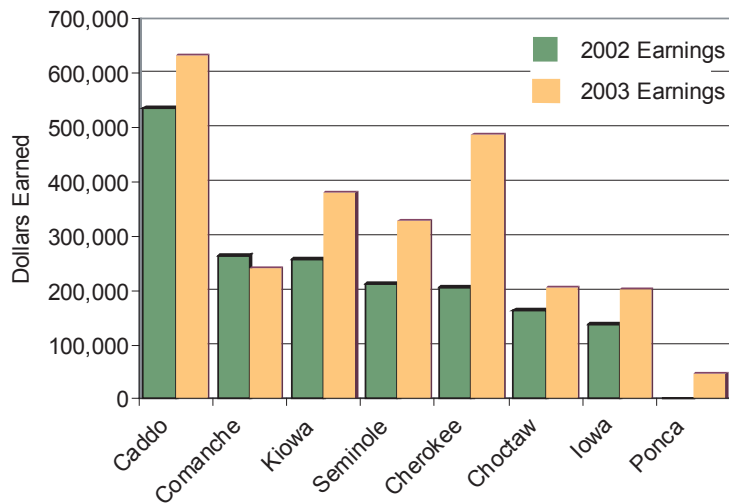


On February 11, 2003, the first shipment from SAK was shipped to Texas in support of the shuttle disaster. The cache continued to support the shuttle disaster through June 4. During this time, the cache was staffed seven days per week in support of this incident, along with various other incidents.

During the summer of 2003, SAK supported the Western mobilization with numerous shipments of supplies and equipment to some of the Western caches. Cache employees also supported the other geographic areas by accepting assignments to the Rocky Mountain Incident Support Cache.

Native American Firefighter Program

The Oklahoma Native American Program continues to grow and provide a needed pool of firefighter resources across the nation. The program is also very beneficial to the local tribal communities in terms of employment and earnings brought back into the community. The attached table is a comparison of earnings between 2002 and 2003.



Tribal Earnings 2002 -- 2003

Interagency Type I Crews

Asheville Hotshots

The detailers to the Asheville Hotshots reported to work on January 12th and were released on May 17th, having completed a tour of duty of 126 days. During this time, the crew completed 184 hours of classroom training, which consisted of 8 National Wildfire Coordinating Group courses, and training specific to the Asheville Hotshot Program. Upon completion of the training on February 14th, the crew was available for fire assignments.

The 2003 Asheville Hotshot crew consisted of seventeen employees from different agencies and regions. Fifteen crewmembers came from the Forest Service, one from Bureau of Indian Affairs, and one from the



National Park Service. Six of these were from the Southern Geographic Area, while the others were from the Eastern, Southwest, Rocky Mountain, Northern Rockies, Eastern Great Basin, California and Northwest Areas.

The crew was dispatched to 9 wildfires for a total of 17 shifts. Out of these 9 fires, 7 were in Region 8 and 2 were in Region 9. The assignments the crew performed on the fires consisted of line construction, burnout operations, structure protection, hose lays, and mop-up. In addition to the fire assignments, the crew was also used for 35 days working the Columbia Shuttle Recovery effort in Nacogdoches, Texas.

The Asheville Hotshots also worked 12 shifts on 11 prescribed burns with a total of 15,480 acres burned throughout the region. Duties included prep work, ignition and holding.

Augusta Interagency Hotshots

The Augusta Interagency Hotshot Crew (IHC) completed its second year as a fully certified Type 1 IHC. With the Southern Region experiencing below-normal fire occurrence in the spring, the crew saw limited suppression action with a short assignment in Arkansas. On the otherhand, the crew assisted with numerous prescribed burns on the George Washington and Jefferson National Forests and across the Southern Geographic Area.

After their mid-year break in June and July, the crew spent most of August and early September on fire details in Idaho and Montana; only to return home to assist in recovery efforts from Hurricane Isabel. The crew then headed back to fire suppression duty in California in October where they served on the Roblar 2 and Cedar fires.

Crew quarters (2 buildings) were constructed at the Augusta IHC base, Augusta Springs. Work is continuing on the office and training room, which should be completed in 2004.



**Augusta Hotshots
in Action**

Hurricane Isabel



**Faller
at Work**



California Wildfires



Cherokee Interagency Hotshots



During the spring of 2003 the Southeast was so wet that fire activity and fire assignments were very limited. The Cherokee Hotshots worked on Forest projects and Southern Geographic Area projects throughout the spring. In late spring the crew was detailed to Region 9 to assist with ice-storm damage cleanup projects. The crew also supported the Columbia Space Shuttle Recovery mission. Late summer provided opportunity for

several details out west. The details included three trips to the Slims fire in Idaho, and one detail to Montana. In the fall, the crew supported Hurricane Isabel relief efforts.

Jackson Interagency Hotshots

Following the completion of their annual fire training, the Jackson Hotshots were detailed to Guilford Courthouse National Military Park, North Carolina. They constructed a 30 foot firebreak around the 300 acre park. This precautionary measure will help to protect the park from any threat of disastrous wildland fire. After the North Carolina assignment the crew returned to Jackson, Mississippi, where they participated in terrorism-response training.

Lamar Liddell, Jackson Hotshot Crew Superintendent, participated in President Bush's roll-out for the *Healthy Forest Initiative* held on the White House lawn. Lamar was one of three Bureau of Land Management firefighters chosen to participate.



U.S. Fish & Wildlife Service



Fire Activity Report 2003

Region 4

General

Region 4 (Southeastern Region) had 50 wildland fires covering 32,403 acres in 2003. The largest fire occurred on the Sabine National Wildlife Refuge (NWR), and totaled 1,460 acres. A total of 358 treatments were conducted for a total of 115,267 acres. There were 334 prescribed burns accomplished for a total of 114,371 acres.

Extreme wet conditions in the Southeastern Region affected the timing of certain prescribed burns, but the Southeastern Region achieved approximately 130% of targeted prescribed burns. These wet conditions continue to provide for a management challenge to balance the prescribed burning and the wildland fire suppression programs.

The Southeastern Region was slightly busy during the spring fire season. The majority of the fires took place in Louisiana, Mississippi, and North Carolina. The total amount of fires during the spring was 20. This was a tremendous drop in wildland fires from previous years, which can be attributed to a historically aggressive prescribed burning program as well as a wetter than normal year.

The Southeastern Region is within the Southern Geographical Area. During the fall fire season there were only a couple of fires, with the largest occurring on the Sabine National Wildlife Refuge at 1,460 acres. The fall fire season was non-eventful due to the abundance of precipitation in the southern area.

Refuge	No. of Rx Burns	Acres
Carolina Sandhills	65	20,590
Merritt Island	32	19,513
St. Marks	66	15,248
Piedmont	15	8,164
Lake Woodruff	18	6,741

In previous years, the Southeastern States applied and received FEMA Fire Assistance grants in the spring and fall fire seasons. Due to the abundance of precipitation in 2003, there were no applications received during this time period. Five stations prescribe burned over 70,256 acres, even with the extreme wet conditions. These refuges accounted for 61% of the Region's prescribed fire acreage, and 58% of the total number of burns, as listed in the table below:

The Regional Director presented a Group Award to the Southeast Region's Prescribed Fire Management Team for *Sustained Excellence in Prescribed Fire Management* during FY 2002 and FY 2003. The Southeast Region treated approximately 35% of the Service's total acreage during FY 2003 for hazardous fuels reduction, and was recognized for these outstanding accomplishments.

Eastern Assistance

Support was provided locally to other agencies primarily for non-wildland fire incidents. The first incident started in February in Texas, the Columbia Shuttle Recovery. Agencies that provided support for this effort were the U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Federal Emergency Management Agency (FEMA), National Aeronautics and Space Administration (NASA), Environmental Protection Agency (EPA), the U.S. Navy and various state agencies. A number of other agencies also assisted with this effort. This incident was operated with a Unified Command staffed by FEMA, NASA, EPA, and the State of Texas. Our support to the incident concluded on May 15, 2003, after approximately three months of involvement. This was due to the possibility of the approaching spring and the southwest fire season.

Support was next provided to the National Wildlife refuges in North Carolina (Region 4) and Virginia and Maryland (Region 5). This assistance was due to Hurricane Isabel slamming the Outer Banks of North Carolina during the month of September. The North Carolina refuges sustained major and minor damages depending on exact locations, i.e. downed trees, loss of power, movement of large amounts of sand, over-washed highways and roads, etc. Over 40 personnel from the Southeastern Region assisted in this clean-up effort during the months of September and October.

Southwest and Western Assistance

With the active Western and Southwestern fire season there were approximately 100 overhead positions and firefighters that went on 14-day assignments. The Southeastern Region also supplied a few Type VI engines with crews, and the Agency Type III helicopter for these fires.

The mnemonics filled in 2003 are listed below:

HCWN	OSC1		FOBS		ENGB		EDSD		SEC1
ATGS		HECM	FFT1		FFT2		RADO	EDSP	
CORD	ICT3		DIVS		LSC2		ORDM	RESL	
CRWB	ICT2		FEMO	EDRC		IOF3		STLR	
ATGS		TPL1		PLDO		IARR		AREP	MCAD
IADP		SOF2							

Region 4 supplied 110 individuals and filled 19 overhead team personnel for wildland fires in Montana, Idaho, Wyoming, and New Mexico. Some individuals went out two or three times during the summer season. The National Preparedness Level was at *PL V* for approximately 31 days. The Southern Geographic Area deployed two Incident Management Teams and two Area Command Teams to the west for fire assignments. Three state sponsored Type II Incident Management Teams were also mobilized to Western fire assignments.

Miscellaneous

- Debbie Downey accepted the job as the Regional Fire Program Assistant in Atlanta, GA, during July.
- Pete Kubiak filled the Regional Prescribed Fire Specialist position in June. His duty station will be Atlanta, GA. Pete transferred from the Office of Aircraft Services, Atlanta, GA.
- Jennifer Hinckely transferred from the State of Florida to ARM Loxahatchee National Wildlife Refuge as the prescribed fire specialist.
- Boyd Blihovde also transferred from the State of Florida and accepted the position of wildland urban interface specialist at Merritt Island NWR.

- Howard Poitevint, Regional Wildfire Suppression Specialist, retired in December after 34 years of federal service.
- David Robinson, Forester/FMO at Carolina Sandhills NWR, retired in May after 35+ years of federal service.
- Pat Boucher, the FWS Assistant Area Coordinator has been the lead instructor on the Resource Ordering and Status System (ROSS) application and implementation for the Southern Geographic Area. She has taught six ROSS classes in various states in the Southern Area. With the cooperation of all the state coordination centers, she implemented ROSS in the Southern Area on June 1, 2003. Pat is the main contact and subject matter expert for ROSS in the Southern Area. She is also the main contact for Firecode, Unit ID's, and mnemonics for the Southern Area.

Three of our district fire management officer's (FMO) are now on the Southern Geographic Area's Type I (Red) and Type II (Blue) overhead teams. Tony Wilder, District 7 FMO, is Operations Section Chief on the Red Team; Jim Durrwachter, District 6 FMO is Operations Section Chief on the Red Team; and Glenn Stratton, Acting District 5 FMO, is Division Supervisor on the Blue Team. Two of our Regional Office staff are now on these teams as well. Bob Eaton, Assistant Regional Fire Management Coordinator, is a Division Supervisor on the Red Team, and Dave Brownlie, Regional Fire Ecologist, is a Situation Unit Leader on the Red Team.

The Southeastern Region provided two firefighters to the Department of Interior's International Assistance Program during the month of November. Tony Wilder, FMO at MS Sandhill Crane NWR, and Carl Schmidt, Forester at Piedmont NWR, both traveled to Uganda to share their expertise in fire suppression tactics with personnel from two of Uganda's National Parks. During their 3-week visit to Africa, Tony and Carl taught two courses in fire suppression techniques and developed fire management plans for the Bwindi Impenetrable National Park; one of the last remaining homes for the mountain gorilla. Both Tony and Carl were nationally recognized for their efforts by the African Wildlife Foundation and by the Uganda Wildlife Authority.

Roger Boykin and Sami Gray were each presented National Fire Plan Awards in January 2003, for their outstanding accomplishments in carrying out the National Fire Plan during FY 2002. Roger was presented the award for "Excellence in Hazardous Fuel Treatment." Sami was presented the award for "Excellence in Implementing the National Fire Plan."

United States Department of Agriculture

Forest Service



Southern Region

Fire Season Highlights

The Southern Region continued a five-year downward trend in fire frequency and acres burned. The drought, which had been the dominant fire weather event since 1998, was replaced by record amounts of precipitation, caused by the El Niño Southern Oscillation of 2002.

While El Niño kept wildfire incidents to a minimum during the spring of 2003, the Southern Region found itself coordinating and managing resources involved in the largest search and rescue operation ever undertaken in the United States—the Columbia Shuttle Recovery.

From February 1 through April 30, the recovery incident was the dominant event occupying the time and attention of Southern Region resources. Much of the recovery operation focused on the Sabine and Angelina National Forests, Texas. Coordination of the recovery incident proved to be a challenge. More than 100 federal, state and local agencies and organizations were involved, and more than 15,000 personnel were mobilized by the Southern Geographic Area.

Year	Fires	Acres	Acres/Fire
1994	1,154	49,983	43
1995	1,278	30,876	24
1996	2,062	36,100	18
1997	896	20,711	23
1998	1,268	70,887	56
1999	1,761	106,104	60
2000	1,783	75,771	42
2001	1,317	54,243	41
2002	985	29,083	30
2003	579	13,022	22

In contrast to other Southern Region states, both Arkansas and Oklahoma experienced active wildfire years (Arkansas, Oklahoma, Texas and Louisiana were slightly dry compared to their neighbors to the east). A red flag event on April 1, spawned several fires, the most significant of which occurred on Hot Springs National Park. This fire threatened a business district in the city of Hot Springs, Arkansas. An aggressive interagency response, both from the air and the ground, held the fire to 19 acres.

Wildfires were also detected in Oklahoma on April 1, and burned more than 10,000 acres of land protected by the Bureau of Indian Affairs. The multiple fires of April 1, 2003, fanned by red flag winds, created a need to mobilize all available fire suppression resources. Fire managers were forced to withdraw resources, both personnel and equipment, from the shuttle recovery effort to combat the wildfires. During the summer and fall of CY 2003 the Southern Region was heavily involved in supporting Western fire suppression efforts. In addition the Region continued to provide support to the management objectives of the USDA's Animal and Plant Health Inspection Service.

Hurricane Isabel severely impacted National Forests in North Carolina (Croatan Ranger District) and several North Carolina coastal units of the National Park Service. The North Carolina State Type 2 Incident Management Team was mobilized to manage the relief effort. The Southern Region provided chainsaw teams, resource specialists, equipment and supplies to aid in the hurricane recovery incident.

The week-long *First Flight Centennial* was held in December 2003, at Wright Brothers National Memorial, Kitty Hawk, North Carolina. The event was held on the 100th anniversary of the first human engineered, heavier-than-air, powered flight. The North Carolina Coordination Center provided support and resources needed to make the event a success.

Quantitative Description of the Weather

Calendar Year 2003 will be remembered as one of the wettest years on record. The wet trend began with the landfall of Hurricane Isidore in September 2002, and continued almost unabated through August 2003.

Dry periods were noted across the Southern Region in January 2003. In contrast, February showed normal to above normal rainfall across the entire Region. During March 2003, a dry signature developed from the Ohio River Valley southwestward to the middle and lower Mississippi River Valleys. The Southern Plains were dry in April and May. The tropical season began during June 2003, with most of the Southern Region states experiencing normal and/or above normal rainfall. July, August and September were generally wet months; although pockets of dryness were noted in Oklahoma in July, and across the Florida Panhandle in September. Periodic rains kept fire risks low from late summer into the fall.

The tropical season was very active. Sixteen storms were of significant intensity to warrant naming, the most notable of which was Hurricane Isabel. This massive storm, referred to as one of the stronger storm systems of modern times, made landfall on the Outer Banks of North Carolina in mid-September 2003. It then moved northwestward to West Virginia, Ohio, Pennsylvania, New York, and even areas of eastern Michigan and Central Canada, as far north as Hudson's Bay. Damage from Isabel exceeded \$3.3 billion, and was associated with 16 of the 48 deaths attributed to Atlantic Basin storms during 2003. The photo was taken September 16, 2003, prior to landfall (National Aeronautics and Space Administration).



**Hurricane Isabel
Prior to Landfall**

The wet trend that had been in place for twelve months came to an end during the last quarter of the year as a dry signature returned for the months of October, November and December. Pronounced dryness occurred across Oklahoma, Arkansas, northern Texas, Louisiana and the Appalachian Mountains during October. Fire risk remained low, however, due to the periodic rains that these areas received. During November, the driest areas were along the Gulf and Atlantic Coasts from Alabama to North Carolina. Coastal Virginia and a small area in south Florida were the only areas that documented precipitation levels in excess of the norm during December. For the rest of the Southern Region, rain gauges recorded less than normal amounts of precipitation for December.

During the last quarter of 2002, the El Niño Southern Oscillation (ENSO) signature in the Central Pacific Ocean transitioned from the persistent La Niña that had been in place for the previous four years to a very weak El Niño. El Niño events are typically associated with wet winters in the Southeastern United States, while La Niña events typically lead to dry conditions. The ENSO signature remained as a weak El Niño during the spring and summer of CY 2003. By the last quarter of the year, the ENSO signature had transitioned to a near-neutral state, generating a trend toward drier conditions for most of the Southern Region.

Significant Prescribed Fire Accomplishments

Southern Region prescribed fire managers were presented with challenges throughout CY 2003. Rainfall events were so persistent and repetitive in some areas that finding a prescription window was close to impossible. The Columbia Shuttle Recovery incident, Western fires, and Hurricane Isabel, while deserving of the allocation of resources, also took a heavy toll on the Southern Region prescribed fire program.

The challenges notwithstanding, Southern Region fire managers aggressively pursued prescribed burning and fuels reduction targets, taking advantage of every burning opportunity. As a result, Southern Region Forests treated more acres than in CY 2002.

Furthermore, several Forests exceeded their annual burning targets. Overall the Region treated 1,327,085 acres; a significant increase over CY 2002 prescribed fire accomplishments.

The National Forests in Mississippi continued to lead the Nation in prescribed burning. This feat required careful planning and a complex interagency coordination effort due to an intricate land ownership mosaic, the proximity of urban centers, intense recreational use and military special use activity. Three Type 3 helicopters were the primary ignition tool. *Without the helicopters the burning goals could not have been met* (Annual Fire Report CY 2003, National Forests In Mississippi).

Prescribed fire detailers from other regions proved to be an invaluable asset in accomplishing burning objectives and acre-targets in the Southern Region. Detailers played a significant role in the prescribed burning successes of the National Forests in Mississippi. They also proved their value in furthering Southern Region prescribed fire programs in Alabama and South Carolina.

The National Forests in Florida exchanged detailers with the National Forests and Grasslands in Texas. Florida fire managers also worked very closely with the National Interagency Fire Center to integrate an understanding of Florida's inherent prescribed burn needs into the national fire perspective. Florida National Forests were prohibited from prescribed burning by national planning priorities for only a brief period of time. Florida exceeded its CY 2003 targets and burned approximately 50,000 acres more than accomplished in CY 2002.



**Wildland-Urban Interface Burn
Cherokee National Forest**



**Ignition
National Forests In Mississippi**



Harrell Cabin Prescribed Burn

Prescribed Fire Accomplishments											
Forest	Fuels* Fire	Fuels Mech	BS	SP	CUS	R	T&E	WI	Total Acres	Total Cost	Cost Acre
National Forests In Alabama	75,670	0	410	—	951	—	9,541	304	86,876	—	—
Ouachita NF AR-Ok	107,066	3	—	—	—	—	—	—	107,069	—	—
Ozark-St Francis NF Arkansas	48,239	0	—	1,651	94	—	11,830	14,743	76,557	—	—
National Forests In Florida	188,654	0	—	—	—	—	350	1,086	190,090	2,907,645	15
Chattahoochee- Oconee NF GA	14,068	5	—	—	—	—	—	—	14,073	—	—
Daniel Boone NF Kentucky	4,951	0	—	—	—	—	—	111	5,062	—	—
Land Between Lakes NRRRA KY	519	0	—	—	—	—	—	—	519	28,834	55
Kisatchie NF Louisiana	111,923	340	—	260	—	—	—	37,966	150,489	1,662,300	18
National Forests In Mississippi	259,314	125	1,125	—	—	—	2,416	—	262,980	—	—
National Forests In North Carolina	22,335	0	—	—	—	—	—	—	22,335	—	—
F Marion & S NF S Carolina	51,367	0	—	—	—	220	150	—	51,737	1,423,288	28
Savannah River Site S Carolina	8,267	0	—	765	—	—	—	—	9,032	—	—
Cherokee National Forest Tennessee	16,100	335	—	240	—	—	—	—	16,675	682,042	42
National Forests & Grasslands TX	24,149	0	—	1,472	—	—	4,360	1,400	31,381	—	—
G W & Jefferson NF Virginia	9,864	0	—	—	—	—	98	1,580	11,542	333,350	34
Total Including Savannah River	942,486	808	1,535	4,388	1,045	220	28,745	57,190	1,036,417	—	—
Total Forest Service Only	934,219	808	1,535	3,623	1,045	220	28,745	57,190	1,027,385	—	—

*Rx Fire + Mech Reduction = 935,027

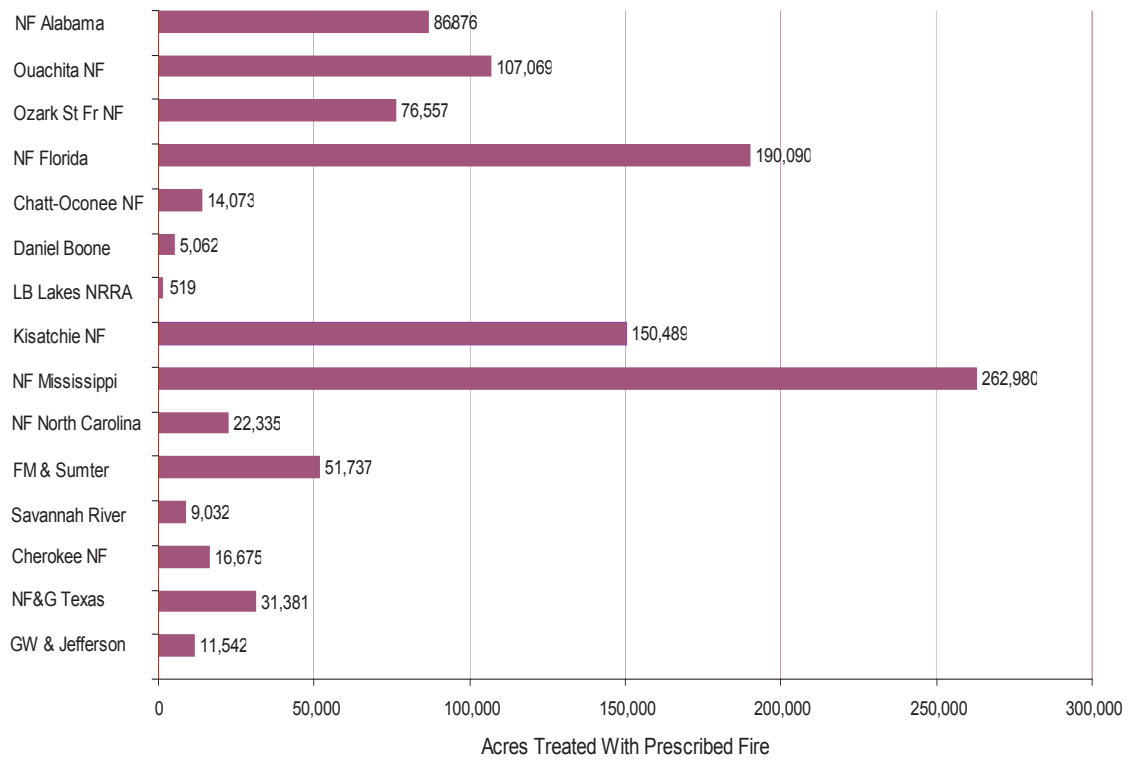


**Prescribed Fire in progress
Ouachita, Ozark & St Francis
National Forests**

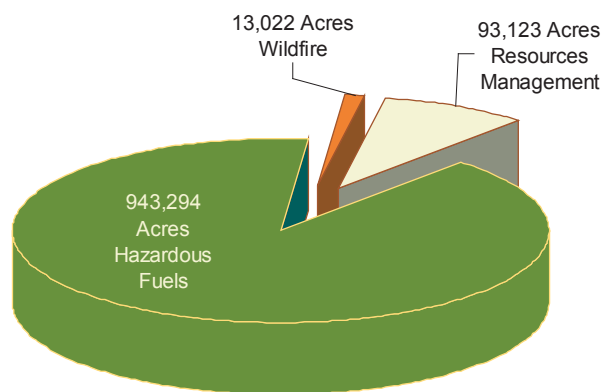


Big Ridge Burn, Arkansas

Prescribed Fire Accomplishments CY 2003



Wildfire Acres Burned Compared to Prescribed Fire Acres Burned



USDA Forest Service Southern Region

Examples of Significant Improvement in Cost Effectiveness

National Forests In Alabama

- Established new policies to guide fireline location and construction. Fewer dozer lines will be constructed. Crews will take advantage of existing roads and creeks when possible. Greater care will be taken in locating dozer lines to prevent erosion problems. Firelines constructed along slopes will be designed in a fashion that will reduce the amount of post-fire rehabilitation work.
- Combined burning objectives (brownspot, T & E, wildlife, range, rough reduction) into single operational burns. This tactic helped save personnel time and money by reducing the amount of dozer lines needed to safely conduct prescribed burns.
- Increased the use of aerial ignition tactics. This increased the number of acres burned while decreasing the number of personnel required during the peak burning period.
- Used all terrain vehicles (ATV) to increase the number of acres burned. ATVs allow fewer personnel to ignite larger areas in less time.
- Requested and used off-forest prescribed fire detailers to implement fire management projects for little or no cost.

Ouachita, Ozark & St Francis National Forests—Arkansas and Oklahoma

- Conducted fire management reviews to analyze cost containment issues. The theme for the annual district fire management officers meeting this year was incident business management: a review of the costs associated with initial attack; and the efficient use of resources.
- Combined Arkansas-Oklahoma fire organizations into one fire team (on-going). The consolidation of duties eliminates duplication of effort. Personnel efficiency is maximized.
- Incorporated non-fire personnel into the initial attack organization. In return, fire personnel were made available to assist other resource programs as needed.
- Reduced training costs by integrating multiple agency training programs into *training academies*.
- Initiated a time saving budget planning process whereby each district's total fire management costs are computed based on an analysis of projected program activities. Funds are distributed based on individual district targets, special projects, equipment acquisition needs, transfer of station, and more. During the budget planning process the cost of each district's fire management program is reviewed and discussed by all fire managers. This creates an open and smooth flowing procedure for allocating funds. While the process may not yet have saved significant dollar amounts in the fire program, it has proven itself to be a cost-effective planning process.
- Combined two separate helicopter contracts into a single contract. A single helicopter is now shared between the Apalachicola and Ocala Forests. The cost savings were significant.

Chattahooche-Oconee National Forests—Georgia

- Expanded cooperation between the Forest Service and other agencies. Examples include training, cooperation on wildland fire incidents and cooperation on prescribed fire projects.

National Forests In Mississippi

- Treated more than one-quarter million acres (259,439 acres) of hazardous fuels with prescribed fire—more than all other Forest Service regions combined, outside of Region 8. The Mississippi prescribed fire program is an outstanding example of commitment to program goals through efficient and wise use of available tools and resources.

- Developed a partnership with the Wild Turkey Federation whereby the Federation provides funding for aerial ignition operations on prescribed burn projects.

National Forests In North Carolina

- Developed an open dialogue with Camp Lejuene and with the U.S. Fish and Wildlife Service. Cooperative efforts included the mutual sharing of personnel and equipment for both wildfire suppression and prescribed fire projects. The Forest also used North Carolina State aircraft for wildfire suppression activities, an on-going practice with annual cost-savings that should not be forgotten.

- Coordinated cooperative meetings with local districts. Meetings were attended by state forest service and wildlife agencies, volunteer fire departments, the National Park Service, U.S. Fish and Wildlife Service and the Bureau of Indian Affairs. The 2003 meetings included discussions on cooperative agreements, safety refresher training, standards for survival and urban-interface fire problems. The cooperative meetings/fire schools have been very beneficial in keeping the local districts, parks, refuges, counties and state agencies up to date on changes taking place within the wildland fire community.

- Provided crews for fire and non-fire assignments. The State of North Carolina, the Bureau of Indian Affairs and the Forest Service each mobilized crews. The Forest Service crews were composed of personnel from different federal agencies. The State of North Carolina also mobilized its Type 2 Incident Management Team.

Caribbean National Forest—Puerto Rico

- Reduced overhead expenditures by 20%. The dispatch operation at San Juan airport was restructured for the purpose of reducing travel costs.

Cherokee National Forest—Tennessee

- Established the Kentucky-Tennessee annual wildfire academy. The new academy involves 5 state and federal agencies: Cherokee National Forest, Tennessee Division of Forestry, National Park Service, Kentucky Division of Forestry, Daniel Boone National Forest. Seven training courses were offered during a one week period in CY 2003.

George Washington and Jefferson National Forests—Virginia

- Improved the cost effectiveness of the prescribed fire program by conducting larger burns when and where possible.

Noteworthy Instances of Cooperation

National Forests In Alabama

- Worked in close cooperation with local educators in promoting fire prevention programs. Provided classroom training, marched in parades, staffed information booths at public events, and provided hands-on field training to eager elementary school students.

Ouachita, Ozark and St. Francis National Forests—Arkansas and Oklahoma

- Revised the existing agreement with the Arkansas Forestry Commission to reflect an expanded level of cooperation on wildland fire suppression operations.

- Established cooperative relationships with several state parks in Arkansas and Oklahoma for the purpose of planning hazardous fuel reduction projects both within and adjacent to park properties and facilities.



**Alabama Students
Thank Smokey**

- Continued work on the *Fire Planning and Analysis* project with the Bureau of Indian Affairs and the National Park Service.
- Managed a significant wildfire incident on lands within the boundaries of Hot Springs National Park, at the request of the National Park Service. The fire burned within the most critical wildland-urban interface in the state, and quickly grew into a high-priority incident.
- Organized *Firewise* councils across the State in cooperation with the Arkansas Forestry Commission.
- Provided training and equipment for Native American Tribes in Oklahoma. Supported mobilization of Native American crews. Focused on training and certifying leadership candidates from the tribes.
- Provided fire training to Arkansas Technological University students; future resource managers in the fish and wildlife, recreation and park management departments.

National Forests In Florida

- Initiated and/or maintained partnerships and cooperative relationships with many different agencies and local governments during CY 2003.
- Established a shared position with the Florida Division of Forestry. The position is located in the Florida Interagency Coordination Center. The new position will assist in dispatching and will serve as intelligence coordinator for Florida resources.
- Committed financial support to the State of Florida Division of Forestry for the construction of a permanent fire exhibit at the annual Tampa State Fair. The exhibit is a powerful and cost-effective venue for extending the wildland fire safety message to a large and diverse audience.
- Assisted Moody Air Force Base in South Georgia with a fuel loading analysis project. The analysis was conducted on a 1,000 acre tract of land owned by the Department of Defense.
- Cooperated with the Florida Division of Forestry in the construction of a permanent multi-agency air tanker base at the Lake City Airport. Additionally, an interagency fire station received funding and will be located northeast of Lake City. The U.S. Fish and Wildlife Service, the Florida Division of Forestry, several volunteer fire departments and the National Forests in Florida will each maintain resources at the station, as wildfire danger dictates.
- Constructed 2 volunteer fire stations in partnership with Leon County. Fast paced urban-interface development had created the need for locally based fire suppression resources.

Chattahoochee-Oconee National Forests—Georgia

- Worked closely with the Georgia Forestry Commission (GFC) which agency provided assistance with wildfire suppression operations throughout the National Forests. GFC employees participated on local and national incidents providing qualified personnel ranging from firefighter to incident commander. The GFC mobilized one crew to an Idaho wildfire incident. Coordinated smoke chasing and initial attack operations with the GFC fire detection plane. GFC provided personnel and equipment to assist with prescribed fires.
- Mobilized personnel from Chattahoochee River Park and from Fort Stewart military reservation to serve on multi-agency crews mobilized to Western wildfire incidents.
- Provided support to Fish and Wildlife Service personnel stationed at the Chattahoochee Fish Hatchery to facilitate their participation on prescribed fire projects on the Chattahoochee National Forest, and to mobilize them to Western wildfire incidents.
- Developed supportive relationships with rural volunteer fire departments to enhance their ability to provide badly needed structural fire protection during wildland fire incidents.

- Completed a 600 acre urban-interface prescribed burn on the Chattooga Ranger District. Personnel from seven different federal, state, county and city agencies were involved. The burn, first of its kind in Georgia, proved to be a model for interagency coordination and teamwork. The incident command system (ICS) was used to coordinate and manage the operation. Notwithstanding the fact that some participants lacked ICS training, all participants were motivated to work together—creating a successful outcome. Feedback from local landowners was very positive.

Kisatchie National Forest—Louisiana

- Exchanged prescribed fire detailers with Region 6. Result was a significant savings in project costs.

National Forests In Mississippi

- Initiated an effort to develop a cooperative agreement with the Nature Conservancy for the purpose of using Nature Conservancy resources on prescribed fire and wildfire suppression operations.
- Developed a partnership with the National Wild Turkey Federation. The Federation will provide funding for the prescribed fire aerial ignition program.
- Developed a joint wildfire operations plan with the Mississippi National Guard.
- Conducted joint prescribed burns with the U.S. Department of Defense.
- Renewed memoranda of understanding with the Tri-County Fire Management Cooperative and with the Harrison County Project Impact.
- Exchanged personnel with the U.S. Fish and Wildlife Service, Mississippi Sandhill Crane National Wildlife Refuge, for fire suppression and prescribed fire operations.
- Exchanged personnel with the National Park Service, Natchez Trace Parkway, for fire suppression and prescribed fire operations.
- Coordinated fire related projects and activities with the Mississippi Forestry Commission. Included day-by-day coordination of fire suppression and prescribed burning operations, planning and conducting fire prevention programs, maintaining and operating weather stations, and developing and coordinating wildland fire training courses.

National Forests In North Carolina, South Carolina, Georgia

- Restructured the boundaries of the state interagency coordination centers. Placed U.S. Fish and Wildlife Service's Savannah Coastal Refuges Fire Management District 2 (includes lands in southeast North Carolina, South Carolina and coastal Georgia) under the control of the South Carolina Interagency Coordination Center. Improved dispatch efficiency; reduced confusion. Allows for U.S. Fish and Wildlife Service fire management staff to coordinate fire operations with a single state coordination center. The change affected the following refuges in Georgia and North Carolina: Pee Dee (located in SE North Carolina), Wassaw, Black Beard, Harris Neck and Wolf Island (located along the Georgia coast).

Caribbean National Forest—Puerto Rico

- Maintained a close working relationship with the Puerto Rico Department of Natural and Environmental Resources (DNER). Trained 25 DNER employees as firefighters. DNER employees participate in providing annual refresher training and are available for dispatch on interagency firefighting crews. Two DNER employees are certified as crew boss. Additional seven employees participated in the 2003 Squad Boss Academy.
- Provided DNER with equipment to stock a wildland fire cache, significantly improving the crew mobilization process.

Cherokee National Forest—Tennessee

- Established the Kentucky-Tennessee annual wildfire academy. The academy involves the cooperation with 5 state and federal agencies. These agencies include: Cherokee National Forest, Tennessee Division of Forestry, National Park Service, Kentucky Division of Forestry and Daniel Boone National Forest. Seven training courses were offered during a one-week academy during 2003.

National Forests and Grasslands In Texas

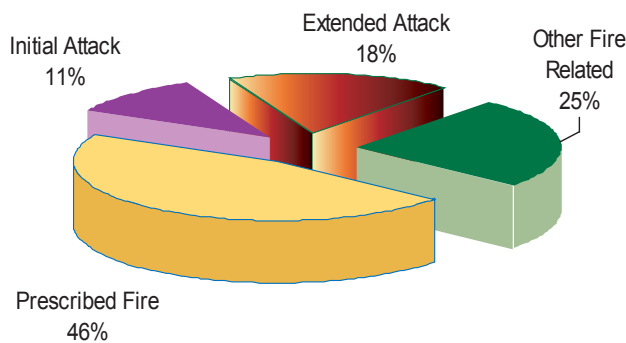
- Provided coordination and mobilization services to the Space Shuttle Columbia Recovery incident. Coordinated resources from more than 100 federal, state and local agencies and organizations at all levels of the civil infrastructure. This was the largest search and recovery project ever undertaken in the United States. The National Forests and Grasslands in Texas (NFTG) played a vital role in directing and supervising search crews mobilized from outside Texas. This project dominated NFTG's daily activities from February 1 until the end of April.
- Coordinated the staffing of the Texas Interagency Coordination Center with the Texas Forest Service and other federal agencies.
- Coordinated two wildland fire academies with partner agencies. Hosted and coordinated S-420 in December 2003.

George Washington and Jefferson National Forests—Virginia

- Received Pulaski Award. In February 2003, Virginia Multi-agency Coordinating Group (VMAC) was presented the Pulaski Award. The award is presented annually on the recommendation of the National Inter-agency Fire Center *...for a groups outstanding contribution to wildland firefighting and America's wildland firefighters*. The Virginia Multi-agency Coordinating Group (VMAC) is composed of representatives of the Virginia Department of Forestry, the National Park Service, the Fish and Wildlife Service and the USDA Forest Service. VMAC was recognized for its efforts in coordinating suppression and prevention activities during the 2001 fall fire season, during which more than 1,000 fires burned 11,000 acres in the State of Virginia.

Safety

Fire Related Safety Incidents Reported by Southern Region Forests								
CY 2003	Rx Fire		Wx Initial Attack		Extended Attack		Other Fire Related	Total
	Civilian	Firefighter	Civilian	Firefighter	Civilian	Firefighter		
Injuries	-	5	-	-	-	-	-	5
Lost Time Injuries	-	7	-	2	-	4	3	16
Fatalities	-	-	-	-	-	-	-	0
Safety Zone Used	-	-	-	-	-	-	-	0
Shelter Deployed	-	-	-	-	-	-	-	0
Near Misses/Close Calls	-	-	-	-	-	-	-	0
Abandoned Area or Fireline	-	-	-	-	-	-	-	0
Threats Identified/Reported	-	1	-	1	-	1	-	3
Vehicle Accidents	-	-	-	-	-	-	4	4
Passenger Vehicle	-	-	-	-	-	1	2	-
ATV	-	-	-	-	-	-	-	-
Equipment	-	1	-	-	-	-	-	-
Occurred On Highway	-	-	-	-	-	-	1	-
Smoke/Visibility Related	-	-	-	-	-	-	-	-
Incidents/Near Misses	-	-	-	-	-	-	-	0
Aviation Safety Threat Identified/Reported	-	-	-	-	-	1	-	1
Other Safety/Fire Incidents	-	-	-	-	-	-	-	0
Total Incidents	0	13	0	3	0	5	7	28



Safety Incidents by Fire Activity

Fire Related Law Enforcement Activities

Fire Related Law Enforcement Activities - Forest Service - Southern Region															
Activities*	National Forests in Alabama	Ouachita, Ozark & St Francis NF	National Forests in Florida	Chattahoochee-Oconee NF	Daniel Boone National Forest	Land Between the Lakes NRRRA	Kisatchie National Forest	National Forests in Mississippi	National Forests in North Carolina	Francis M & Sumter NF, South Carolina	Savannah River Site	Cherokee National Forest, Tennessee	National Forests & Grasslands, Texas	George Washington & Jefferson NF, VA	Total
Personal Contacts With Public	120	175	0	2,500	0	—	0	10	—	82	n/a	—	0	485	3,372
Education/Fire Prevention Programs	0	8	0	9	0	—	0	0	—	1	n/a	—	1	5	24
Patrol Miles Logged	1,500	0	0	22,000	0	—	0	510	—	1,160	n/a	—	0	5,940	31,110
Arson Cases Investigated	7	70	7	28	2	—	4	20	—	21	n/a	—	7	3	169
Warnings Issued	2	20	4	35	2	—	0	0	—	0	n/a	—	0	0	63
Violation Notices Issued	0	3	3	15	0	—	0	0	—	1	n/a	—	6	3	31
Arrests	0	2	0	0	0	—	0	0	—	0	n/a	—	1	0	3
Convictions	1	4	0	0	0	—	0	0	—	0	n/a	—	1	3	9
Misdemeanor	1	3	0	0	0	—	0	0	—	0	n/a	—	0	3	7
Felony	0	1	1	0	0	—	0	0	—	0	n/a	—	1	0	3
Other: Sentencing	0	0	0	0	0	—	0	0	—	2	n/a	—	0	0	2
Other: Arrest Pending	0	0	0	0	0	—	0	0	—	1	n/a	—	0	0	1
Other Fire Incidents Investigated	0	0	0	0	31	—	24	0	—	9	n/a	—	0	0	64
Hours logged fire investigative work	0	0	990	1,320	—	—	—	0	—	0	n/a	—	0	0	2,310

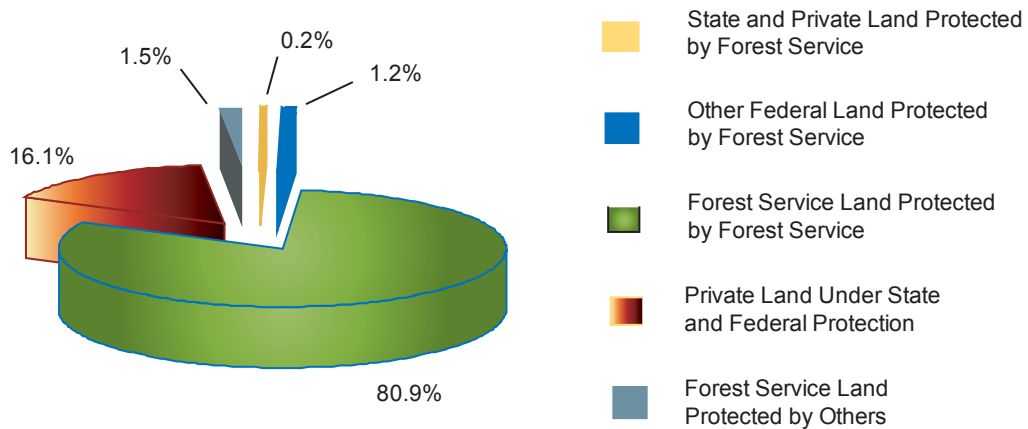
*This table is designed to provide only a general perspective on field-based fire related law enforcement activities. The "—" means data not available.

Land Protection

Land Protection Report CY 2003

State	Inside Forest Service Protection Boundaries							National Forest Land Protected by Others	
	Protected By Forest Service					State & Private Land Prot'd By State and Forest Service			
	State & Private				Other Federal Land				National Forest Land
	Fee	Offset	Reimburse Supp	With-out Reimburse					
AL						665,981	665,981		
AR						2,581,858	2,581,858		
FL		37,758				1,158,273	1,196,031		
GA						866,079	866,079	520,610	
KY DBF		1,090				702,030	703,120	87,530	180,115
KY LBL						171,000	171,000		882
LA						604,000	604,000		71,000
MS						1,152,898	1,152,898		
NC						1,247,264	1,247,264		
OK						350,845	350,845	372,707	
PR						28,004	28,004		
SC					198,344	620,751	819,095		
TN						639,889	639,889		
TX						675,572	675,572		
VA						1,781,449	1,781,449	1,654,489	
Total		38,848			198,344	13,245,893	13,483,085	2,635,336	251,997

Land Protection 2003
Southern Region



Personnel Employed on Wildland Fire Activities

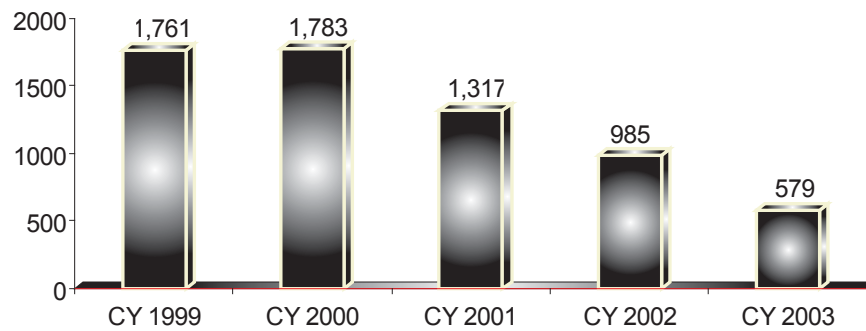
Personnel Employed on Wildland Fire Presuppression and Suppression Activities		
Regular Appointed Personnel		
Full-Time Fire Management (20 Pay Periods Or More)	276	
Part-Time Fire Management	177	
Others Used On Pre-suppression	445	
Others Used On Suppression	1,084	
Total Regular Appointed Personnel		1,982
Seasonal Or Short-Term Personnel		
Regular Fire Control (Crew, Firefighters, Patrol, Lookouts)	29	
Others Who Spend Time On Fire Control Work	390	
Emergency Fire Fighters	1,750	
Total Emergency Firefighters		2,169
Total Number Of Casuals Employed On Fire Suppression		2,971
Number Of Casuals Employed For First Time	420	
Total		7,122

Fires by Size Class - Southern Region Forests 2003										
State		A	B	C	D	E	F	G	Fires	Acres
Alabama National Forests In Alabama	Fires	4	18	8	0	0	0	0	30	448
	Percent	13%	60%	27%	0%	0%	0%	0%		
	Acres	0.6	62.3	385.4	0.0	0.0	0.0	0.0		
Arkansas Ouachita, Oark- St Francis NF	Fires	22	69	41	1	1	1	0	135	3,833
	Percent	16%	51%	30%	1%	1%	1%	0%		
	Acres	3.5	193.4	1,417.0	124.0	545.0	1,550.0	0.0		
Florida National Forests In Florida	Fires	28	29	7	2	0	0	0	66	602
	Percent	42%	44%	11%	3%	0%	0%	0%		
	Acres	3.0	53.0	226.2	320.0	0.0	0.0	0.0		
Georgia Chattahoochee- Oconee NF	Fires	6	22	4	1	0	0	0	33	329
	Percent	18%	67%	12%	3%	0%	0%	0%		
	Acres	0.7	72.4	98.7	150.0	0.0	0.0	0.0		
Kentucky Daniel Boone National Forest	Fires	5	15	10	0	0	0	0	30	233
	Percent	17%	50%	33%	0%	0%	0%	0%		
	Acres	0.5	68.5	164.0	0.0	0.0	0.0	0.0		
Kentucky Land Between The Lakes NRA	Fires	2	0	0	0	0	0	0	2	2
	Percent	100%	0%	0%	0%	0%	0%	0%		
	Acres	2.0	0.0	0.0	0.0	0.0	0.0	0.0		
Louisiana Kisatchie National Forest	Fires	0	43	18	1	2	0	0	64	1,864
	Percent	0%	67%	28%	2%	3%	0%	0%		
	Acres	0.0	96.0	552.0	285.0	931.0	0.0	0.0		
Mississippi National Forests In Mississippi	Fires	8	34	23	3	0	1	0	69	2325
	Percent	19%	54%	24%	2%	1%	0.5%	0.0%		
	Acres	16	849	4,198	1,644	1,893	4,424	0		
North Carolina NF In North Carolina	Fires	15	25	6	0	0	0	0	46	220
	Percent	33%	54%	13%	0%	0%	0%	0%		
	Acres	2.15	62.75	155	0	0	0	0		
Puerto Rico Caribbean National Forest	Fires	0	0	0	0	0	0	0	0	0
	Percent	0%	0%	0%	0%	0%	0%	0%		
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
South Carolina Francis Marion & Sumter NF	Fires	6	14	2	1	0	1	0	24	2,042
	Percent	25%	58%	8%	4%	0%	4%	0%		
	Acres	0.9	35.9	70.2	151.0	0.0	1,784.0	0.0		
S Carolina Savannah River Site	Fires	2	15	0	0	0	0	0	17	22
	Percent	0%	0%	0%	0%	0%	0%	0%		
	Acres	0.2	21.25	0	0	0	0	0.0		
Tennessee Cherokee National Forest	Fires	3	6	11	0	0	0	0	20	260
	Percent	15%	30%	55%	0%	0%	0%	0%		
	Acres	0.45	23	236	0	0	0	0		
Texas National Forests & Grasslands In Texas	Fires	4	14	5	1	1	0	0	25	722
	Percent	16%	56%	20%	4%	4%	0%	0%		
	Acres	0.4	31.5	123.0	150.5	417.0	0.0	0.0		
Virginia George Washington & Jefferson NF	Fires	4	8	6	0	0	0	0	18	127
	Percent	22%	44%	33%	0%	0%	0%	0%		
	Acres	0.4	34.7	92.0	0.0	0.0	0.0	0.0		
Total Fires	Fires	109	312	141	10	4	3	0	579	13,022
	Percent	19%	54%	24%	2%	1%	0.5%	0%		
Total Acres	Acres	16	849	4,198	1,644	1,893	4,424	0	13,022	
	Percent	0.1%	6.5%	32.2%	12.6%	14.5%	34.0%	0.0%		

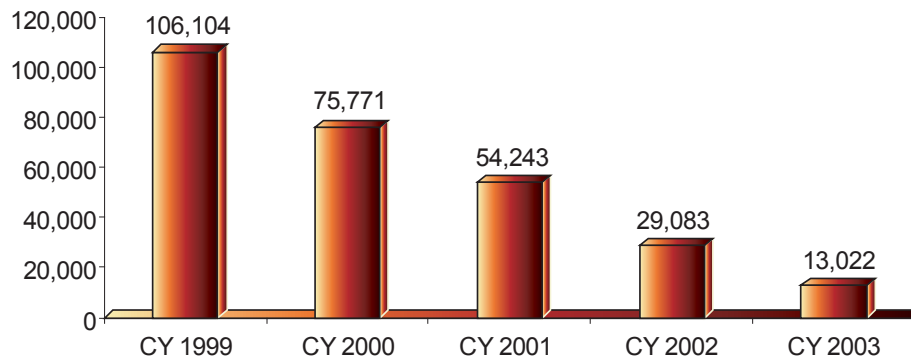
Fires by Cause - Southern Region Forests 2003													
State		Lightning	Equipment	Smoking	Campfire	Debris	Railroad	Arson	Children	Misc.	Fires	Acres	Acres Per Fire
Alabama National Forests In Alabama	Fires	0	0	0	1	4	0	19	0	6	30		15
	Percent	0%	0%	0%	3%	13%	0%	63%	0%	20%			
	Acres	0.0	0.0	0.0	22.0	12.6	0.0	251.6	0.0	162.1		448.3	
Arkansas Ouachita, Ozark-St Francis National Forests	Fires	18	5	0	8	11	2	61	0	30	135		28
	Percent	13%	4%	0%	6%	8%	1%	45%	0%	22%			
	Acres	167.3	560.7	0.0	21.1	103.8	17.0	1,088.0	0.0	1,875.0		3,832.9	
Florida National Forests In Florida	Fires	12	1	2	5	4	0	8	2	32	66		9
	Percent	18%	2%	3%	8%	6%	0%	12%	3%	48%			
	Acres	154.6	0.1	1.1	4.0	31.5	0.0	4.8	0.2	405.9		602.2	
Georgia Chattahoochee-Oconee National Forests	Fires	1	0	0	0	5	2	9	0	16	33		10
	Percent	3%	0%	0%	0%	15%	6%	27%	0%	48%			
	Acres	3	0	0	0	29.4	5	52.9	0	231.5		321.8	
Kentucky Daniel Boone National Forest	Fires	0	0	0	1	1	0	27	0	1	30		8
	Percent	0%	0%	0%	3%	3%	0%	90%	0%	3%			
	Acres	0.0	0.0	0.0	13.0	12.0	0.0	204.0	0.0	4.0		233.0	
Kentucky Land Between The Lakes NRA	Fires	0	1	0	0	0	0	0	0	1	2		1
	Percent	0%	50%	0%	0%	0%	0%	0%	0%	50%			
	Acres	0	1	0	0	0	0	0	0	1		2.0	
Louisiana Kisatchie National Forest	Fires	1	32	0	1	3	0	22	0	5	64		29
	Percent	2%	50%	0%	2%	5%	0%	34%	0%	8%			
	Acres	99	956	0	1	16	0	747	0	45		1,864.0	
Mississippi National Forests In Mississippi	Fires	0	5	1	3	9	0	44	0	7	69		34
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Acres	0.0	1,100.0	0.1	22.1	218.1	0.0	957.9	0.0	27.6		2,325.8	
North Carolina National Forests In North Carolina	Fires	3	2	0	0	18	3	20	0	0	46		5
	Percent	7%	4%	0%	0%	39%	7%	43%	0%	0%			
	Acres	14	2.15	0	0	96.75	42	65	0	0		219.9	
Puerto Rico Caribbean National Forest	Fires	0	0	0	0	0	0	0	0	0	0		0
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
South Carolina Francis Marion & Sumter National Forests	Fires	0	1	2	1	1	0	15	0	4	24		85
	Percent	0%	4%	8%	4%	4%	0%	63%	0%	17%			
	Acres	0.0	0.1	0.4	5.0	0.1	0.0	236.6	0.0	1,799.9		2,042.0	
South Carolina Savannah River Site	Fires	2	10	0	0	0	0	3	0	2	17		1
	Percent	12%	59%	0%	0%	0%	0%	18%	0%	12%			
	Acres	11	5	0	0	0	0	4	0	2		21.5	
Tennessee Cherokee National Forest	Fires	0	0	0	0	0	0	20	0	0	20		13
	Percent	0%	0%	0%	0%	0%	0%	100%	0%	0%			
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	259.5	0.0	0.0		259.5	
Texas National Forests & Grasslands In Texas	Fires	1	0	3	4	5	0	5	1	6	25		29
	Percent	4%	0%	12%	16%	20%	0%	20%	4%	24%			
	Acres	417.0	0.0	0.7	9.0	170.1	0.0	67.0	1.0	57.6		722.4	
Virginia George Washington & Jefferson NF	Fires	0	5	0	0	3	1	4	0	5	18		7
	Percent	0%	28%	0%	0%	17%	6%	22%	0%	28%			
	Acres	0.0	13.8	0.0	0.0	33.0	9.0	17.5	0.0	53.8		127.1	
Total Fires	Fires	38	62	8	24	64	8	257	3	115	579		22
	Percent	7%	11%	1%	4%	11%	1%	44%	1%	20%			
Total Acres	Acres	865.4	2,639.3	2.3	97.2	723.3	73.0	3,955.6	1.2	4,665.0		13,022	
	Percent	7%	20%	0%	1%	6%	1%	30%	0%	36%			

Five Year Averages

Five-Year Averages 1999-2003 - Southern Region Forests												
1999-2003	Light ning	Equip ment	Smok ing	Camp fire	Debris	Rail road	Arson	Child ren	Misc.	Fires	Acres	Acres Fire
1999	204	30	23	93	161	21	847	5	377	1,761	106,104	60
2000	274	64	16	78	148	35	926	11	233	1,783	75,771	42
2001	114	46	33	50	129	63	607	13	258	1,317	54,243	41
2002	142	46	10	39	109	10	424	9	196	985	29,083	30
2003	38	62	8	24	64	8	257	3	115	579	13,022	22
99-03	772	248	90	284	611	137	3,061	41	1,179	6,425	278,223	43
5 yr avg	154	50	18	57	122	27	612	8	236	1,285	55,645	—
Percent	12%	4%	1%	4%	10%	2%	48%	1%	18%	—	—	—



1999 - 2003 Number of Fires per Year



1999 - 2003 Acres Burned per Year

Bureau of Indian Affairs



U. S. Department of Interior

Wildland Fires by Cause

Wildland Fires by Cause 2003*						
CY 2003		Lightning	Human	Total Fires	Total Acres	Acres Per Fire
Florida	Fires	1	12	13		22
	Percent	8%	92%			
	Acres	20.0	266.0		286.0	
North Carolina	Percent	7%	93%			
	Fires	0	15	15		1
	Percent		100%			
Oklahoma	Acres	0	20		20.0	
	Percent		100%			
	Fires	0	154	154		153
Total Fires	Percent		100%			
	Acres	0.0	23,556		23,556.0	
	Percent		100%			
Total Fires	Fires	1	181	182		131
	Percent	1%	99%			
Total Acres	Acres	20.0	23,842		23,862	
	Percent	0.1%	99.9%			

*Data taken from Southern Geographic Area Situation Report, 12/31/03

National Park Service Southeast Region



2003 Annual Fire Report

Wildland Fires for the Southeast Region

Wildland Fires for the Southeast Region		
Activity	# Fires / Projects	# Acres
Suppression	55	3,364.5
Natural Outs	49	136.0
Support Actions	138	
Total Prescribed Fires	63	61,738.6
Planned Ignition	57	59,315.5
Unplanned Ignition	6	2,423.1
False Alarms	29	

National Park Service

Southeast Fire Management 2003 Success Stories

Canaveral Implements Prescribed Fire to Improve

Habitat for Protected Species

Canaveral National Seashore has a number of federally Threatened and Endangered species. Two of those include the Florida scrub jay which is found only in Florida, and the Eastern indigo snake. Another associated species is the gopher tortoise, which is designated a Species of Special Concern. The gopher tortoise is considered a “keystone species” because its burrows provide refuge for dozens of other animal species. The scrub jay, gopher tortoise, and indigo snake are seriously threatened by loss of habitat caused by human development and fire suppression. These species live in coastal scrub vegetation which consists of several live oak species and other various shrubs with scattered openings. Scrub jays feed on the live oak acorns, and bury the nuts in the sandy openings. Gopher tortoises dig burrows in the sandy soil providing critical habitat for many species including the indigo snake.

Oak scrub is a fire adapted community that, under natural conditions, will burn every 5 to 12 years. However some sections of the park have not burned in 30-50 years. This has eliminated many of the canopy openings, and trees have doubled their normal height of 6-8 feet. Overgrown scrub allows blue jays to move into the area and prey on nests. In addition, migrating cooper hawks can hide in the dense vegetation and ambush the scrub jays. In the fall of 1992, 1/3 of the breeding scrub jays in the area were lost to hawks.

On February 21st the park conducted its first prescribed burn (named Scrub Jay 1) to restore openings and reduce the height of the canopy. Two months prior to ignition, mechanical reduction was utilized to remove trees too large to carry the fire. Since the area lies adjacent to Merritt Island Wildlife Refuge, the agencies worked together to conduct the burn. The total area burned was 752 acres.

The project successfully reduced the size of the canopy to less than five feet and created open sandy areas for the tortoises and jays to utilize. Researchers conducting studies on the gopher tortoise, recorded numerous burrows after the fire. The park is also conducting a telemetry study with Towson University to determine the survivorship rate of neonate (newly born) gopher tortoises in the area that was burned. At least four families of scrub jays were seen foraging in the area. The park has begun color banding jays to document changes in the jay population.

FY-03 Fire Program Accomplishments

- **\$36,764 for fire training for southeast region parks**
- **Regional Fire Program Personnel taught or assisted with eight midlevel to advanced level fire courses**
- **Provided \$70,000 for fire cache and PPE for parks in the region**
- **Secured \$690,065 for Fire Facilities Construction Funds for BISO, GUIB, and CHCH**
- **Conducted Fire Program Reviews at EVER, BICY, GRSM, and NATR**
- **Secured funding for the continued development of approximately 20 Environmental Assessments for FY-03 and FY-04**
- **Completing approximately 17 Fire Management Plans**
- **Distributed division newsletter and updated website**
- **Maintained communications between Collaborative Groups for Fuel Treatment Planning with state and other federal agencies in the Southeast**
- **Provided GIS support for fuels projects and fire management plans**
- **Secured \$57,000 for fire history and other fire related GIS data development at BICY, EVER, GRSM, and GUIB**

Hazardous Fuels Reduction

New Regional Gyrotracs — The National Interagency Fire Center purchased two Gyrotracs for the Southeast Region. The new brush cutters will be used to help with mechanical fuels treatments. They will be stationed at Big Cypress National Preserve, but are available to travel to other parks in the region. Each Gyrotrac will have a trailer and an operator. These low ground-pressure, tracked machines are well-adapted for park projects as they minimize ground disturbance. The Gyrotracs have been put to the test and have successfully thinned fuels, once too thick to crawl through, in Big Cypress National Preserve.



Everglades National Park — In May, fire staff used prescribed fire to burn 141 acres of marshgrass and wetlands adjacent to the Coe visitor center. The project was undertaken

in an effort to eliminate exotic vegetation, reduce hazardous fuels, and reduce shrub encroachment into prairies. The visitor center was closed for about one hour while operations were conducted near the entrance, but was reopened as soon as conditions were deemed safe. This burn eliminated exotic plants from the area immediately adjacent to the visitor center, facilitating the introduction of native plants.



Great Smoky Mountains National Park — The park completed its largest prescribed burn (1,034 acres) about a mile west of Cades Cove. The burn was intended to help the recovery of yellow pine in an area where the tree was once a predominate species. Five prescribed fires were used to treat a total of 1,352 acres in forestlands and grasslands.



Additionally, the park finished two hazard fuels reduction projects. Slash piles were successfully burned in January within the Gatlinburg Bypass project to reduce the potential of a wildfire that might escape the park into the Gatlinburg area.

A similar project was completed in the Ace Gap area near Townsend, Tennessee. The project was completed on schedule and with positive feedback from park neighbors.

SER continued to accomplish the highest fuel reduction acres in the National Park Service. As of Sept. 30, 2003, we had accomplished a total of 70,608 acres, which exceeded our planned acres of 59,538

- \$4,064,041 secured for fuels related projects and support
- Over 62% of fuels funding was awarded through contracting

Cowpens National Battlefield — On May 14, the park successfully completed its first prescribed burn. This was the second phase of a project that started in 2002. The 52-acre burn took place in an area that had been treated by a Magnum brush-cutter last year as a mechanical fuels reduction project.

Kings Mountain National Military Park — The park has completed 123 acres of mechanical fuel reduction. Thinning by hand, burning stacked piles, and chipping has helped to reduce the fuel load in wildland-urban interface areas by up to 75%. The park’s prescribed fire program is in its third year. The objectives of the program are threefold: hazard fuels reduction, habitat restoration, and cultural landscape restoration. Prescribed fire has also been used to help reduce heavy fuel loads that resulted from Southern Pine Beetle infestation, ice damage, and Hurricane Hugo.

Mammoth Cave National Park — In April the park burned 408 acres at Onyx Meadows. This was the park’s third prescribed fire in two years.

Gulf Islands National Seashore —The park completed two prescribed burns in the Naval Live Oaks Area of the Florida District in March. A total of 70 acres were burned for habitat restoration and to reduce hazardous fuels. One of the burns was the park’s first ever re-burn of a previously treated area. In 2002, this block had been the recipient of 22 gopher tortoise, a fire dependent species.

In accordance with the prescription in our Fire Management Plan, fire was used to enhance the barrens habitat and reduce hazardous fuels. We're very pleased with the result of the fire.

Ronald Switzer, Mammoth Cave National Park
Superintendent

Rural Fire Assistance

Blue Ridge Parkway — The park has provided personal protective equipment, hand tools, power saws, blowers, S130/190 training, and safety training for 49 local fire departments.



More than 150 firefighters and 20 instructors from several Virginia localities and six states attended the 2003 Wildland Fire Academy held in Bedford County, VA.

Mammoth Cave National Park — The park provided eight local departments with Nomex pants, shirts, gloves, helmets, training fire shelters, goggles, hand tools, backpack leaf blowers, wildland fire hose, nozzles, and hose reels.



Equipment Delivery: Chalybeate, Kentucky Volunteer Fire Department

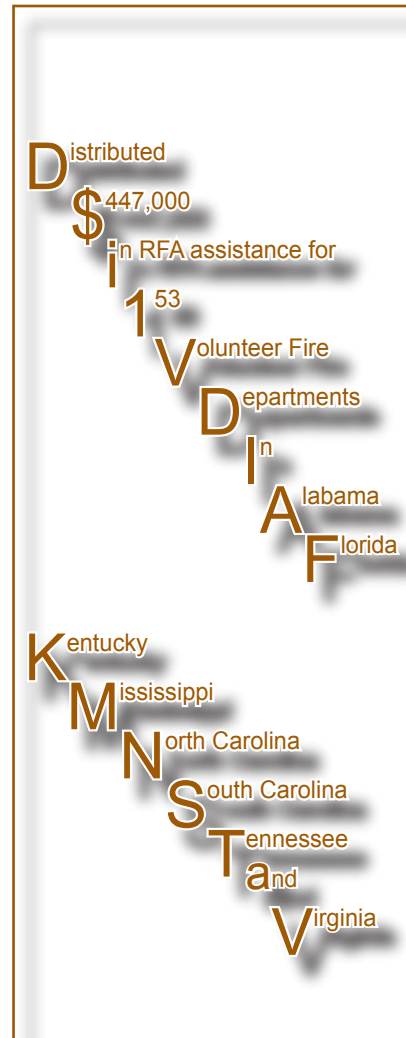
Natchez Trace Parkway — The remoteness and length of the parkway have dictated the need for close cooperation with the fire service community. The Parkway collaborates with 52 rural fire departments along the 444 miles of parkway in three states. The Rural Fire Assistance program helps provide basic wildland fire suppression training materials and gear for these departments as part of the National Fire Plan.



Congressman Benny Thompson (center) visited the Natchez Trace Parkway to meet with Superintendent Wendell Simpson (left) and FMO Dan Mapstone (right), to help distribute gear and equipment to local volunteer fire departments



PPE and Gear Distributed to Local Firefighters



Great Smoky Mountains National Park — The park provided tools, training, and equipment for 10 fire departments along the 250 miles of park boundary in the wildland-urban interface.

Parts of Gatlinburg are a mix of homes and rental units built on steep slopes and closely surrounded by dense brush and forest. Some of this terrain is not easily accessible for regular fire trucks and hoses, so this equipment will help us go in and knock down fires before they can reach structures

Gatlinburg, TN Fire Chief, Gary West

Education, Prevention and Information

Firewise — The Jefferson-Shelby Wildland Urban Interface Advisory Council, in association with the NPS, sponsored Alabama’s first-ever Firewise Communities workshops in June. They utilized an innovative teleconference format to link workshops in Gadsden and Birmingham. A second workshop was offered in Little River Canyon National Preserve. In October, an additional workshop was held in Alexander City, in association with Horseshoe Bend National Military Park. More than 80 participants from a variety of disciplines represented federal, state, and local agencies and communities.



**Firewise Workshop
Alexander City, Alabama**

Natchez Trace Parkway — Fire management staff collaborated with the Tupelo Fire Department, Mississippi Forestry Commission, Noxubee National Wildlife Refuge, and Smokey Bear to host a special event for local school children and park visitors during Fire Prevention Week. Each agency showed their fire equipment and presented both structural and wildland fire prevention information.



**Smokey Bear Reaches out to Local Youth
Fire Prevention Week**

Alabama — The Jefferson-Shelby Wildland Urban Interface Advisory Council is developing and distributing Alabama Reader newspaper supplements for 5th grade students. The supplements provide information on the role of fire in the ecosystem and fire prevention. Educational CD-ROMS will also be distributed to classrooms.

Florida — The Division of Forestry is working on numerous Firewise projects, including education, prevention and mitigation brochures, newspaper supplements, public service announcements, mobile displays, CD-ROMS, teacher workshops, and Firewise workshops. Funding will also be provided for a bi-lingual position in South Florida to help spread the Firewise message.



NPS Distributed \$1,839,950 Community Assistance Contract Funding to five states to help support projects in communities that border parks.

Mississippi — The Mississippi Forestry Commission is training personnel to teach Firewise workshops and develop a collaborative approach to Firewise messages across local, state, and federal jurisdictions. They are also developing an interactive CD-ROM for students to learn about Firewise concepts.

North Carolina — The North Carolina Division of Forest Resources is promoting Firewise concepts, including distributing a *Living with Fire* newspaper supplement and creating a mobile Firewise display.

Southeast Region Fire Display — Two fire management program interpretative displays, with mannequins in full personal protective equipment (PPE), were circulated around the region for community outreach and education efforts. Exhibits were used prior to, and during, planned fuel treatments and/or during periods of high fire danger. The displays visited several parks including Big Cypress National Preserve, Chattahoochee River National Recreation Area, Cowpens National Battlefield, Cumberland Gap National Historical Park, Guilford Courthouse National Military Park, Gulf Islands National Seashore, Kings Mountain National Battlefield, Natchez Trace National Parkway, and Mammoth Cave National Park.



Southeast Fire Management Display

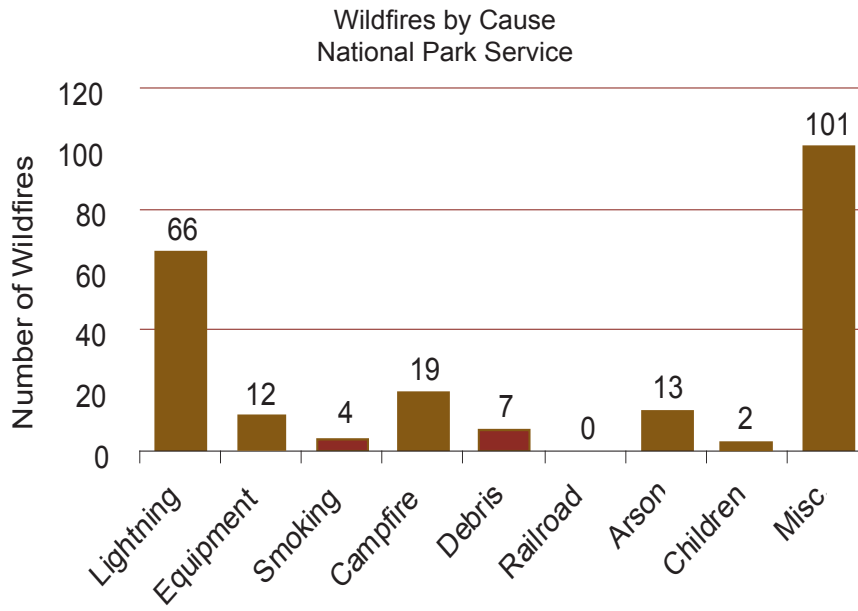
Webpages — Information on the Southeast Region Fire Management Program can be found on NPS FireNet (www.nps.gov/fire). This page includes regional information and links to parks with Fire Management web pages including:

- Big Cypress National Preserve
- Canaveral National Seashore
- Cape Hatteras National Seashore
- Cowpens National Battlefield
- Everglades National Park
- Great Smoky Mountains NP
- Gulf Islands National Seashore
- Mammoth Cave National Park
- Vicksburg National Military Park



CY 2003 Fires & Acres by Cause: National Park Service*												
State	Lightning	Equipment	Smoking	Campfire	Debris	Railroad	Arson	Children	Misc.	Total Fires	Total Acres	Acres Per Fire
Arkansas	Fires	0	0	1	0	1	0	1	0	10	13	171
	Percent	0%	0%	8%	0%	8%	0%	8%	0%	77%		
	Acres	0.0	0.0	0.1	0.0	52	0.0	450	0.0	1,725	2,227	
	Percent	0%	0%	0%	0%	2%	0%	20%	0%	77%		
Florida	Fires	59	5	1	2	0	0	1	0	47	115	525
	Percent	51%	4%	1%	2%	0%	0%	1%	0%	41%		
	Acres	2,784	3	44	0.2	0.0	0.0	1	0.0	57,519	60,351	
	Percent	5%	0%	0%	0%	0%	0%	0%	0%	95%		
Kentucky	Fires	0	0	1	0	0	0	3	0	1	5	82
	Percent	0%	0%	20%	0%	0%	0%	60%	0%	20%		
	Acres	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	408	408	
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%		
Mississippi	Fires	0	4	0	0	0	0	0	0	5	9	16
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	0%		
	Acres	0	12	0	0	0	0	0	0	129	141	
	Percent	0%	9%	0%	0%	0%	0%	0%	0%	91%		
North Carolina	Fires	1	0	0	1	0	0	0	2	0	4	2
	Percent	25%	0%	0%	25%	0%	0%	0%	50%	0%		
	Acres	6	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	6	
	Percent	95%	0%	0%	2%	0%	0%	0%	0%	0%		
Oklahoma	Fires	0	0	0	1	0	0	0	0	6	7	100
	Percent	0%	0%	0%	14%	0%	0%	0%	0%	86%		
	Acres	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	703	703	
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%		
South Carolina	Fires	0	0	0	0	0	0	0	0	2	2	27
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%		
	Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54	54	
	Percent	0%	0%	0%	0%	0%	0%	0%	0%	100%		
Tennessee	Fires	0	1	1	0	3	0	0	0	8	13	152
	Percent	0%	8%	8%	0%	23%	0%	0%	0%	62%		
	Acres	0.0	449	0.1	0.0	51	0.0	0.0	0.0	1,476	1,977	
	Percent	0%	23%	0%	0%	3%	0%	0%	0%	75%		
Texas	Fires	5	1	0	15	2	0	7	0	21	51	158
	Percent	10%	2%	0%	29%	4%	0%	14%	0%	41%		
	Acres	0.5	0.2	0.0	4	23	0.0	133	0.0	7,908	8,068	
	Percent	0%	0%	0%	0%	0%	0%	2%	0%	98%		
Virginia	Fires	1	1	0	0	1	0	1	0	1	5	28
	Percent	20%	20%	0%	0%	20%	0%	20%	0%	20%		
	Acres	0.1	0.1	0.0	0.0	3	0.0	10	0.0	127	149	
	Percent	0%	0%	0%	0%	2%	0%	7%	0%	90%		
Total Fires	Fires	66	12	4	19	7	0	13	2	101	224	331
	Percent	29%	5%	2%	8%	3%	0%	6%	1%	45%		
Total Acres	Acres	2,790	465	44	5	129	0.0	594	0.2	70,049	74,077	
	Percent	4%	1%	0%	0%	0%	0%	1%	0%	95%		

*This table represents NPS wildfires occurring in ALL 13 states within the Southern Geographic Area. Four of these states are outside the Southeast Region of the NPS.



Southeast Region Fire Ecology Program

The Southeast Region (SER) Fire Ecology program had another busy year in Fiscal Year 2003, continuing to implement and manage a regional monitoring program of nearly 500 plots in 14 parks. Our personnel were also instrumental in the implementation of several prescribed burns both at fire effects team host parks and at the numerous satellite parks that they support throughout the region. In addition to field work, the fire ecology program staff has been busy providing input to fire management plans, fire monitoring plan development, and burn plan development. We also intend to begin the development of fire history atlases using satellite data next year.



CBI Workshop Training at Great Smoky Mountains National Park



Everglades National Park Crew Reads Pineland Plot

Training has also been of paramount importance with several program members teaching the introductory fire effects course this year at the Prescribed Fire Training Center in Tallahassee. SER also hosted a Composite Burn Index (CBI) training workshop in July, teaching fire severity ground validation techniques.

The Second International Fire Congress, held in Orlando during the fall, was a big success and the Southeast Region had an excellent turnout. Each SER fire ecology team presented monitoring data including information regarding fire activities at Everglades National Park, Great Smoky Mountains National Park, and Gulf Islands National Seashore.

Worthy of special recognition during the year are the efforts of Gina Hernandez, Everglades National Park, in supporting the development of the new fire ecology program software, *Fire Ecology Assessment Tool* (FEAT). Gina has been a critical player in FEATs development and she deserves special recognition.

A group entitled “The Southeast Region Fire Ecology Partnership,” was formed this year and is based out of the Tall Timbers Research Station. This group is comprised of the southeast regional fire ecologist from each participating federal agency and from The Nature Conservancy. One of the first challenges the group has taken on is development of the Fire Regime Condition Class (FRCC) for the southeast. They will be working with the national FRCC team and the LANFIRE effort.

NPS Table 1. FY2003 Southeast Region Fire Ecology Plot Workload Totals

Park	Monitoring Unit	Total Plots Installed	Type of Plot	Pre-burn 2003	Immed Post 2003	Post-burn 2003 (1-20 yrs)
Big Cypress National Preserve	Pinelands	98	FMH Forest Plot	1	2	0
	Prairies	11	FMH Forest Plot	0	1	0
	Mixed Pineland and Prairie	64	Photo Points	2	1	26
	Team Total	173		3	4	26
Natchez Trace Parkway Team						
Gulf Islands NS	Longleaf-Slash Pine Forest	12	FMH Forest Plot	0	5	3
	Pitcher Plant Grassland	1	FMH Forest Plot	0	0	1
	Sand Pine-Scrub Oak Forest	11	FMH Forest Plot	2	0	2
Little River Canyon NP	Shortleaf Pine Forest	10	FMH Forest Plot	0	0	9
	Chestnut Oak Forest	3	FMH Forest Plot	1	0	2
	Green Pitcher Plant Bog	6				
Mammoth Cave NP	Big Bluestem Grassland	3	FMH Forest Plot	0	0	6
	Red Cedar Forest	4	FMH Grass Plot	0	0	0
	Chestnut Oak Forest	1	FMH Forest Plot	1	0	0
	Indian Grass Grassland	3	FMH Brush Plot	0	0	1
Natchez Trace NP	Loblolly Pine Forest	12	FMH Forest Plot	0	2	5
	Red Cedar Forest	4	FMH Brush Plot	0	4	0
Stones River NB	Earthworks Grasslands	7	FMH Grass Plot	7	0	0
	Central Basin Barrens	6	FMH Grass Plot	6	0	0
Vicksburg NMP	Battlefield Grassland	3	Photo Points	0	3	0
	Team Total	86		17	17	32
Everglades National Park Team						
Canaveral NS	Slash Pine Flatwoods	5	FMH Forest Plot	5	0	0
	Scrub Jay 1	5	CBI pre/post	0	5	0
Everglades NP	Everglades	11	FMH Brush Plot	4	0	2
	Coastal Prairie	18	FMH Brush Plot	0	1	11
	Marl Prairie	28	FMH Brush Plot	13	26	5
	Slash Pine Savanna	27	FMH Forest Plot	8	36	14
Timucuan NEP	Cedar Point	5	Photo Point	0	0	0
	Team Total	99		30	68	32

Great Smoky Mountains National Park Team						
Great Smoky Mtns NP	Red-Cockaded Woodpecker	14	FMH forest plot	0	3	10
	Table Mountain Pine	8	FMH forest plot	0	0	0
	Pitch Pine	14	FMH forest plot	6	3	3
	Scarlet Oak	5	FMH forest plot	0	1	0
	Chestnut Oak	1	FMH forest plot	0	0	0
	Red Oak	4	FMH forest plot	0	0	0
	Meadow Ryegrass	20	FMH grass plot	0	0	4
	Chinese Lespedeza	10	FMH grass plot	7	0	0
Big South Fork	Green Mountain Fire		CBI plots	0	0	15
	Meadow Ryegrass	6	FMH grass plot	0	0	0
Cowpens	Loblolly Pine	6	FMH forest plot	0	0	6
Kings Mtn NMP	Chestnut Oak	19	FMH forest plot	0	4	19
	Blackjack Oak	4	FMH Forest plot	0	2	4
	Team Total	84		13	13	61
Southeast Region FY03 Total		442		63	102	151

Fire Effects Program - Great Smoky Mountains National Park

During the 2003 season, the Great Smoky Mountains National Park (GRSM) Fire Effects Team monitored three parks in the southeast: Congaree Swamp National Monument, Great Smoky Mountains National Park and Kings Mountain National Military Park. GRSM co-monitored Mammoth Cave National Park with the Natchez Trace Fire Effects Team. We completed a total of 14 plot installations, 13 immediate post-burn reads, and 50 long-term post-burn reads. In July we hosted a CBI (burn severity) workshop with fire effects teams from throughout the southeast region. We completed 15 CBI plots on the Green Mountain Fire site; which wildfire occurred on the eastern side of the Great Smoky Mountains in November 2001.

The GRSM team participated in fire and educational activities throughout the year. During the spring we assisted with prescribed burning throughout the region. During the wildfire season our team members took assignments as squad boss trainees and as fire effect monitors (FEMOs). During the spring Annual Wildfire Pilgrimage, we educated the public on the fire history of the Smoky Mountains. In November, we presented our data on the role of fire in tree mortality, and on the role of fire in regeneration of yellow pine (*Pinus pungens*, *P. rigida*, and *P. virginiana* communities of Great Smoky Mountains National Park) at the 2nd International Wildland Fire Ecology and Fire Management Congress in Orlando, Florida.

Fire Use Module - Great Smoky Mountains National Park

The GRSM Fire Use Module (FUM) continued to complete all phases of projects (planning, preparation, burn implementation). Despite the high precipitation levels, 17 NPS burn units were completed, in which 2,600 acres were burned. The crew worked at Gulf Islands National Seashore, Kings Mountain National Military Park, Ozark National Scenic Riverway, Mammoth Cave National Park, Cowpens National Battlefield, and the Great Smoky Mountains National Park.

Crewmembers actively participated in the Western United States national fire emergency last summer. Members were assigned to 30 wildland fires, working more than 130 operational shifts. Personnel completed task books for several different incident management positions, and for prescribed fire and fire effects monitoring positions.

Fire Use Module - Cumberland Gap National Historical Park (GUCA)

The Cumberland Gap Fire Use Module began the season on January 13, 2003. After battling less than perfect prescribed burning conditions, we were able to accomplish projects at Mammoth Cave National Park and at Cowpens National Battlefield. We assisted the Great Smoky Mountains Fire Use Module in accomplishing some of their projects at Gulf Islands National Seashore, Great Smoky Mountains National Park, and Kings Mountain National Military Park.



Personnel attended 14 training classes; six task books were completed and signed. After the prescribed fire season, the module filled many suppression resource requests for the Western fire season. Module members were able to gain experience in a variety of fuel types in Colorado, Idaho and Montana.

Accomplishments

NPS Prescribed Fire			
Project name	Host Unit	Dates	Accomplishments
Ski Mountain*	GRSM	2-1	40 piles burned
Arbutus Ridge*	GRSM	3-10 to 3-12	1000 acres
Willow Hollow	PERI	3-16	446 acres
North Central	PERI	3-16	128 acres
NLO-7*	GUIS	3-26	40 acres
Gopher Tortoise*	GUIS	3-27	30 acres
Great Onyx Meadows	MACA	4-14	420 acres
Marry Morris*	KIMO	5-2	70 acres
Dellingham*	KIMO	5-13	80 acres
Battlefields	COWP	5-14	72 acres
Brushy Ridge*	KIMO	6-24	270 acres

*GRSM module assist

Fire Use Fires

Project Name	State	Acres(at DEMOB)	Dates on Fire	FUM Members on Incident
None	—	—	—	—

Suppression Fires

Project Name	State	Acres (at DE-MOB)	Dates	FUM Members on Incident
Mesa Verde Helitack IA	CO	41 IA Fires	6-29 to 7-28	Nagle
Robert Fire	MT	57,570	8-9 to 8-27	Jerkins
Mineral-Prim Complex	MT	18,082	9-4 to 9-18	Jerkins
Blackfoot Complex	MT	25,996	8-27 to 8-29	Jerkins
Wedge Canyon	MT	53,315	8-23 to 9-7	Ernst
Milepost 59	ID	8,159	8-17 to 8-24	Nagle
Slims Complex	ID	12,456	8-24 to 9-2	Nagle
Lolo IA	MT	2 IA Fires	8-4 to 8-22	Sturgill, Cope

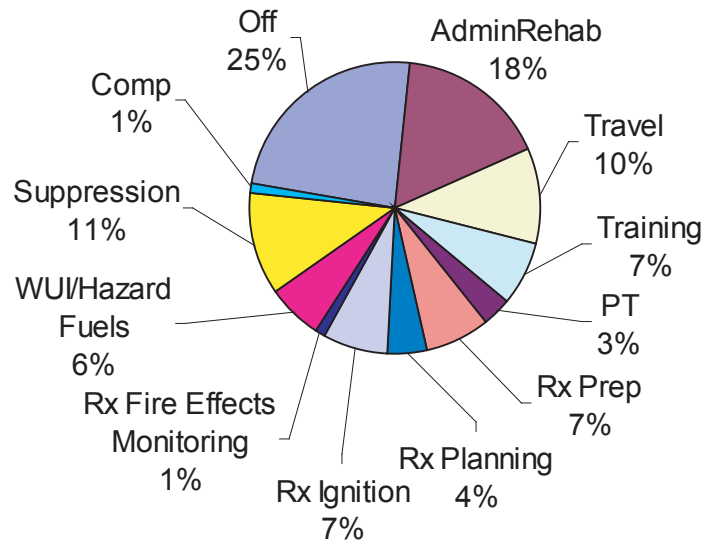
Accomplishments Summary

Project Type	# of Assignments	Days on Assignment	Accomplishments
RX Fire	11	13	2,556 acres
Fire Use	0	0	0 acres
Planning			10 Burn Plans completed
WUI			1 mile buffer at CUGA
Suppression	8	120	6 task books signed off

Training

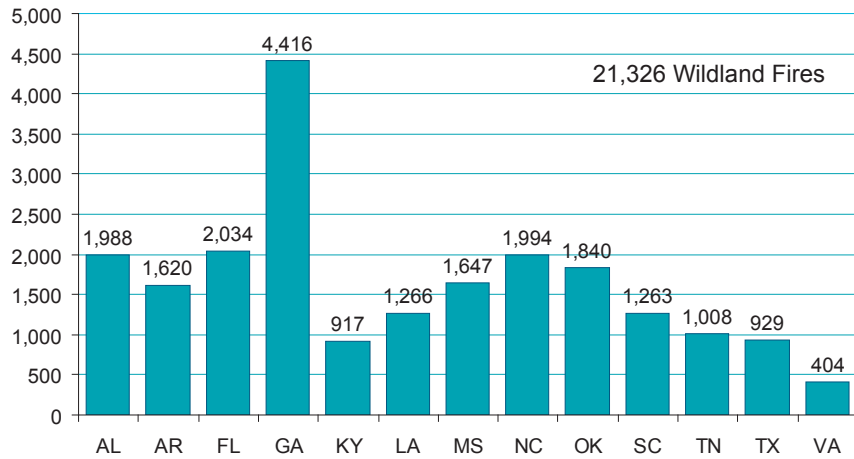
Class	Location	Dates	Employees Attending
I-401	New York Fire Academy	10-25	Nagle
S-260	New York Fire Academy	10-26 to 10-27	Nagle
S-230	New York Fire Academy	11-1 to 11-3	Sturgill, Nagle
S-234	New York Fire Academy	11-3 to 11-6	Sturgill
Fire Refresher	GRSM	1-16	Sturgill, Nagle, Brusselback
GPS for ICS	Tallahassee, FL	2-23 to 3-1	Sturgill
S-271(217)	Chattanooga, TN	2-24 to 2-27	Nagle, Brusselback
ATV Operators	M-boro, KY	5/29	Cope, Ernst
Intro to Supervision	Virginia Beach, VA	7-20 to 7-26	Sturgill
EMT-Basic	Knoxville, TN	8-4 to 8-22	Ernst
S-212	Natural Tunnel, VA	9-8 to 9-12	Cope
S-205	Natural Tunnel, VA	9-13 to 9-14	Cope, Ernst
Supervision and Group Performance	Virginia Beach, VA	9-14 to 9-20	Sturgill
S-290	London, KY	9/24 to 9/26	Cope, Ernst

Personnel Time Chart

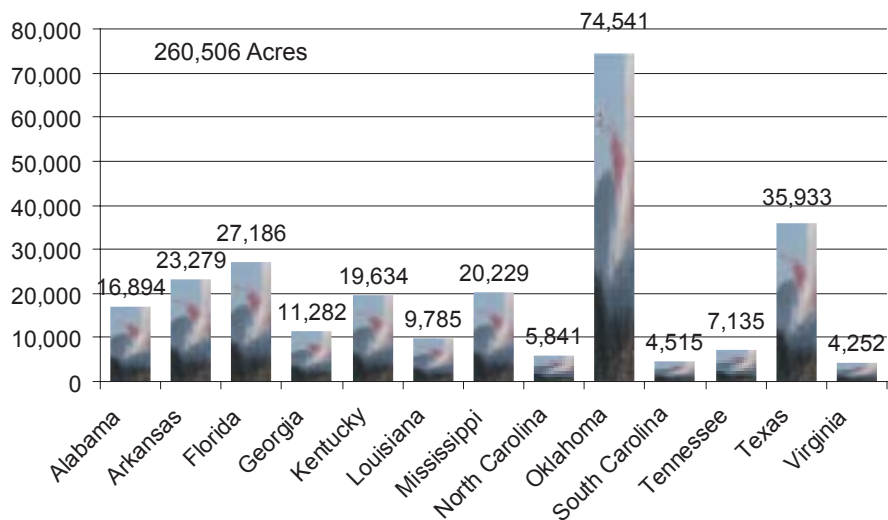


State and Private Forestry Fire Statistics CY 2003

Wildland Fire Occurrence by State*
State and Private Forestry



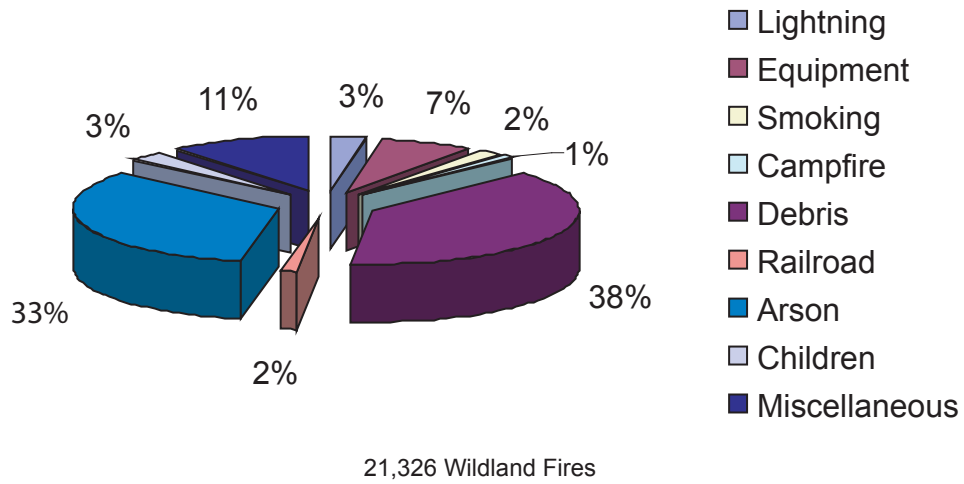
Acres Burned by State
State and Private Forestry



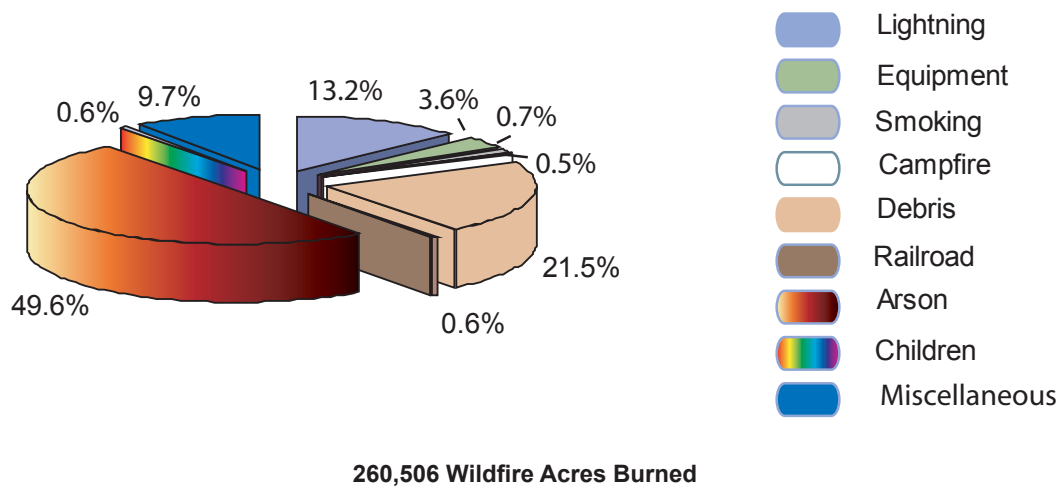
*Source for State and Private 2003 Wildland Fire Statistics: USDA Forest Service 2003 *Annual Wildfire Summary*; "wfsun.pff."

Fires & Acres By Cause --- State & Private Forestry CY 2003													
		Lightning	Equip ment	Smoking	Campfire	Debris	Railroad	Arson	Children	Misc	Fires	Acres	Acres/ Fire
Alabama	Fires	2	127	37	9	637	29	973	31	143	1,988		8.5
	Percent	0%	6%	2%	0%	32%	1%	49%	2%	7%			
	Acres	6.0	269.0	182.0	48.0	3,593.0	245.0	10,679.0	96.0	1,776.0		16,894	
Arkansas	Fires	34	90	22	13	631	61	529	19	221	1,620		14.4
	Percent	2%	6%	1%	1%	39%	4%	33%	1%	14%			
	Acres	429	534	277	136	6622	176	11539	80	3486		23,279	
Florida	Fires	344	166	27	49	487	11	302	119	529	2,034		13.4
	Percent	17%	8%	1%	2%	24%	1%	15%	6%	26%			
	Acres	13483	1329	201	248	2512	89	2396	371	6557		27,186	
Georgia	Fires	69	650	117	62	2231	76	716	137	358	4,416		2.6
	Percent	2%	15%	3%	1%	51%	2%	16%	3%	8%			
	Acres	189	694	163	239	5569	191	3177	190	870		11,282	
Kentucky	Fires	0	18	12	10	258	2	550	14	53	917		21.4
	Percent	0.0%	2.0%	1.3%	1.1%	28.1%	0.2%	60.0%	1.5%	5.8%			
	Acres	0	202	48	127	3866	10	14676	21	684		19,634	
Louisiana	Fires	8	28	9	2	320	52	673	15	159	1,266		7.7
	Percent	1%	2%	1%	0%	25%	4%	53%	1%	13%			
	Acres	138	291	15	19	1577	376	6191	283	895		9,785	
Mississippi	Fires	3	24	6	1	574	13	912	8	106	1,647		12.3
	Percent	0%	1%	0%	0%	35%	1%	55%	0%	6%			
	Acres	17	193	45	1	5716	119	12991	50	1097		20,229	
North Carolina	Fires	10	140	121	21	864	15	355	154	314	1,994		2.9
	Percent	0	0	0	0	0	0	0	0	0			
	Acres	176	806	119	52	2,074	20	1,799	232	563		5,841	
Oklahoma	Fires	38	73	0	10	490	4	1177	6	42	1,840		40.5
	Percent	2%	4%	0%	1%	27%	0%	64%	0%	2%			
	Acres	1616	1902	0	27	12062	64	56516	17	2337		74,541	
South Carolina	Fires	9	108	44	8	616	9	244	82	143	1,263		3.6
	Percent	1%	9%	3%	1%	49%	1%	19%	6%	11%			
	Acres	60	361	182	30	1921	9	1321	141	490		4,515	
Tennessee	Fires	13	53	24	10	420	5	410	11	62	1,008		7.1
	Percent	1%	5%	2%	1%	42%	0%	41%	1%	6%			
	Acres	68	178	48	41	2300	27	4000	21	452		7,135	
Texas	Fires	38	44	9	13	563	13	121	10	118	929		38.7
	Percent	4%	5%	1%	1%	61%	1%	13%	1%	13%			
	Acres	18,143	2,463	466	230	7,680	141	2,835	61	3,914		35,933	
Virginia	Fires	3	25	21	4	138	30	67	23	93	404		10.5
	Percent	1%	6%	5%	1%	0%	7%	17%	6%	23%			
	Acres	4	83	162	49	616	63	1174	31	2070		4,252	
Total Fires	Fires	571	1,546	449	212	8,229	320	7,029	629	2,341	21,326		12.2
	Percent	3%	7%	2%	1%	39%	2%	33%	3%	11%			
Total Acres	Acres	34,329	9,305	1,908	1,247	56,108	1,530	129,294	1,594	25,191		260,506	
	Percent	13%	4%	1%	0%	22%	1%	50%	1%	10%			

Wildfires by Cause
State and Private Forestry



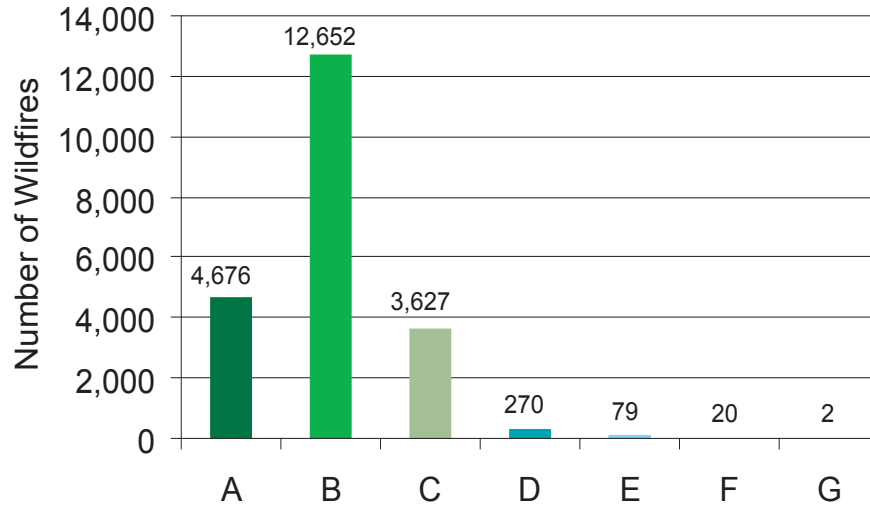
Acres by Cause
State and Private Forestry
CY 2003



*Source for all State and Private 2003 Wildland Fire Statistics: USDA Forest Service 2003 *Annual Wildfire Summary*; "wfsun.pff."

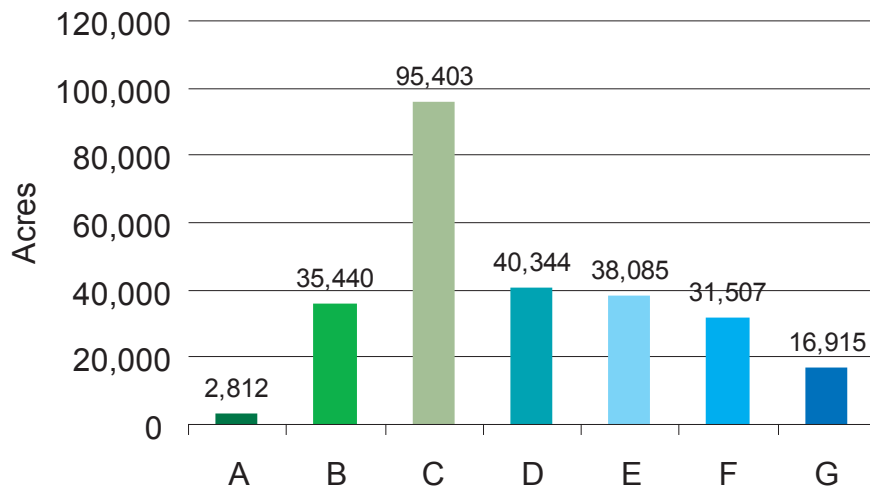
Fires & Acres By Size Class: State and Private Forestry CY 2003										
State		A	B	C	D	E	F	G	Fires	Acres
Alabama	Fires	321	1257	395	14	0	1	0	1,988	16,894
	Percent	16%	63%	20%	1%	0%	0%	0%		
	Acres	39	3574	10089	2032	0	1160	0		
	Percent	0%	21%	60%	12%	0%	7%	0%		
Arkansas	Fires	0	1185	406	20	9	0	0	1,620	23,279
	Percent	0%	73%	25%	1%	1%	0%	0%		
	Acres	0	3144	11513	3353	5269	0	0		
	Percent	0%	14%	49%	14%	23%	0%	0%		
Florida	Fires	578	1102	313	23	15	3	0	2,034	27,186
	Percent	28%	54%	15%	1%	1%	0%	0%		
	Acres	61	2748	8577	3315	7035	5450	0		
	Percent	0%	10%	32%	12%	26%	20%	0%		
Georgia	Fires	1534	2662	211	9	0	0	0	4,416	11,282
	Percent	35%	60%	5%	0%	0%	0%	0%		
	Acres	442	4565	4550	1725	0	0	0		
	Percent	4%	40%	40%	15%	0%	0%	0%		
Kentucky	Fires	57	521	293	38	8	0	0	917	19,634
	Percent	6%	57%	32%	4%	1%	0%	0%		
	Acres	16	1451	9122	6209	2836	0	0		
	Percent	0%	7%	46%	32%	14%	0%	0%		
Louisiana	Fires	144	939	173	9	1	0	0	1,266	9,785
	Percent	11%	74%	14%	1%	0%	0%	0%		
	Acres	434	2977	4575	1439	360	0	0		
	Percent	4%	30%	47%	15%	4%	0%	0%		
Mississippi	Fires	354	727	544	22	0	0	0	1,647	20,229
	Percent	21%	21%	21%	21%	21%	21%	21%		
	Acres	354	2946	13926	3003	0	0	0		
	Percent	2%	15%	69%	15%	0%	0%	0%		
North Carolina	Fires	823	1,040	124	6	1	0	0	1,994	5,841
	Percent	41%	52%	6%	0%	0%	0%	0%		
	Acres	126	2,031	2,497	837	350	0	0		
	Percent	2%	35%	43%	14%	6%	0%	0%		
Oklahoma	Fires	227	895	599	73	34	11	1	1,840	74,541
	Percent	12%	49%	33%	4%	2%	1%	0%		
	Acres	28	2779	19055	12367	16615	17797	5900		
	Percent	0%	4%	26%	17%	22%	24%	8%		
South Carolina	Fires	250	902	111	0	0	0	0	1,263	4,515
	Percent	0%	0%	0%	0%	0%	0%	0%		
	Acres	33	2003	2479	0	0	0	0		
	Percent	0%	0%	0%	0%	0%	0%	0%		
Tennessee	Fires	152	675	161	20	0	0	0	1,008	7,135
	Percent	15%	67%	16%	2%	0%	0%	0%		
	Acres	1142	4709	1142	142	0	0	0		
	Percent	16%	66%	16%	2%	0%	0%	0%		
Texas	Fires	84	540	259	30	11	4	1	929	35,933
	Percent	0%	0%	0%	0%	0%	0%	0%		
	0	82	1976	6785	4955	5620	5500	11015		
	Percent	0%	0%	0%	0%	0%	0%	0%		
Virginia	Fires	152	207	38	6	0	1	0	404	4,252
	Percent	38%	51%	9%	1%	0%	0%	0%		
	Acres	55	537	1093	967	0	1600	0		
	Percent	1%	13%	26%	23%	0%	38%	0%		
Total Fires	Fires	4,676	12,652	3,627	270	79	20	2	21,326	
	Percent	22%	59%	17%	1%	0%	0.1%	0%		
Total Acres	Acres	2,812	35,440	95,403	40,344	38,085	31,507	16,915	260,506	
	Percent	1.1%	13.6%	36.6%	15.5%	14.6%	12.1%	6.5%		

Wildfires by Size Class
State and Private Forestry
CY 2003



21,326 Wildfires

Acres by Size Class
State and Private Forestry
CY 2003



260,506 Wildfire Acres

*Source for State and Private 2003 Wildland Fire Statistics: USDA Forest Service 2003 *Annual Wildfire Summary*; "wfsum.pff."

Structures Lost, Injuries and Fatalities*

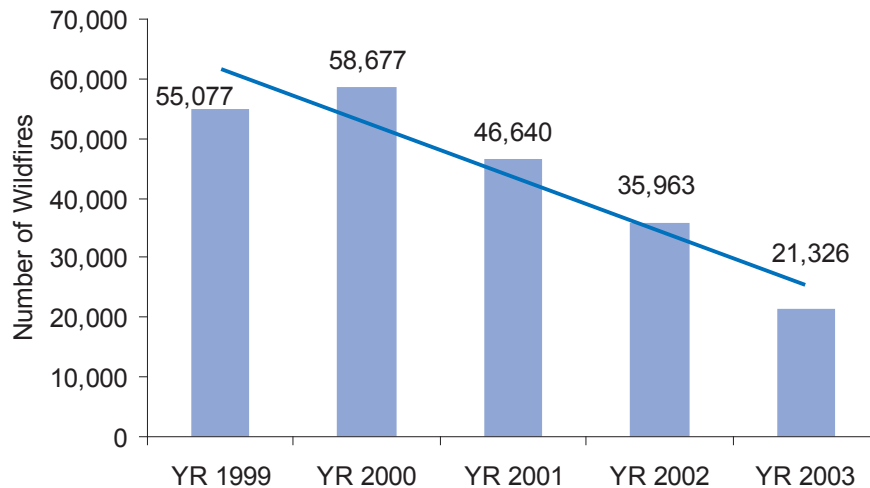
Fatalities: Hurricane Isabel		
State & Private Forestry	Injuries	Fatalities
Isabel Eastern Branch	—	8
Isabel Central Branch	—	2
Total	—	10

Structures Lost, Threatened, Damaged: Wildland Fire			
State & Private Forestry	Destroyed	Threatened	Damaged
Primary Residence	0	210	0
Outbuilding	11	145	6
Commercial	0	5	0
Total	11	360	6

Structures Lost, Damaged, Threatened: Hurricane Isabel			
State & Private Forestry	Destroyed	Threatened	Damaged
Primary	347	0	8,267
Outbuilding	—	—	—
Commercial	19	0	211
Total	366	—	8,478

*Source for State and Private 2003 structure, fatalities and injuries data: USDA Forest Service 2003 *Annual Wildfire Summary*; "wfsun.pff."

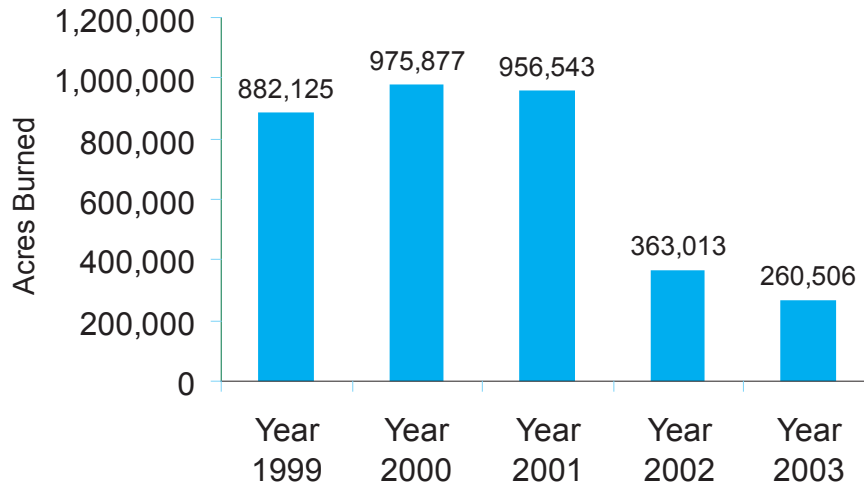
Wildland Fire Occurrence
1999 - 2003
State & Private Forestry



Average Number of Wildfires per Year = 43,537

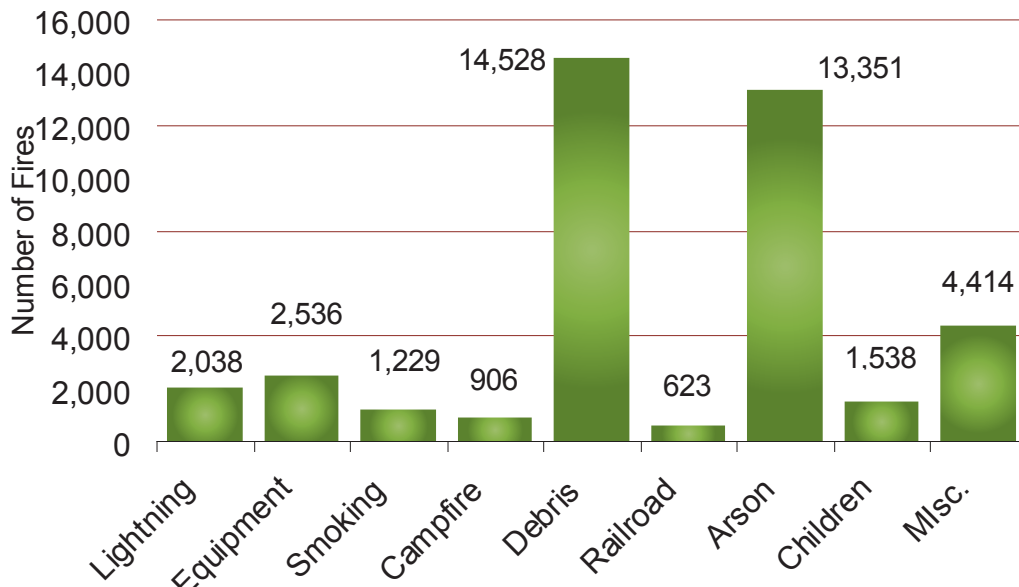
STATE AND PRIVATE FORESTRY — 5 YEAR AVERAGES												
Year	Lightning	Equipment	Smoking	Campfire	Debris	Railroad	Arson	Children	Misc.	Total Fires	Total Acres	Acres/Fire
1990	2881	3240	2479	501	16850	678	23385	1775	9026	60,815	663,545	10.9
1991	730	2363	2364	497	15337	469	21673	1562	7099	52,094	530,988	10.2
1992	895	1875	1704	427	13904	443	17768	1558	3352	41,926	403,470	9.6
1993	2395	2204	1562	405	13887	488	18846	1630	3951	45,368	423,496	9.3
1994	1147	1760	1357	413	14606	448	15467	1579	3498	40,275	543,133	13.5
1995	1048	2244	1623	479	17661	497	16345	1912	3749	45,558	508,148	11.2
1996	1018	2303	1500	470	22020	619	16893	1911	4090	50,824	1,199,111	23.6
1997	442	1612	833	242	10243	412	9308	1105	2105	26,302	190,240	7.2
1998	2526	2254	1252	326	11734	481	13305	1398	3309	36,585	794,989	21.7
1999	2609	3429	1802	624	20084	716	18971	2017	4825	55,077	882,125	16.0
2000	3503	3,666	1591	472	19003	954	20286	1882	7320	58,677	975,877	16.6
2001	1522	1892	1251	326	11778	381	12345	1573	3701	46,640	956,543	20.5
2002	1,984	2,146	1,050	2,897	13,547	744	8,123	1,590	3,882	35,963	363,013	10.1
2003	571	1,546	449	212	8,229	320	7,029	629	2,341	21,326	260,506	12.2
1990-94	8048	11442	9466	2243	74584	2526	97139	8104	26926	240,478	2,564,632	10.7
5 yr avg	1610	2288	1893	449	14917	505	19428	1621	5385	48,096	512,926	
Percent	7%	1%	4%	1%	31%	1%	40%	3%	11%	—	—	—
91-95	6215	2221	8610	2221	75395	2345	90099	8241	21649	225,221	2,409,235	10.7
5 yr avg	1243	444	1722	444	15079	469	18020	1648	4330	45,044	481,847	
Percent	3%	1%	4%	1%	33%	1%	40%	4%	10%	—	—	—
92-96	6503	2194	7746	2194	82078	2495	85319	8590	18640	223,951	3,077,358	13.7
5 yr avg	1301	439	1549	439	16416	499	17064	1718	3728	44,790	615,472	—
Percent	3%	1%	1%	1%	37%	1%	38%	4%	8%	—	—	—
93-97	6050	2009	6875	2009	78417	2464	76859	8137	17393	208,327	2,864,128	13.7
5 yr avg	1210	402	1375	402	15683	493	15372	1627	3479	41,665	572,826	
Percent	3%	1%	3%	1%	37%	1%	38%	4%	8%	—	—	—
94-98	6181	1930	6565	1930	76264	2457	71318	7905	16751	199,544	3,235,621	16.2
5 yr avg	1236	386	1313	386	15253	491	14264	1581	3350	39,909	647,124	
Percent	3%	1%	3%	1%	38%	1%	36%	4%	8%			
95-99	7643	2141	7010	2141	81742	2725	74822	8343	18078	214,346	3,574,613	16.7
5 yr avg	1529	428	1402	428	16348	545	14964	1669	3616	42,869	714,923	
Percent	4%	1%	3%	1%	38%	1%	35%	4%	8%			
96-2000	10098	2134	6978	2134	83084	3182	78763	8313	21649	227,465	4,042,342	18.7
5 yr avg	2020	427	1396	427	16617	636	15753	1663	4330	45,493	808,468	
Percent	4%	1%	3%	1%	37%	1%	35%	4%	10%			
97-01	10602	12853	6729	1990	72842	2944	74215	7975	21260	223,281	3,799,773	18.0
5 yr avg	2120	2571	1346	398	14568	589	14843	1595	4252	44,656	759,955	
Percent	4%	5%	3%	1%	28%	1%	29%	3%	8%			
98-02	12,144	13,387	6,946	4,645	76,146	3,276	73,030	8,460	23,037	232,942	3,972,547	17.1
5 yr avg	2,429	2,677	1,389	929	15,229	655	14,606	1,692	4,607	46,588	794,509	
Percent	5%	6%	3%	2%	33%	1%	31%	4%	10%	—		
99-03	10,189	12,679	6,143	4,531	72,641	3,115	66,754	7,691	22,069	217,683	3,438,064	16
5 yr avg	2,038	2,536	1,229	906	14,528	623	13,351	1,538	4,414	43,537	687,613	
Percent	5%	6%	3%	2%	33%	1%	31%	4%	10%			

Acres Burned per Year
1999 - 2003
State and Private Forestry



Average Acres Burned per Year: 1999 - 2003 = 687,613
Total Acres Burned 1999 - 2003 = 3,438,064

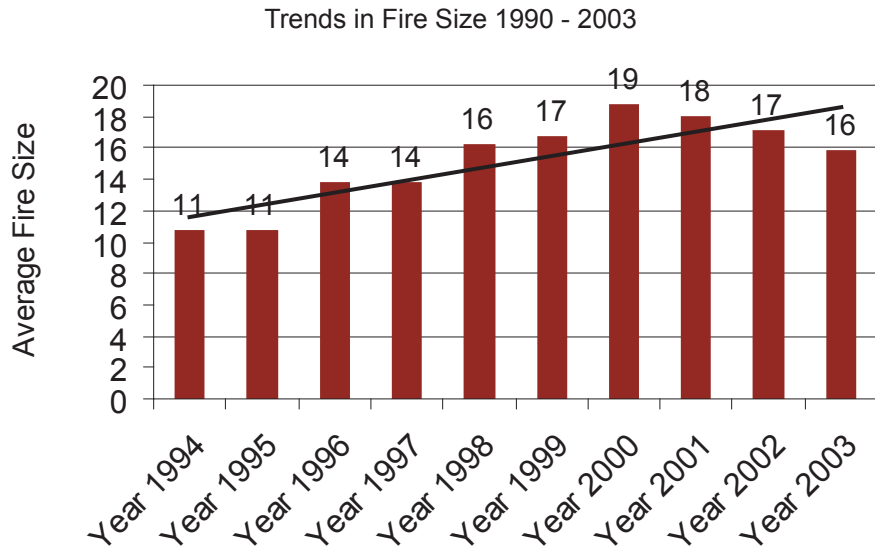
Wildland Fires Burned by Cause
5-Year Averages: 1999 - 2003
State & Private Forestry



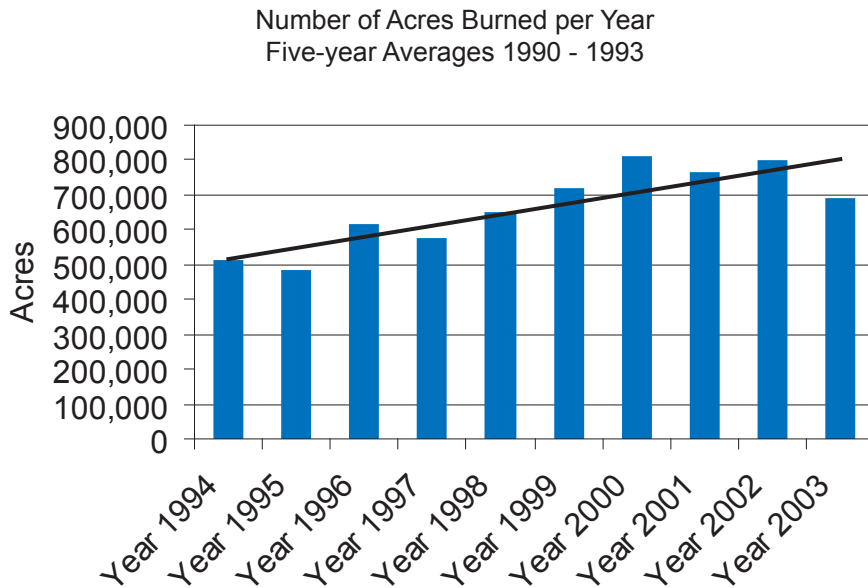
43,537 Average Wildfires per Year 1999 - 2003
Total Fires Burned 1999 - 2003 = 217,683

Trends in Fire Size

State and Private Forestry - Southern Geographic Area



Each year represents five years of data. For example, year 1994 represents the average size of all fires from 1990 through 1994.



Average number of acres burned, over 5-year spans, from 1994 through 2003. Each column represents the average number of acres burned over the previous 5 years.

Terminology Used In This Report

BIA	Bureau of Indian Affairs, U.S. Department of Interior
BLM	Bureau of Land Management, U.S. Department of Interior
BS	Brown Spot (prescribed fire tables)
CUS	Clear understory (prescribed fire tables)
CWN	Call when needed: aircraft that have a call when needed contract
DOD	US Department of Defense
DOE	Us Department of Energy (Savannah River Site)
ENGB	Engine Boss
Fee	Land owned in fee is land owned in full, in absolute and legal possession
FEMA	Federal Emergency Management Agency
FEMO	Fire effects module
FFT1	Firefighter Type 1 (also 2)
FS	Forest Service, U.S. Department of Agriculture
Fuels	Hazardous fuels reduction by prescribed fire (used in tables)
Fuels Mech	Hazardous fuels reduction by mechanical methods (used in tables)
FUM	Fire Use Management
FWS	Fish & Wildlife Service, U.S. Department of Interior
GACC	Geographic Area Coordination Center
Hazardous Fuels	Combustible material of natural origin occurring in a wildland environment that, by its inherent qualities, provides the potential for an uncontrollable fire event
HECM	Helicopter Crew Member
Hel 1 (or 2,3)	Helicopter and type (1, 2, 3)
Hotshot Crew	Interagency Type 1 Fire Crew, 20 persons
ICT1	Incident Command Team 1 (also 2,3,4)
IHC	Interagency Type 1 Fire Crew, 20 person, IHC = Interagency Hotshot Crew
NICC	National Interagency Coordination Center
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service, U.S. Department of Interior
NWS	National Weather Service
R	Range improvement (prescribed fire tables)
RR	Rough reduction (prescribed fire tables)
RX1	Prescribed Burn Boss 1 (or Rx2)
S&P	State and Private Forestry
SACC	Southern Area Coordination Center
SACG	Southern Area Coordinating Group
SB	Seedbed preparation
SP	Site prep (prescribed fire tables)
T&E	Threatened and endangered species (prescribed fire tables)
Task Book	Document used to track and certify a trainee's progress in required skills and tasks
Type	1, 2, 2-IA, and 3 – Various resources are "typed" by capability or configuration
UTF	Unable to fill the resource request.
WI	Wildlife improvement (prescribed fire tables)