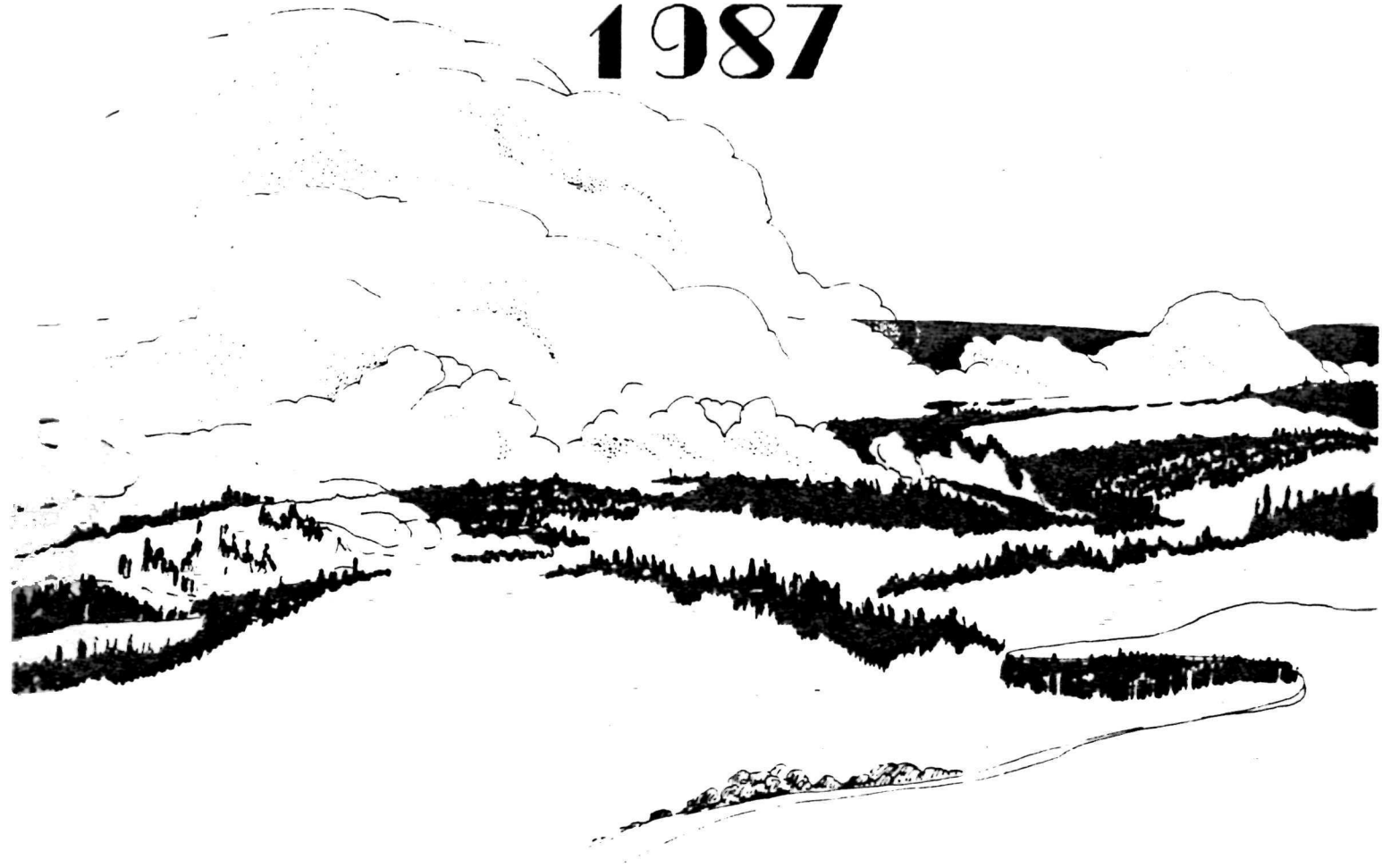


# National Park Service Wildland Fire Report 1987



---

National Park Service  
Branch of Fire Management  
Boise, Idaho  
February 1988



NATIONAL PARK SERVICE

WILDLAND FIRE REPORT

1987

Prepared by:  
Judi Zuckert  
Fire Information Specialist  
February 1988

National Park Service  
Branch of Fire Management  
3056 Elder Street, Suite A  
Boise, Idaho 83705-4707

# TABLE OF CONTENTS

Wildfire Activity Summary . . . . .	. 1
Table 1 - National Fire Activity 1987 . . . . .	. 3
Table 2 - Wildfires and Acres by Size Class 1987 . . . . .	. 4
Table 3 - Wildfires by Cause 1987 . . . . .	. 5
Table 4 - Large Wildfire Occurrence 1987 . . . . .	. 6
Table 5 - Large Prescribed Natural Fires 1987 . . . . .	. 7
Table 6 - Large Prescribed Burns 1987 . . . . .	. 7
Table 7 - Wildfires 1978-1987. . . . .	. 8
Table 8 - Prescribed Natural Fires 1978-1987. . . . .	. 9
Table 9 - Prescribed Burns 1978-1987 . . . . .	.10
Table 10 - Mutual Aid Responses 1978-1987 . . . . .	.11
Table 11 - Support Actions 1978-1987 . . . . .	.12
Table 12 - False Alarms 1978-1987 . . . . .	.13
Table 13 - Fire Occurrence by Region 1987 - Alaska Region . . . . .	.14
Table 14 - Fire Occurrence by Region 1987 - Mid Atlantic Region . . . . .	.15
Table 15 - Fire Occurrence by Region 1987 - Midwest Region . . . . .	.16
Table 16 - Fire Occurrence by Region 1987 - National Capital Region . . . . .	.17
Table 17 - Fire Occurrence by Region 1987 - North Atlantic Region. . . . .	.18
Table 18 - Fire Occurrence by Region 1987 - Pacific Northwest Region . . . . .	.19
Table 19 - Fire Occurrence by Region 1987 - Rocky Mountain Region. . . . .	.20
Table 20 - Fire Occurrence by Region 1987 - Southeast Region. . . . .	.21
Table 21 - Fire Occurrence by Region 1987 - Southwest Region. . . . .	.22
Table 22 - Fire Occurrence by Region 1987 - Western Region . . . . .	.23
Table 23 - Interagency Hotshot Crew Wildfire Assignments 1987 . . . . .	.24
Table 24 - Interagency Hotshot Crew Workload Distribution 1981-1987 . . . . .	.25

## 1987 WILDFIRE ACTIVITY SUMMARY

The 1987 fire season was highlighted by the largest mobilization of personnel and resources to western fires in modern history. This followed two previous years of record-breaking mobilizations in 1985 and 1986. While the number of fires and acres burned during the year were less than the amount burned the two previous years, the intensity of simultaneously burning fires, and the threats posed to adjacent communities by these major fires, was unprecedented.

Nationwide, there were 71,300 fires reported on public lands during the year. These fires burned over 2,447,296 acres. Over 27,000 people were mobilized for wildfire suppression activities during the year.

Wildfire activity jumped around the continental United States from region to region during the year. In the Spring, drought conditions in the northeastern lake states were the most severe in ten years. In early summer, fire activity was centered in the Great Basin, the Southwest, and California. The typical early summer lightning did not develop in Alaska, and the fire season there was a very light one. In midsummer, hot, dry winds, low humidities, and lightning-caused a moderate amount of wildfire activity around the west.

For most of August there was very little wildfire activity, and it appeared that the season would end on a quiet note despite the drought conditions around the West. In late August, lightning activity from thunderstorms in California and southern Oregon started over 2,000 fires. Over 728,000 acres burned in less than two weeks, with over 580,000 acres burned in California alone. Fire suppression efforts in California and Oregon continued until mid-October. Then, to close out the year, lack of rain, wind, and arson combined to create a heavy fall fire season in the Southeast. In November, over 15,500 fires were reported during the first week of the month; in the second week rain and snow curtailed the fire season.

National Park Service wildfire activity generally followed the national pattern. There were a total of 704 wildfires suppressed, which burned almost 39,000 acres. In addition, there were 129 prescribed natural fires, which burned 12,761 acres, and 111 prescribed burns that covered 28,893 acres. During the year, there were a total of 1,781 firefighters and overhead dispatched for interagency suppression efforts. Neither the number of fires or the number of acres of NPS land that burned during 1987 was exceptionally high. However, the number of personnel who left their home areas to assist on interagency wildfire suppression details was the greatest in agency history.

The fire year began for the National Park Service in the Southwest, with human-caused fires in January and February at Alibates Flint Quarries and Buffalo River. In March, wildfires were reported in 7 out of 10 regions. Again, the fires were human-caused, and the largest were at Indiana Dunes,

Big Cypress, Buffalo River, and Hawaii Volcanoes. April brought the first large lightning-caused fire, at Great Sand Dunes, and large prescribed burns conducted in the Southeast, Midwest, and Rocky Mountain regions. In May, personnel from four regions were dispatched to the Lake States on cooperative suppression efforts. In June, there were a variety of wild-fires, prescribed natural fires, and prescribed burns in six regions. In July there were large wildfires and prescribed natural fires in the Sierra. August brought lightning fires into Joshua Tree, Lassen, Sequoia-Kings Canyon, and Yosemite, and the beginning of the large mobilization of personnel to California and Oregon.

During the period of intense fire activity in California and Oregon, there were major concerns about the effects of the wildfires on park lands in both states. At Oregon Caves National Monument, evacuation plans were reviewed and readied for implementation due to a potential for the park to be isolated by fires on the Siskiyou National Forest. The threat subsided without an evacuation taking place. In Yosemite National Park, the large Stanislaus Complex of fires on the Stanislaus National Forest spread into the northwestern section of the park, and threatened the Merced and Tuolumne groves of Giant Sequoias, as well as the communities of Hodgdon Meadows, Crane Flat, and El Portal. Roads and campgrounds were closed and some employees were evacuated from Crane Flat and Hodgdon Meadows. This threat occurred during the busy Labor Day holiday, and most of the park remained open for visitation.

At the same time, in Sequoia-Kings Canyon National Parks, two large fires that originated on other agency lands affected the parks. The Case Fire necessitated the closure of the Mineral King Road, and threatened several camps and communities along the wildland/urban interface. The Pierce Fire, which originated on the Sequoia National Forest, exhibited extreme fire behavior, crowning and burning giant sequoias outside the park boundary. Fortunately, the wildfire swept into the park in a section of the Redwood Mountain giant sequoia grove where the fuel loading had been significantly reduced by a National Park Service prescribed burn 7 years earlier. The wildfire dropped to a surface fire that was stopped with handlines without damage to the park's sequoia. Holiday crowds were also accommodated in most of Sequoia-Kings Canyon as usual.

As the western fire season lingered on, over 1,100 NPS firefighters and overhead spent much of September and October battling wildfires in California, Oregon, Washington and Idaho. Then, there was a final dispatch of personnel to the Southeast in late October, as human-caused fires were ignited on dry state, forest, and park lands. Wildfires continued to burn in Southeastern parks until mid-December.

The National Park Service also provided personnel to cooperating agencies for local fire suppression efforts outside of park areas. The largest number of mutual aid responses in NPS history occurred in 1987, with 164 suppression responses on neighbors' fires totalling 21,134 acres. The National Park Service also received personnel and equipment from other agencies for suppression efforts on park lands. To combat the ten largest park fires, more resources were received from the interagency community than were contributed during the August-October mobilizations.

Table 1. NATIONAL FIRE ACTIVITY 1987

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	566	27,754
Suppressed on NPS lands by NPS modified control strategy	53	9,756
Suppressed on NPS lands by other federal agency	18	590
Suppressed on NPS lands by non-federal agency	72	758
TOTAL suppressed wildfires	709	38,858
Natural out on NPS lands	124	1,042
Prescribed natural fire	129	12,761
Prescribed burn	111	28,893
False alarm	75	--
Mutual aid by NPS	164	21,134
Support action (non-local)	625	--

Table 2. WILDFIRES AND ACRES BY SIZE CLASS 1987

SIZE CLASS IN ACRES	AGENCY LANDS		OTHER LANDS		ALL LANDS	
	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES
A (0 - .2)	344	40	58	7	402	47
B (.3 - 9)	257	439	59	147	316	586
C (10 - 99)	60	1,569	27	1,048	87	2,617
D (100 - 299)	22	3,284	10	2,247	32	5,531
E (300 - 999)	13	6,166	6	4,023	19	10,189
F (1000 - 4999)	12	13,360	3	16,639	15	29,999
G (5000 + )	1	14,000	1	5,721	2	19,721
TOTAL	709	38,858	164	29,831	873	68,689

In 1987, roughly 85 percent of all wildfires on NPS lands were controlled at under 10 acres in size. The largest fire, which occurred at Hawaii Volcanoes National Park, accounted for 36 percent of all the wildfire acreage burned during the year. Western Region accounted for 41 percent of the year's wildfire occurrence.

Normal fire year calculations indicate that the number of wildfires in 1987 was 25 percent below the norm of 940 fires. There were fewer fires than expected in size classes A, B, C, E, and G.

Table 3. WILDFIRES BY CAUSES 1987

CAUSE	AGENCY LANDS		OTHER LANDS		ALL LANDS	
	FIRES	ACRES	FIRES	ACRES	FIRES	ACRES
Lightning	267	25,624	71	13,457	338	39,081
Campfire	90	234	7	7	97	241
Smoking	44	53	9	38	53	91
Debris Burning	27	1,009	14	4,610	41	5,619
Incendiary	119	5,090	18	2,916	137	8,006
Equipment Use	11	343	9	182	20	525
Railroads	4	376	5	17	9	393
Children	15	14	3	6	18	20
Miscellaneous	132	6,116	28	8,598	160	14,714
TOTAL	709	38,858	164	29,831	873	68,689

The most common cause of wildfires on National Park Service lands in 1987 was lightning. Lightning-caused fires also accounted for the largest amount of acreage burned.



Table 4. LARGE WILDFIRE OCCURENCE 1987

REGION	PARK	SUPPRESSION STRATEGY	FIRE NAME	NPS ACRES	TOTAL ACRES	FUEL MODEL	COST
ARO	Denali	Contain	Slate Creek	650	2,700	Q	\$ 743
RMR	Dinosaur	Confine	Tank	47	2,240	T	\$ 683
	Grand Teton	Contain	Adams Hill	2,350	2,350	G	\$ 1,017
	Gr Sand Dunes	Control	Runaway	1,280	1,280	T	\$ 2,212
SER	Big Cypress	Control	41 South #2	1,241	1,241	N	\$ 2,212
	Big South Fork	Control	Laurel Ridge	1,854	1,854	E	\$ 25,711
	Great Smokies	Control	Morton Bluff	119	1,785	P	\$ 15,551
	Natchez Trace	Control	Browns	4	1,154	P	\$ 769
WRO	Hawaii Volcan	Control	Kipukanene	1,200	1,200	L	\$128,568
	Hawaii Volcan	Control	Uila	14,000	14,000	L	\$204,834
	Joshua Tree	Contain	Paul	1,250	1,250	L	\$ 69,610
	Yosemite	Confine	Lost Bear	1,365	1,365	H	\$191,967
	Yosemite	Control	Jarrel	2,000	2,000	G	\$ 4,973

There were a total of 725 wildfires and natural outs reported on NPS lands in 1987. Of these, 13 fires reached a size of over 1,000 acres. Over one-third of these large fires were managed with a confine or contain strategy, rather than full suppression.

Table 5. LARGE PRESCRIBED NATURAL FIRES 1987

REGION	PARK	FIRE NAME	NPS ACRES	FUEL MODEL	COST
Western	Yosemite	Frog	3,550	U	\$ 4,000
	Yosemite	Campground	1,097	U	\$24,157

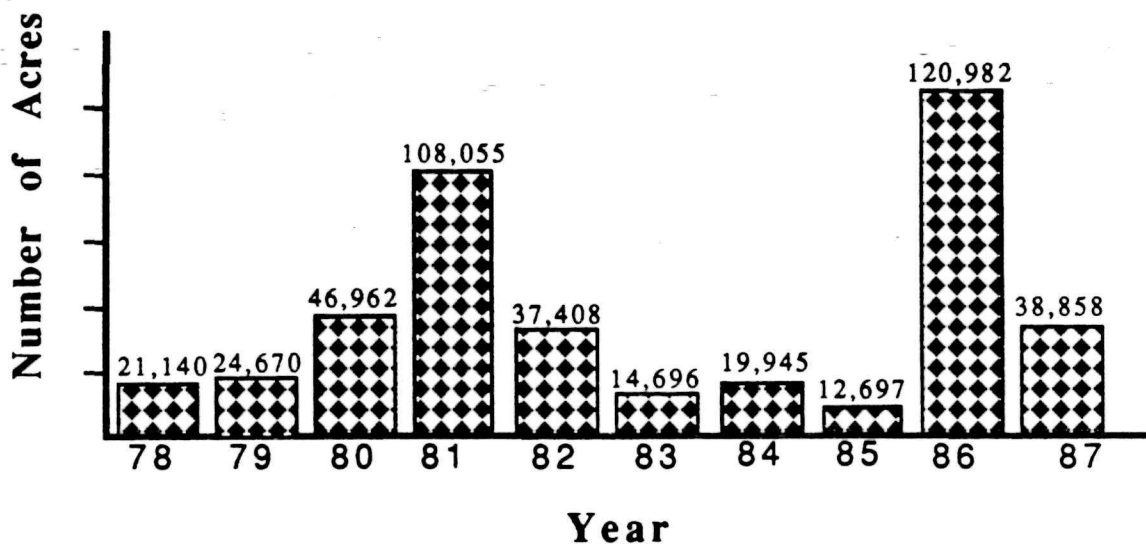
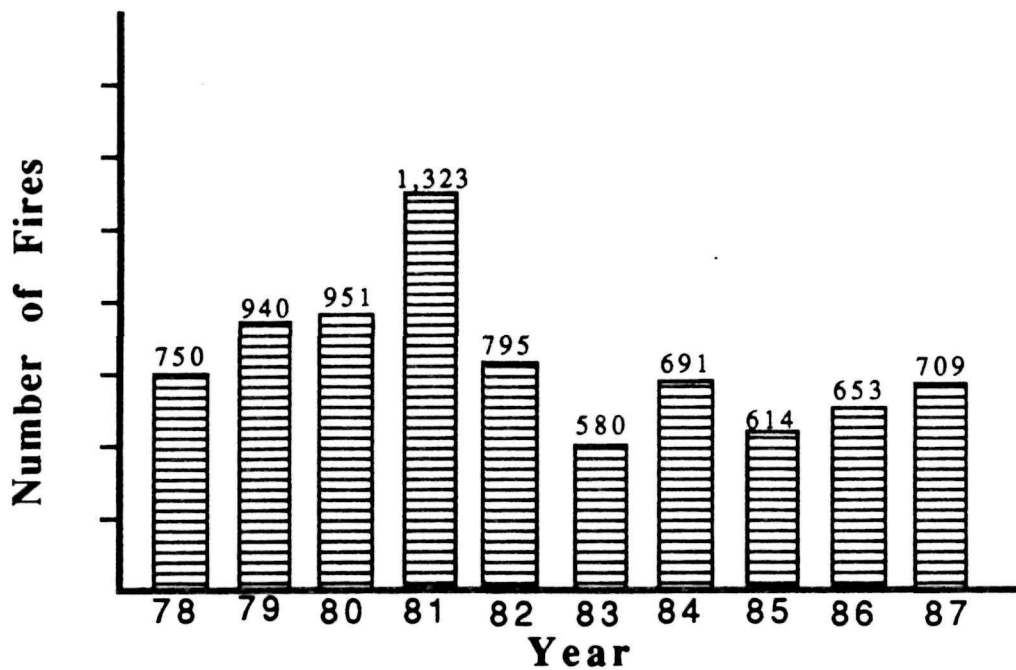
Of the 129 prescribed natural fires that occurred, only two reached a size of 1000 acres or larger. The number of fires was 82 percent of the normal fire year calculation of 158 prescribed natural fires. Eighty-five percent prescribed natural fires that burned were in the Southeast and Western Regions.

Table 6. LARGE PRESCRIBED BURNS 1987

REGION	PARK	FIRE NAME	ACRES	FUEL MODEL	COST/ACRE
Rocky Mtn	Wind Cave	Bison Trap	2,460	C	\$7.01
Southeast	Big Cypress	Oasis NE	3,603	D	\$0.80
	Big Cypress	Turner S & E	1,100	N	\$0.64
	Big Cypress	Walker	1,460	D	\$0.50
	Big Cypress	Burns Lake	2,679	N	\$0.95
	Big Cypress	41 N #2	1,416	N	\$1.14
	Big Cypress	Bass Lake	1,479	D	\$1.03
	Big Cypress	Gator RX	2,651	N	\$1.54
	Everglades	West Bndy	1,705	D	\$2.31
	Everglades	Blocks H & J	1,254	D	\$2.31

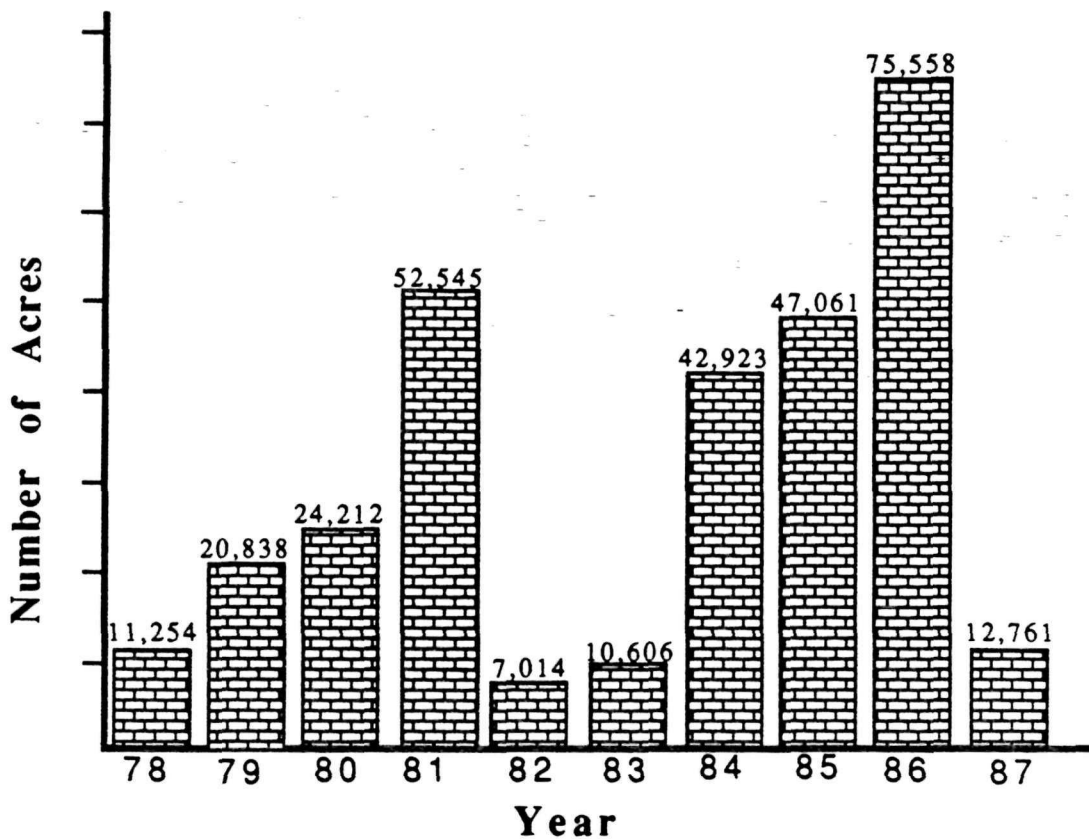
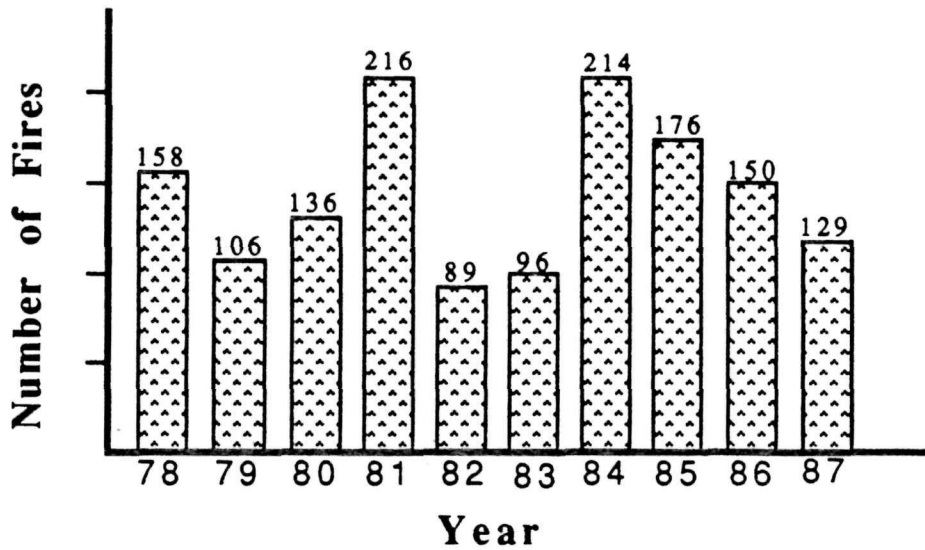
There were 111 prescribed burns conducted on NPS lands during 1987. Ten of these burns exceeded 1,000 acres in size. The Southeast Region had the largest prescribed burn program during the year with 36 fires, followed by the Midwest Region with 27 burns.

Table 7. WILDFIRES 1978-1987



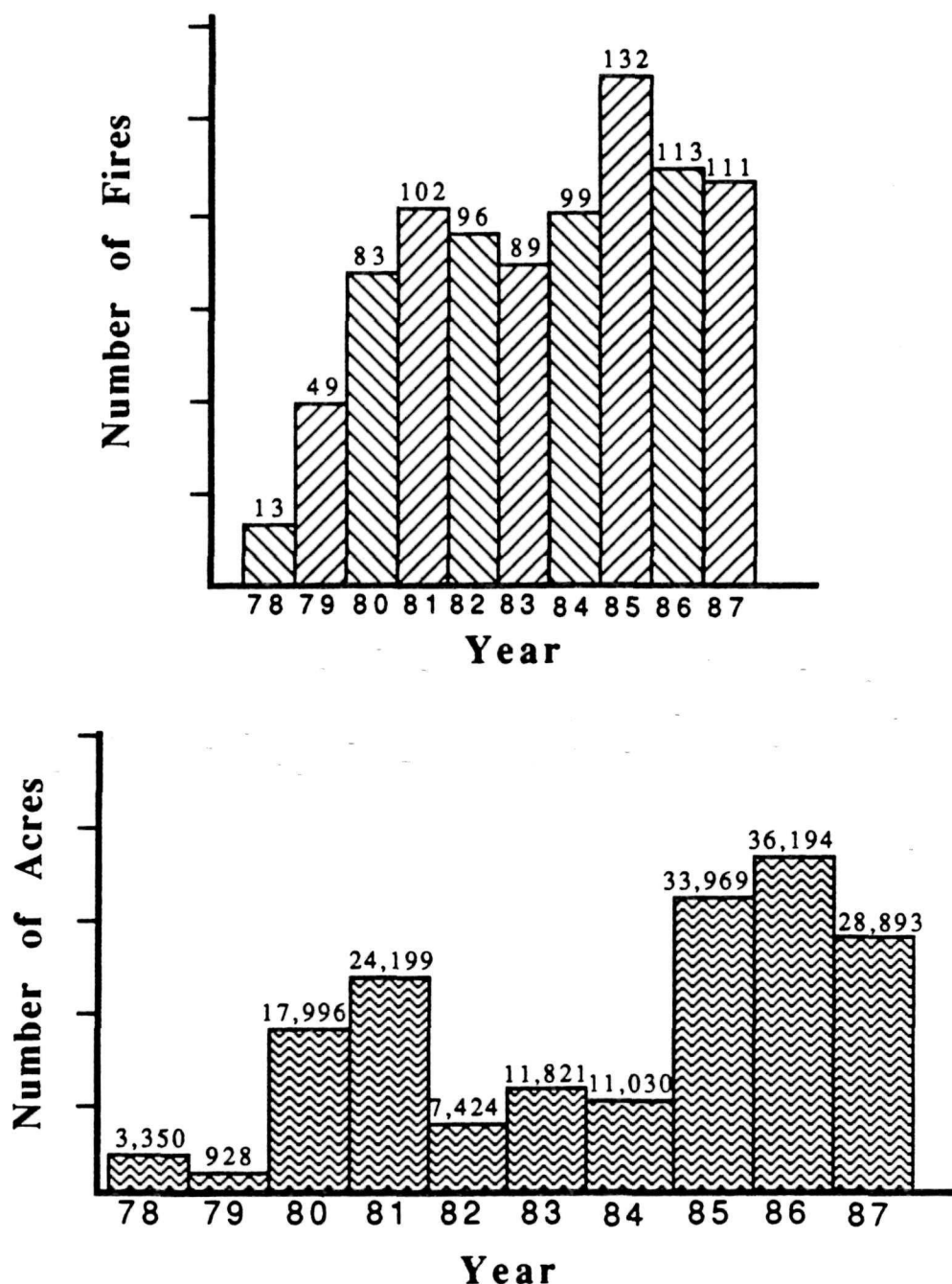
The number of wildfires in 1987 was 75 percent of the Normal Fire Year calculation of 940 fires, more wildfires were reported in five of the past ten years. The number of acres burned was the fourth highest of the past ten years; roughly 68 percent more land burned in 1986 than in 1987.

Table 8. PRESCRIBED NATURAL FIRES 1978-1987



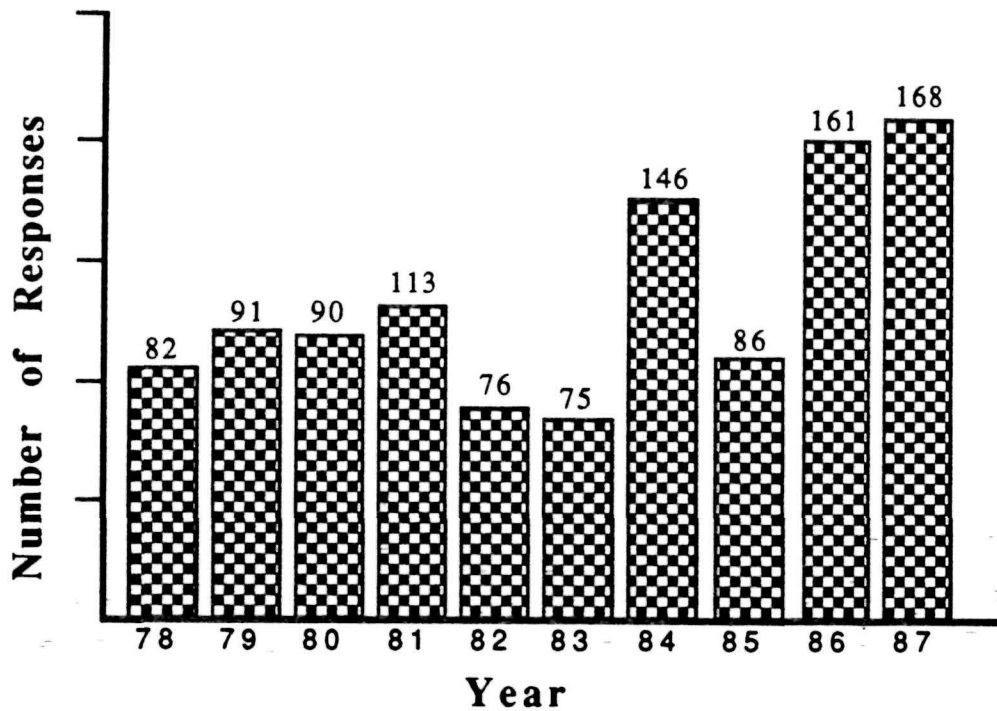
The normal fire year calculation for prescribed natural fires is 158 fires; there were 82 percent of the expected number of prescribed fires in 1987. The amount of acreage burned during the year was relatively small, the third lowest total in the past 10 years. This was primarily due to a low number of natural ignitions occurring within natural fire zones.

Table 9. PRESCRIBED BURNS 1978-1987



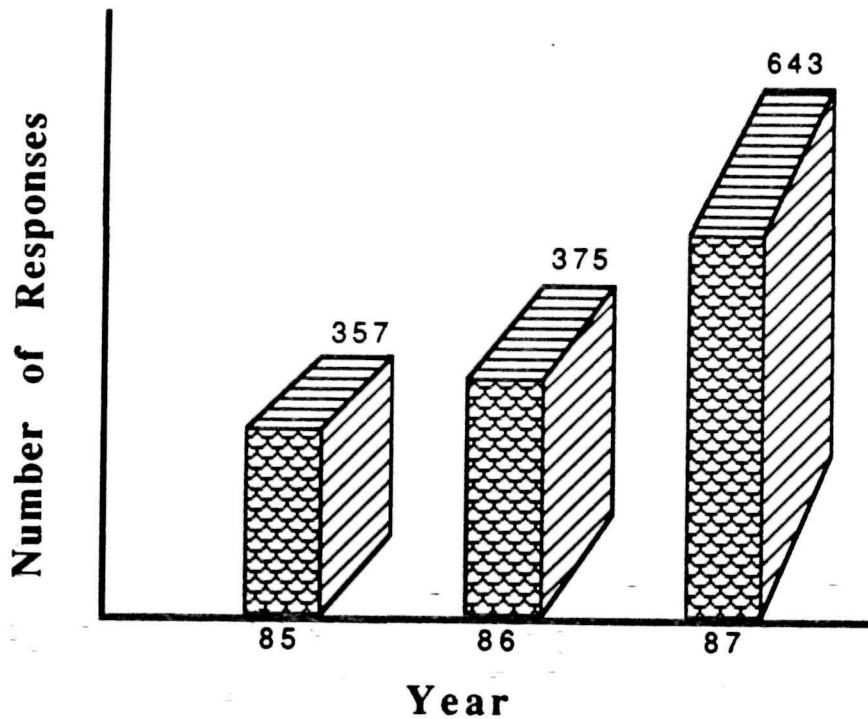
There has been a gradual increase in the number of prescribed burns being conducted by National Park areas during the past ten years. 1987 was a fairly typical year for burn programs. During the year, the Southeast Region conducted the most prescribed burns, followed by the Midwest Region. The largest prescribed burn program, measured by total acres burned, was managed at Big Cypress National Preserve in Florida.

Table 10. MUTUAL AID RESPONSES 1978-1987



The National Park Service responded to slightly more mutual aid requests in 1987 than in any prior year. Mutual aid responses are defined as suppression assists to other agencies under a Memorandum of Understanding, interagency agreement, or contract. Mutual aid responses also include NPS suppression action taken on other lands to prevent fire spread onto NPS lands. Mutual aid responses are geographically local, and do not include the mobilizations of personnel from one region to another.

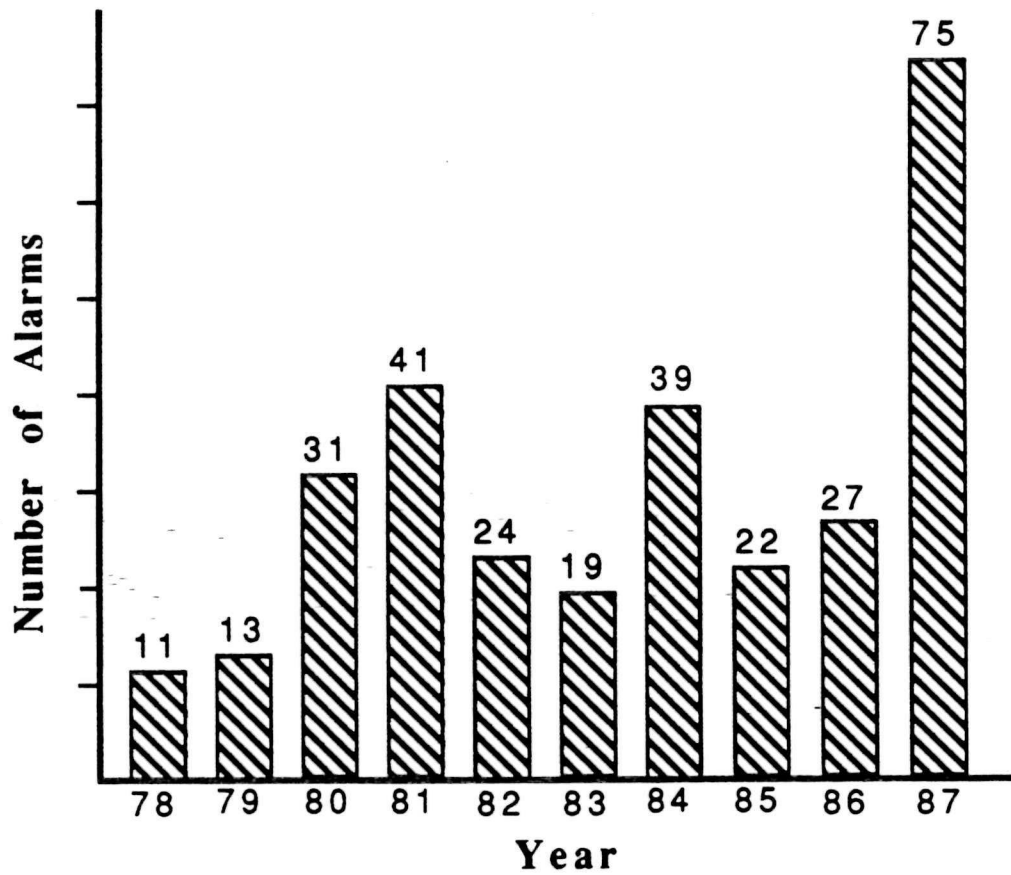
Table 11. SUPPORT ACTIONS 1985-1987



Support actions are wildfire suppression assists to other agencies. They do not include local; mutual-aid responses. The years 1985 through 1987 have seen increasing mobilizations of National Park Service personnel for fires outside of park areas during three extraordinarily high fire-occurrence years.

Table 11 displays the number of support action dispatches. The actual number of individuals dispatched is substantially greater. At the peak of the September 1987 mobilization there were 1,118 individuals out of their home units on non-local fire suppression assignments.

Table 12. FALSE ALARMS 1978-1987



The National Park Service responded to more false alarms in 1987 than in any previous year.



Table 13. FIRE OCCURRENCE BY REGION 1987  
ALASKA REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	--	--
Suppressed on NPS lands by NPS modified control strategy	--	--
Suppressed on NPS lands by other federal agency	2	490
Suppressed on NPS lands by non-federal agency	1	650
Natural out on NPS lands	1	5
Prescribed natural fire	8	533
Prescribed burn	--	--
False alarm	2	
Mutual aid by NPS		
Support action (non-local)	6	

The 1987 fire season was uneventful for the Alaska region. There were very few fires overall, and a majority of the fires were allowed to burn as prescribed natural fires. The region contributed three people to the national mobilization, including the Regional Fire Coordinator. He was the NPS representative to the Multi-Agency Coordinating Group which directed fire suppression activity throughout California.

Table 14. FIRE OCCURRENCE BY REGION 1987  
MID ATLANTIC REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	17	120
Suppressed on NPS lands by NPS modified control strategy	--	--
Suppressed on NPS lands by other federal agency	1	2
Suppressed on NPS lands by non-federal agency	1	2
Natural out on NPS lands	--	--
Prescribed natural fire	--	--
Prescribed burn	1	3
False alarm	1	
Mutual aid by NPS	4	35
Support action (non-local)	16	

The Mid-Atlantic Region experienced a very light fire year in 1987. The overall number of wildfires was only 29 percent of the region's Normal Fire Year calculation of 66 wildfires. The region contributed 186 people to the Western fire mobilization.

Table 15. FIRE OCCURRENCE BY REGION 1987  
MIDWEST REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	38	1,033
Suppressed on NPS lands by NPS modified control strategy	1	0
Suppressed on NPS lands by other federal agency	--	--
Suppressed on NPS lands by non-federal agency	7	9
Natural out on NPS lands	4	2
Prescribed natural fire	1	0
Prescribed burn	27	1270
False alarm	2	
Mutual aid by NPS	10	18
Support action (non-local)	84	

The Midwest Region had a moderate fire season in 1987, well below the Normal Fire Year calculation of 82 wildfires and 8 prescribed natural fires. In the Spring, there was an early and relatively intense fire season in the Great Lakes area to which regional personnel were dispatched. Six parks in the region conducted prescribed burns during the year. The region committed personnel to several national mobilizations of firefighters during the year, sending personnel to the Great Lakes, the Southeast, and the West. A total of 121 people were dispatched to the Western mobilization.

Table 16. FIRE BY REGION 1987  
NATIONAL CAPITAL REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	6	5
Suppressed on NPS lands by NPS modified control strategy	--	--
Suppressed on NPS lands by other federal agency	--	--
Suppressed on NPS lands by non-federal agency	4	1
Natural out on NPS lands	--	--
Prescribed natural fire	--	--
Prescribed burn	--	--
False alarm	--	--
Mutual aid by NPS	--	--
Support actions (non-local)	43	

The Normal Fire Year calculation for the National Capitol Region is 16 wildfires, which indicates that 1987 was below normal for the number of park fires. The region was involved in 8 dispatches of firefighters, and regional personnel were sent to fires in Kentucky, Virginia, and in the West, at a cost to the region of roughly \$126,000. A total of 52 NCR firefighters were involved in the year's major mobilization effort.

Table 17. FIRE OCCURRENCE BY REGION 1987  
NORTH ATLANTIC REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	12	10
Suppressed on NPS lands by NPS modified control strategy	--	--
Suppressed on NPS lands by other federal agency	--	--
Suppressed on NPS lands by non-federal agency	52	93
Natural out on NPS lands	1	0
Prescribed natural fire	--	--
Prescribed burn	--	--
False alarm	--	--
Mutual aid by NPS	--	--
Support actions (non-local)	37	--

The North Atlantic Region experienced a relatively uneventful fire season in 1987. The only unusual fire activity was at Cape Cod, where fire danger was abnormally high during the summer due to drought, and there were a few small fires there. The region contributed 53 firefighters to the national mobilization.

Table 18. FIRE OCCURRENCE BY REGION 1987  
PACIFIC NORTHWEST REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	60	17
Suppressed on NPS lands by NPS modified control strategy	1	360
Suppressed on NPS lands by other federal agency	2	0
Suppressed on NPS lands by non-federal agency	1	0
Natural out on NPS lands	2	45
Prescribed natural fire	4	177
Prescribed burn	6	68
False alarm	1	
Mutual aid by NPS	--	--
Support actions (non-local)	65	

A Normal Fire Year for the Pacific Northwest Region is calculated to be 68 wildfires and 11 prescribed natural fires, indicating that 1987 was a very normal year for wildfires on park lands, and that there were fewer prescribed natural fires than the norm. These statistics do not reflect the extremely high fire dangers that lingered in the Pacific Northwest until late Fall. The region had personnel committed to the national mobilization for two months, with a total of 145 fire-fighters and overhead involved.

Table 19. FIRE OCCURRENCE BY REGION 1987  
ROCKY MOUNTAIN REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	52	1,546
Suppressed on NPS lands by NPS modified control strategy	3	2,401
Suppressed on NPS lands by other federal agency	1	17
Suppressed on NPS lands by non-federal agency	--	--
Natural out on NPS lands	27	6
Prescribed natural fire	14	1,210
Prescribed burn	4	3,932
False alarm	14	
Mutual aid by NPS	43	6,904
Support actions (non-local)	141	

The two largest wildfires in Rocky Mountain Region parks during 1987 occurred at Grand Teton National Park and at Great Sand Dunes National Monument. At the Tetons, most of the 2,350 acre Adam Hill Fire was managed with a confinement strategy, but the eastern flank of the fire was suppressed. At Great Sand Dunes, the 1,280 acre Runaway fire spread rapidly in grass and sage before being suppressed.

Regionwide, there were 53 percent of the Normal Fire Year calculation of 106 wildfires, and 41 percent of the NFY calculation of 34 prescribed natural fires during the year. The region contributed 528 firefighters and overhead to the national mobilization.

Table 20. FIRE OCCURRENCE BY REGION 1987  
SOUTHEAST REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	101	4,584
Suppressed on NPS lands by NPS modified control strategy	26	1,405
Suppressed on NPS lands by other federal agency	--	--
Suppressed on NPS lands by non-federal agency	4	2
Natural out on NPS lands	29	316
Prescribed natural fire	18	4,136
Prescribed burn	36	22,412
False alarm	21	
Mutual aid by NPS	29	1,844
Support actions (non-local)	53	--

The Southeast Region had active Spring and Fall fire seasons. In the Fall, drought conditions combined with arsonists led to over 600 fires that burned over 73,000 acres in a week's time, primarily on state and national forest land. The largest park fire was the Laurel Ridge Fire at Big South Fork National River and Recreation Area, which burned 1,854 acres. In terms of overall fire numbers, the year was very close to the Normal Fire Year calculation of 149 wildfires. The Southeast Region contributed 288 firefighters and overhead to mobilizations in the West and the Southeast.



Table 21. FIRE OCCURRENCE BY REGION 1987  
SOUTHWEST REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	19	855
Suppressed on NPS lands by NPS modified control strategy	1	0
Suppressed on NPS lands by other federal agency	--	--
Suppressed on NPS lands by non-federal agency	2	2
Natural out on NPS lands	--	--
Prescribed natural fire	6	2
Prescribed burn	18	302
False alarm	8	
Mutual aid by NPS	16	132
Support actions (non-local)	40	--

The Normal Fire Year calculation for the Southwest Region is 58 wildfires and 8 prescribed natural fires, indicating that 1986 was greatly below normal in terms of the number of wildfires, and slightly below normal for the expected number of natural fires. There were numerous human-caused fires in the Spring, particularly at Buffalo River and Alibates Flint Quarries.

The Southwest Region contributed 100 firefighters and joverhead to the western mobilization, and also dispatched firefighters to Kentucky in the late Fall. One SWR crew, the Carlsbad Regulars, were involved in a shelter deployment while on a U.S. Forest Service fire; there were no injuries reported.

Table 22. FIRE OCCURRENCE BY REGION 1987  
WESTERN REGION

FIRE TYPE	# FIRES	ACRES
Suppressed on NPS lands by NPS full control strategy	256	19,579
Suppressed on NPS lands by NPS modified control strategy	21	5,590
Suppressed on NPS lands by other federal agency	12	81
Suppressed on NPS lands by non-federal agency	--	--
Natural out on NPS lands	48	413
Prescribed natural fire	78	6,704
Prescribed burn	19	907
False alarm	27	
Mutual aid by NPS	62	12,200
Support actions (non-local)	140	

The Western Region's wildfire season began in March, with a 1,200 acre human-caused fire at Hawaii Volcanoes National Park. During the summer, there were large fires at Grand Canyon National Park, Sequoia-Kings Canyon National Parks, and Yosemite National Park. During the interagency mobilization in the Fall, there were large fires burning simultaneously in Hawaii Volcanoes, Joshua Tree, Lassen, Sequoia-Kings Canyon, and Yosemite. There were 265 firefighters and overhead from the region dispatched in the mobilization effort. This does not include the large number of Park Service personnel involved in suppression activities in their home parks, or those involved in mutual aid responses.

Table 23. INTERAGENCY HOTSHOT CREW WILDFIRE ASSIGNMENTS 1987

Crew	Fire Name	Location	Dates
Arrowhead	Yucca	Sequoia NP	5/10-5/11
Arrowhead	Truck	San Bernadino NF	5/31-6/3
Arrowhead	Pacheco	Sequoia NF	6/10-6/12
Arrowhead	Winter	Winema NF	6/13-6/15
Arrowhead	Point	BIA Hualapai	6/16-6/19
Arrowhead	Burns	Gila NF	6/20-6/24
Arrowhead	Bailey	Gila NF	6/25-6/26
Arrowhead	Horse Linto	Six Rivers NF	6/27-7/1
Alpine	Thirty	Kaibab NF	7/14
Alpine	Lost	Kaibab NF	7/14
Alpine	Willis	Kaibab NF	7/14-7/19
Arrowhead	AB Misc	Sequoia NP	7/15-7/17
Arrowhead	School	Sequoia NF	7/17-7/18
Alpine	Monument	Kaibab NF	7/21-7/22
Alpine	Orderville	Kaibab NF	7/21
Arrowhead	Huckleberry	Sequoia NP	7/27
Arrowhead	Kaweah	CDF Tulare	7/29-7/30
Arrowhead	Betty Blake	Yosemite NP	8/2-8/4
Alpine	Bad Bear	Boise NF	8/4-8/7
Arrowhead	Lost Bear	Yosemite NP	8/5-8/10
Arrowhead	Halstead	Sequoia NP	8/12-8/18
Arrowhead	Deer	Sequoia NF	8/22-8/25
Arrowhead	Coffee	Sequoia NP	8/30-9/1
Alpine	Pierce	Sequoia NF	8/31-9/3
Arrowhead	Case Mountain	CDF Tulare	9/2-9/7
Alpine	Fay	Sequoia NF	9/3-9/7
Alpine	Flume/Wallow	Shasta NF	9/7-9/18
Arrowhead	Uila	Hawaii Volcano NP	9/8-9/13
Arrowhead	Hotelling	Klamath NF	9/14-9/21
Alpine	Yellow	Klamath NF	9/19-9/28
Arrowhead	Yellow	Klamath NF	9/19-28
Arrowhead	Wilcox	Los Padres NF	10/4-10/6
Alpine	Strause	Klamath NF	10/3-10/7
Arrowhead	Indian	Sierra NF	10/7
Alpine	Yellow	Klamath NF	10/7-10/24

Table 24. INTERAGENCY HOTSHOT CREW WORKLOAD DISTRIBUTION 1981-1987

YEAR	# WILDFIRES	% TIME WILDFIRE SUPPRESSION	% TIME PRESCRIBED FIRES	% TIME OTHER PROJECTS	% TIME TRAINING	% TIME MISC
1981*	42	38	7	33	11	11
1982	22	22	18	28	16	16
1983	19	20	18	26	16	17
1984	55	53	10	14	9	12
1985	42	65	5	13	7	10
1986	35	50	13	17	8	12
1987	35	63	4	15	8	10

\*1981-1984 statistics include Alpine, Arrowhead, and Bison crews  
 1985-1987 statistics include Alpine and Arrowhead crews

The National Park Service presently manages 2 of the 57 Interagency Hotshot Crews as part of its contribution to national interagency fire suppression resources. The crews' primary function is large wildfire suppression. When not needed for suppression activities, the crews are able to make significant contributions to park prescribed fire and other physically demanding natural resource projects.

The high wildfire suppression demands of 1985, 1986, and 1987 resulted in the National Park Service crews having less time for project work in parks during these years than in previous years. During their seven year history with the National Park Service, the interagency hotshot crews have spent an average of 49 percent of each season on interagency wildfire suppression dispatches.

In 1987, Alpine crew project work included prescribed burns, hazard fuel reduction, trail maintenance, vegetation removal, building and utility projects, and search and rescue. This work was performed in Grand Canyon National Park, Yellowstone National Park, Big Hole National Battlefield, Golden Gate National Recreation Area, and on the Kaibab National Forest.

Arrowhead crew assignments in 1987 included prescribed burns, trail maintenance, roadside fuel reduction, and building and utility projects in Joshua Tree National Monument, Sequoia and Kings Canyon National Parks, and on the Sequoia National Forest.