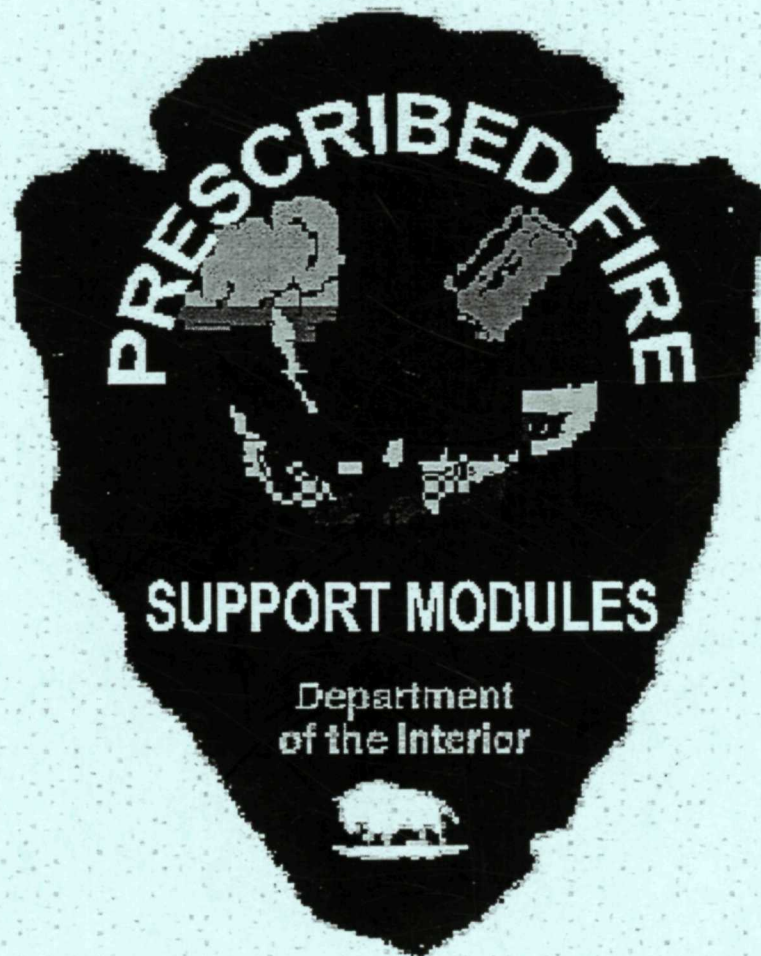


PRESCRIBED FIRE SUPPORT MODULES

1997 YEAR-END REPORT

NATIONAL PARK SERVICE



PRESCRIBED FIRE SUPPORT MODULES 1997 YEAR END REPORT

1. SUMMARY

The Prescribed Fire Support Modules (PFSM) were established by the National Park Service (NPS) in 1995. The primary mission of the program has been to assist with prescribed natural fires (PNF) in the areas of holding, monitoring, mapping, and fire behavior predictions. Secondary priorities have been to assist with ignition, holding, and monitoring of management ignited prescribed fires (MIPF); prepare all aspects of MIPF, including control line location and construction, writing burn plans, establishing and reading fire effects plots, archeological surveys, etc; and perform hazard fuel reduction projects. The program consisted of 28 people in 1997, divided into four modules of seven individuals. Module locations were Bandelier National Monument, Whiskeytown National Recreation Area, Yellowstone National Park, and Zion National Park. This report summarizes the accomplishments, costs, and personnel data of the program.

2. NPS UNITS ASSISTED BY THE PFSM

The PFSM provided assistance to 33 NPS units in four regions spread among 13 states. They are listed below alphabetically.

Bandelier National Monument, New Mexico
Bent's Old Fort National Historic Site, Colorado
Big Bend National Park, Texas
Big Thicket National Preserve, Texas
Buffalo National River, Arkansas
Carlsbad Caverns National Park, New Mexico
Chiricahua National Monument, Arizona
Congaree Swamp National Monument, South Carolina
Dinosaur National Monument, Colorado
El Malpais National Monument, New Mexico
Everglades National Park, Florida
Golden Gate National Recreation Area, California
Grand Canyon National Park, Arizona
Grand Teton National Park, Wyoming
Great Basin National Park, Nevada
Guadalupe Mountains National Park, Texas
Hubbell Trading Post National Historic Site, Arizona
Lake Mead National Recreation Area, Nevada
Lassen Volcanic National Park, California
Lava Beds National Monument, California
Mesa Verde National Park, Colorado
Muir Woods National Monument, California
Oregon Caves National Monument, Oregon
Pea Ridge National Military Park, Arkansas
Pinnacles National Monument, California
Point Reyes National Seashore, California
Redwood National Park, California
Saguaro National Park, Arizona
Whiskeytown National Recreation Area, California
Wilson's Creek National Battlefield, Missouri
Yellowstone National Park, Wyoming
Yosemite National Park, California
Zion National Park, Utah

3. INTERAGENCY ASSISTANCE

The PFSM provided assistance on PNF and MIPF projects to 8 units of other federal and state land management agencies. These agencies include:

Bureau of Land Management, Grangeville District
Redding District
California State Parks (2)
US Fish and Wildlife Service, Sacramento National Wildlife Refuge, California
National Elk Refuge, Wyoming
US Forest Service, Gila National Forest, New Mexico
Santa Fe National Forest, New Mexico

4. PNF ASSIGNMENTS

The PFSM assisted on nine PNFs in 1997, of which seven burned on NPS land. The total area involved was 23,242 acres, with 3,242 acres on NPS land. Of those nine PNFs, one was converted to a wildfire. Modules averaged spending 23% of their time on PNFs in 1997 compared to 26% in 1996. Prescribed natural fires assignments are summarized in the table below.

PNFs

NAME	LOCATION	ACRES	MODULE(S)
Lilley	Gila NF	15000	ZION, BAND
Rocky	Gila NF	5000	ZION, BAND
Kibbie	Yosemite NP	113	WHIS
Ribbon	Yosemite NP	3	WHIS
Slope	Yosemite NP	2	WHIS
Lummis	Bandelier NM	1665	WHIS, YELL, ZION
Verde	Saguaro NP	8	BAND
Huffer	Lassen Volcanic NP	1200	BAND, WHIS, YELL, ZION
Swamp	Grand Canyon NP	251	ZION

5. MIPF ASSIGNMENTS

The PFSM assisted with the ignition of 73 MIPFs in 1997. The total area involved was 17,218 acres. Sixty-seven of these burns were on NPS land, one was on the US Forest Service, two were on National Wildlife Refuges, two were on California State Parks, and one was on Bureau of Land Management land. Of these 73 burns, there were only three significant escapes. The PFSM performed preparation work on 34 MIPFs in 1997 including the construction or improvement of 22 miles of handline. Modules averaged spending 22% of their time on MIPF ignition and 9% of their time on MIPF preparation in 1997, compared to 11% on ignition and 12% on preparation in 1996.

Module personnel additionally performed considerable non-quantifiable work on MIPFs. This includes reading fire effects plots and fuel loading transects, writing burn plans, control line location, project mapping, and general burn planning. Modules mechanically treated 15 acres on nine hazard fuel reduction projects. Management ignited prescribed fire assignments are summarized in the tables on the following pages.

MIPF IGNITION

NAME	LOCATION	ACRES	MODULE(S)
Soupbowl	Yosemite	200	WHIS
Ford 1	Pea Ridge NB	400	YELL, WHIS
Huntsville Road West	Pea Ridge NB	170	YELL, WHIS
LBD Maintenance Area	Buffalo NR	80	YELL, WHIS
LWA Savannah	Buffalo NR	420	YELL, WHIS
Pruitt Complex Unit 1	Buffalo NR	315	YELL, WHIS
4B	Wilson's Creek NB	10	YELL, WHIS
Cemetery	Wilson's Creek NB	35	YELL, WHIS
NE Corner	Wilson's Creek NB	147	YELL, WHIS
Ray's Cornfield	Wilson's Creek NB	80	YELL, WHIS
SE Cornfield	Wilson's Creek NB	7	YELL, WHIS
Manley North	Wilson's Creek NB	43	YELL, WHIS
McKittrick Canyon D	Guadalupe Mountains	18	BAND
McKittrick Canyon C	Guadalupe Mountains	20	BAND
Cherry Canyon	Guadalupe Mountains	82	BAND
McKittrick Canyon B	Guadalupe Mountains	18	BAND
McKittrick Canyon A	Guadalupe Mountains	28	BAND
Williams Ranch	Guadalupe Mountains	1100	BAND
Housing Area	Carlsbad Caverns NP	15	BAND
Rattlesnake Springs	Carlsbad Caverns NP	4	BAND
Slaughter Canyon B	Carlsbad Caverns NP	1100	BAND
Slaughter Canyon C	Carlsbad Caverns NP	600	BAND
Spray Field	Whiskeytown NRA	15	WHIS
Uhl/Wallace Draw	Grand Teton NP	570	YELL
Pederson	National Elk Refuge	80	YELL
Lower Spread	Grand Teton NP	3900	YELL
Bonita	Chiricahua NM	7	ZION
Waring Ranch	Lake Mead NRA	110	WHIS
Fire Camp II	Lake Mead NRA	30	WHIS
Green Springs	Lake Mead NRA	20	WHIS
Boyscout	Everglades NP	20	YELL
Banana	Everglades NP	Piles	YELL
Block P	Everglades NP	10	YELL
Flamingo	Everglades NP	1	YELL
LPK Campground	Everglades NP	35	YELL
Piles	Hubbell Trading Post	5	BAND
Towerhouse Meadow	Whiskeytown NRA	7	WHIS
Tract 2	Sacramento NWR	25	WHIS
Thorofare	Yellowstone NP	2	YELL
Wilderness #48	Bandelier NM	300	WHIS, YELL
Devils Bathtub	Saguaro NP	178	ZION, BAND
Spud Rock	Saguaro NP	Piles	BAND
Tiyo	Grand Canyon NP	605	BAND, YELL
Williams Ridge	Redwood NP	70	WHIS, ZION
Williams Ridge East	Redwood NP	50	WHIS, ZION

NAME	LOCATION	ACRES	MODULE(S)
Airstrip	Redwood NP	30	WHIS, ZION
Chew	Dinosaur NM	1200	ZION
Bent's Piles	Bent's Old Fort NHS	2	YELL
East Mesa	Zion NP	6	ZION
Basin	Big Bend NP	70	BAND
Block 1300	Big Thicket NP	2000	BAND
San Juan	Santa Fe NF	500	YELL
Clear Creek	Whiskeytown NRA	35	WHIS
China Camp	California State Parks	27	WHIS
Coggins 4	Whiskeytown NRA	347	WHIS
Cave Creek 2	Oregon Caves NM	5	WHIS
Colter Bay	Grand Teton NP	Piles	YELL
Cave Creek 1	Oregon Caves NM	8	WHIS
Cave Creek 3	Oregon Caves NM	5	WHIS
Caldwell Butte	Lava Beds NM	195	WHIS
Devils Bathtub	Saguaro NP	300	WHIS
Dry Creek	Whiskeytown NRA	35	WHIS
Crystal	Whiskeytown NRA	610	WHIS, YELL
Trail	Lassen Volcanic NP	126	WHIS
Eagle Nest	Lava Beds NM	10	YELL
Deerpark 2	Muir Woods NM	52	ZION
Deadwood Creek	Redding BLM	300	ZION
Vineyard K	Pinnacles NM	32	ZION
McCurdy	Golden Gate NRA	60	ZION
Strain Hill	Golden Gate NRA	125	ZION, WHIS
Canyon	Yellowstone NP	1	YELL
Dry Creek 2	Whiskeytown NRA	58	WHIS
Angel Island	California State Parks	7	WHIS
Shasta Divide	Whiskeytown NRA	140	WHIS

MIPF PREPARATION

NAME(S)	LOCATION	CHAINS	MODULE(S)
Bonita	Chiricahua NM	10	ZION
Wedge	Chiricahua NM	Prep	ZION
Boundary Line	Congaree Swamp NM	60	YELL
Upper Frijoles #14	Bandelier NM	190	BAND
Upper Frijoles #19	Bandelier NM	Plots	BAND
Upper Frijoles #9	Bandelier NM	Plots	BAND
Chekika Towers	Everglades NP	Prep	YELL
Lava Point	Zion NP	Prep	ZION
Salt Creek	Whiskeytown NRA	19	WHIS
Monarch III	Whiskeytown NRA	Burn plan	WHIS
?	Whiskeytown NRA	Plots	WHIS
Trail	Lassen Volcanic NP	70	WHIS
Cave Creek	Oregon Caves NM	41	WHIS
Coggins 4	Whiskeytown NRA	20	WHIS
Devils Bathtub	Saguaro NP	60	ZION
Eagle Nest	Lava Beds NM	25	BAND
Tiyo	Grand Canyon NP	35	BAND
Lost Woman	El Malpais NM	136	BAND
Cerritos Gap	El Malpais NM	20	BAND
Coggins 4	Whiskeytown NRA	6	WHIS, YELL, ZION
Flatiron	Lassen Volcanic NP	21	WHIS, YELL, ZION
Dolasen	Redwood NP	10	ZION
Elk Camp	Redwood NP	25	ZION
Williams Ridge	Redwood NP	23	WHIS
Elk Camp	Redwood NP	28	WHIS
Dolasen Prairie	Redwood NP	Snagging	WHIS
Coggins 4	Whiskeytown NRA	36	WHIS
Wolf Ridge	Grand Teton NP	Burn plan	YELL
Sheep Creek	Grangeville BLM	Burn Plan	YELL
Lava Point	Zion NP	5	ZION
Big Sandy	Big Thicket NP	400	BAND
Turkey Creek	Big Thicket NP	80	BAND
San Juan	Santa Fe NF	3	YELL
Clear Creek	Whiskeytown NRA	30	WHIS
Eagle Nest	Lava Beds NM	253	WHIS
Deerpark 2	Muir Woods NM	60	WHIS, ZION
McCurdy	Golden Gate NRA	4	WHIS
Cow Lake	Grand Teton NP	Plots	YELL
Baseline	Grand Teton NP	Plots	YELL
Cave Creek 3	Oregon Caves NM	28	WHIS
Fuel Break	Santa Fe NF	60	BAND

6. TOTAL PROGRAM ACCOMPLISHMENTS

Quantifiable PFSM accomplishments are summarized in the table below.

MODULE NAME	PNF		MIPF IGNITION		MIPF PREPARATION		HAZARD FUEL REDUCTION	
	#	ACRES	#	ACRES	#	MILES	#	ACRES
BANDELIER	4	21208	16	5623	9	11.8		
WHISKEYTOWN	5	2983	37	4537	14	7.9		
YELLOWSTONE	2	2865	28	7908	10	1.1	4	15
ZION	5	23116	12	1917	9	2.5		
TOTAL **	9	23242	73	17218	34	22.0	4	15

** Total numbers may not add up due to the combined use of modules on assignments.

7. PFSM DETAILER PROGRAM

The PFSM detailer program continued in 1997. The program was open to candidates from any agency who had a need or interest in learning more about prescribed fire. The objective of the program was to provide experience and on-the-job training in the following positions:

- Prescribed Fire Behavior Monitor
- Prescribed Fire Behavior Specialist
- Ignition Specialist Type 2
- Burn Boss Type 2

Details generally lasted 2-3 weeks. Time frames were left adjustable to take maximum advantage of PNF or MIPF opportunities. Eight individuals from two agencies participated in the program. Participants were:

- Scott Amirault, Cape Cod National Seashore (Yellowstone module)
- Patrick Dege, Congaree Swamp National Monument (Yellowstone module)
- Jerry Drazinski, Boise BLM (Whiskeytown module)
- Kurt Fogelburg, Voyageurs National Park (Whiskeytown module)
- Mark Nicholas, Gulf Island National Seashore (Bandelier module)
- Steve Singler, Fire Island National Seashore (Zion module)
- Patricia Stephen, Rocky Mountain National Park (Bandelier module)
- Stacey Wickland, Grand Canyon National Park, (Zion module)

The detailer program will continue in 1998.

Due to losing several individuals to permanent jobs, the Bandelier module rotated five detailers through six week periods after their midsummer furlough. These detailers are listed in Appendix A. The Zion module rotated four detailers from their home park throughout the season to fill in their seventh position. These detailers are listed in Appendix D.

8. RELIEF PROGRAM COORDINATOR DETAIL

Kelly Root, Whiskeytown National Recreation Area, served as relief PFSM Program Coordinator for nine days in July. There were no new individuals trained in this position in 1997. It is expected there will be additional experimentation with this concept in 1998, including the use of regional and module personnel.

9. BUDGETS

The total operating budget of the PFSM program was \$592,471 for the 1997 fire season. Budget figures for the Program Coordinator position are not included in this total. Program costs are broken down into five categories--personal services, travel, vehicles, supplies and materials, and miscellaneous and are summarized below.

PROGRAM TOTAL

Personal Services	\$421,937
Travel	\$ 49,073
Vehicles	\$ 25,801
Supplies and Materials	\$ 80,414
Miscellaneous	\$ 15,246
Total	\$592,471

PERSONAL SERVICES

BAND	\$ 95,662
WHIS	\$106,766
YELL	\$111,412
ZION	\$108,097

TRAVEL

BAND	\$14,988
WHIS	\$ 7,865
YELL	\$19,606
ZION	\$ 6,614

VEHICLES

BAND	\$5,126
WHIS	\$7,429
YELL	\$4,678
ZION	\$8,568

SUPPLIES AND MATERIALS

BAND	\$33,963 (includes \$5,950 for a new cache)
WHIS	\$18,988
YELL	\$12,598
ZION	\$14,865

MISCELLANEOUS

BAND	\$2,008
WHIS	\$3,502
YELL	\$ 0
ZION	\$9,736

PROGRAM TOTAL BY MODULE

BAND	\$151,747
WHIS	\$144,193
YELL	\$148,294
ZION	\$148,880

10. PROGRAM DIRECTIONS FOR 1998

The PFSM program will have a few changes in 1998. The most notable are summarized below.

- The broad mission of the program will give equal emphasis to wildland and prescribed fire in 1998 with project priorities being decided on a case by case basis. In addition to operations, the modules will try to expand into a greater planning role.
- There will be two new modules, one at Buffalo National River, Arkansas and the other at Great Smoky Mountain National Park, Tennessee/North Carolina. These modules will be staffed at 5 people each in 1998.
- Core target positions will focus on RXB2, RXFM, RXI2, and CRWB; additional developmental positions will be pursued at the discretion of each module.
- "Support" was dropped from the program name.
- The four western modules will hire their seasonals off of one roster, the eastern modules will hire their seasonals independently.
- The module "core" was dropped from five to four.
- Module members will be resource ordered only as "THSP" next year.

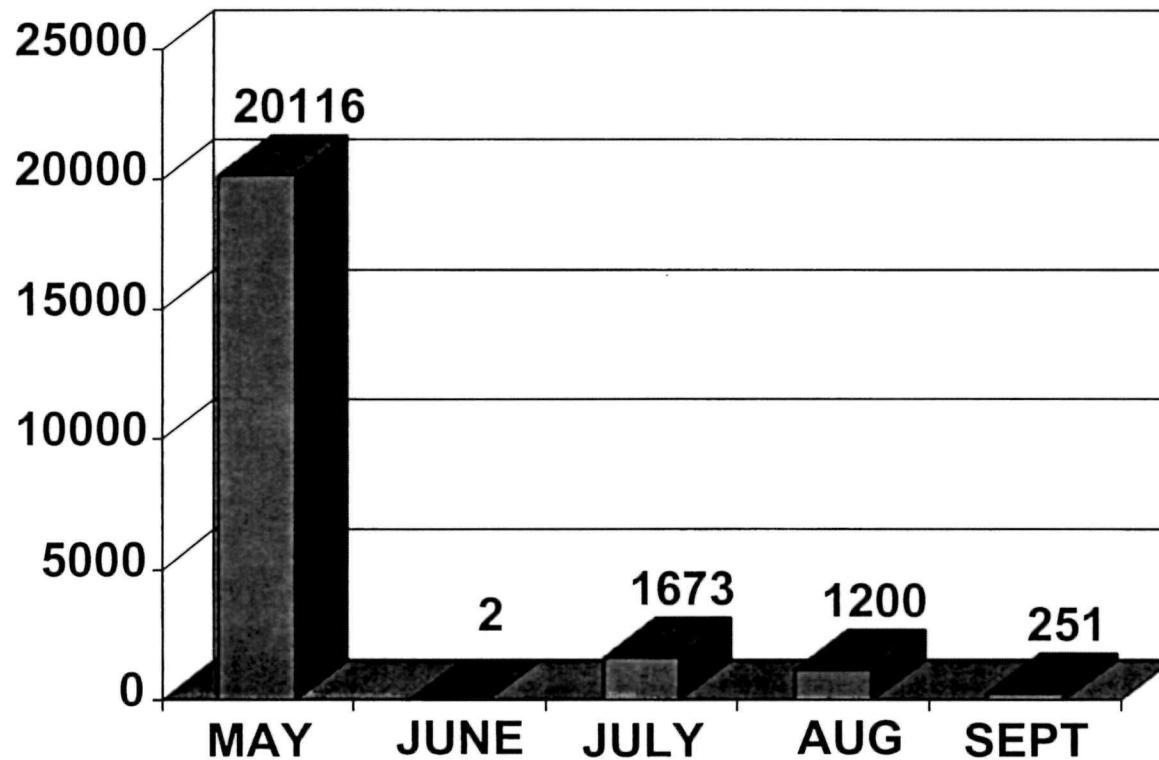
11. ACRES IGNITED BY MONTH

See tables on the following pages for monthly acreage totals.

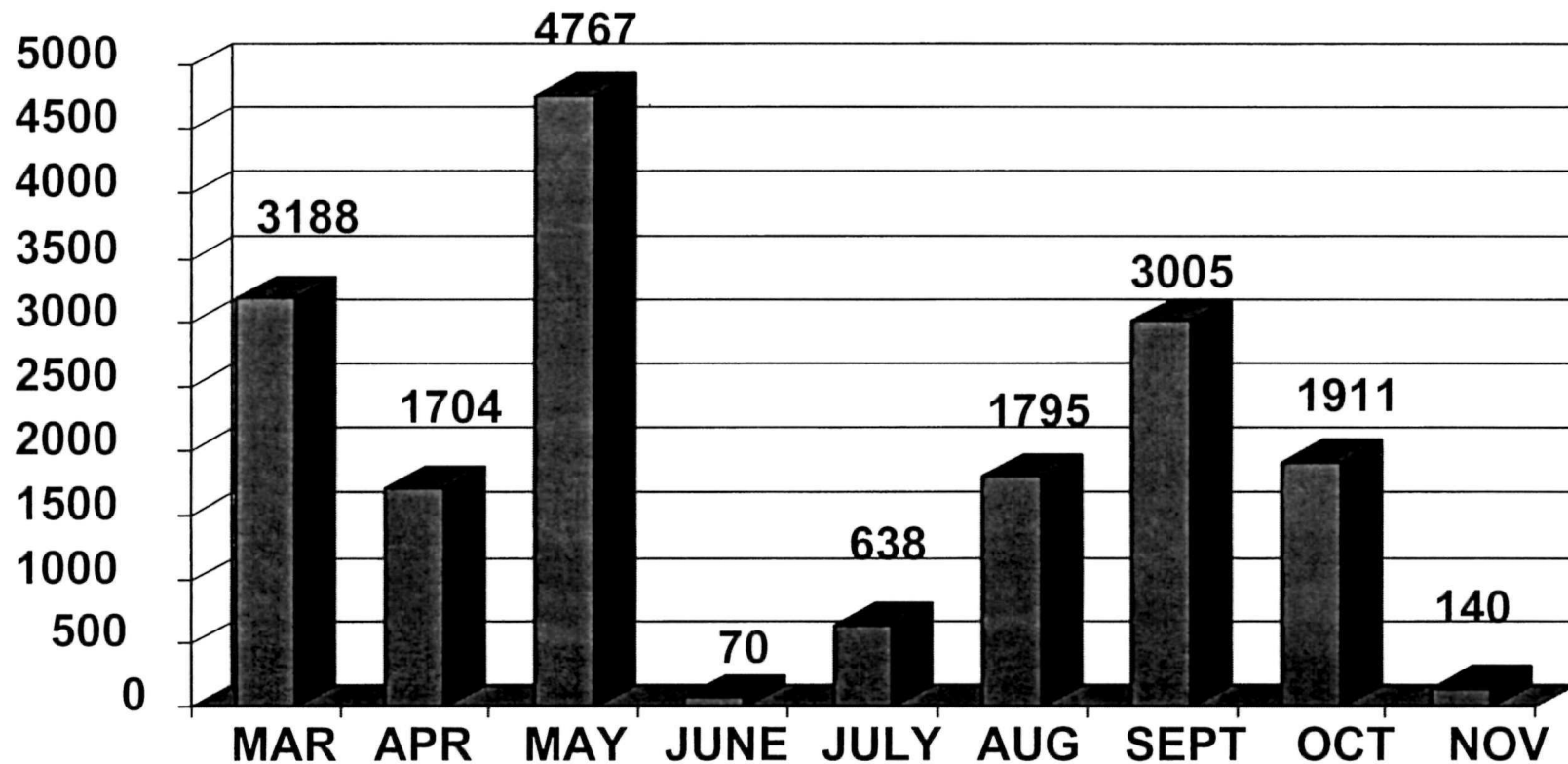
12. ACRES COMPARISON BY YEAR

See table on the following page for program acreage comparisons by year.

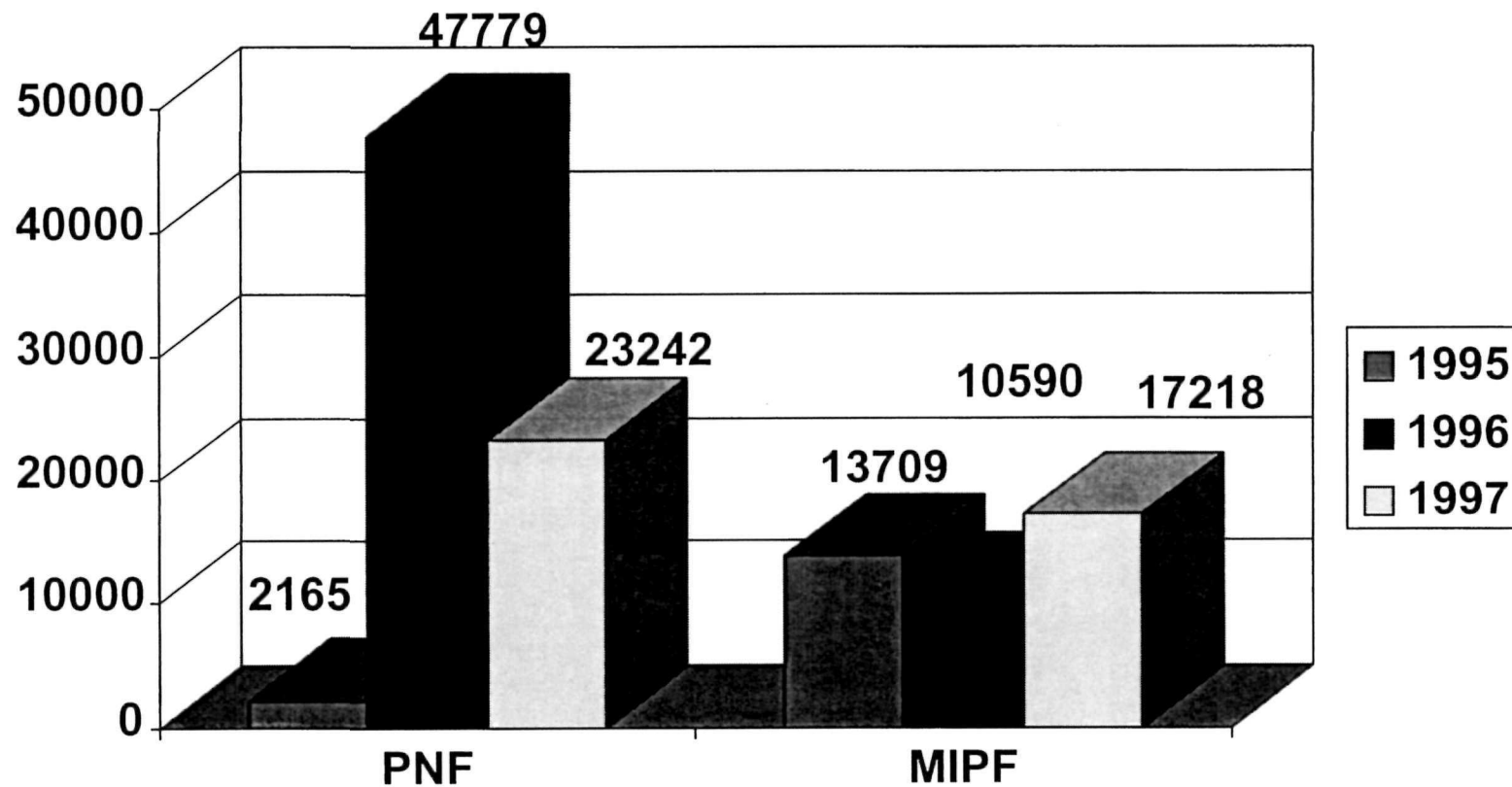
PNF ACRES BY MONTH



MIPF ACRES BY MONTH



ACRE COMPARISONS BY YEAR



APPENDIX A - BANDELIER MODULE

1. ROSTER

Marla Rodgers	Module Leader
John Thornburg	Assistant Module Leader (left to take permanent job)
Greg Gallegos	Assistant Module Leader (acting)
Bryan Combs	Module Member (left to take permanent job)
Karen Peck	Module Member (left to take permanent job)
Heather Rabel	Module Member
Pat Shendo	Module Member (second half of season)
Ron Simpson	Module Member (left to take permanent job)
Philip Benton	Detailer (Big Bend National Park)
Mary Emerick	Detailer (Florida Panther National Wildlife Refuge)
Tara Picken	Detailer (Crater Lake National Park)
Kasey Rose	Detailer (Boise BLM)
Ed Van Steinburg	Detailer (Harpers Ferry National Historic Park)

2. WORK SUMMARY PERCENTAGES

Prescribed Natural Fire	13%
Management Ignited Prescribed Fire (ignition)	24%
Management Ignited Prescribed Fire (preparation)	6%
Training	9%
Fire Effects Plots	1%
Travel	28%
Equipment	6%
Administration	9%
Miscellaneous	4%

3. 1997 PRESCRIBED FIRE QUALIFICATIONS AND ASSIGNMENTS

Marla Rodgers	RXB2, RXFM, RXI2, CRWB, HECM
John Thornburg	RXI2, RXFM, CRWB, HECM
Ron Simpson	RXFM, HECM, CRWB(t)
Greg Gallegos	RXFM(t), HECM, HEMG(t)
Heather Rabel	RXFS, RXFM, RXI2(t), HECM
Bryan Combs	RXFM(t), HECM(t)
Karen Peck	RXFM, HECM
Patrick Shendo	RXFM, RXI2(t), HECM
Kasey Rose	RXFM(t), HECM
Philip Benton	RXFM(t), HECM(t)
Ed Van Steinburg	RXFM(t), RXI2(t), HECM
Mary Emerick	RXFM, HECM
Tara Picken	RXFM(t), HECM(t)

4. TRAINING

Look Up, Look Down, Look Around	Module
Fire Shelters	Module
RX-230 Ignition Specialist	Rabel
RX-590	Rodgers
S-217 Helicopter Crewmember	Module
S-230 Crew Boss	Thornburg
S-234 Ignition Methods and Techniques	Module
S-390 Intermediate Fire Behavior	Simpson
Rappelling (refresher)	Picken

5. ACCOMPLISHMENTS

The Bandelier Module assisted 11 NPS units and two National Forests on 28 total assignments in 1997. For summary of accomplishments, see the following table.

BANDELIER MODULE

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
3/10-14						S-390 training - Simpson
3/12-13	Guadalupe Mountains		McKittrick Canyon D	18		Ignition, holding, monitoring
3/14-15	Guadalupe Mountains		McKittrick Canyon C	20		Ignition, holding, monitoring
3/18	Guadalupe Mountains		Cherry Canyon	82		Ignition, holding, monitoring
3/19	Guadalupe Mountains		McKittrick Canyon B	18		Ignition, holding, monitoring
3/20	Guadalupe Mountains		McKittrick Canyon A	28		Ignition, holding, monitoring
3/21-23	Guadalupe Mountains		Williams Ranch	1100		Ignition, holding, monitoring
3/24	Carlsbad Caverns NP		Housing Area	15		Ignition
3/26	Carlsbad Caverns NP		Slaughter Canyon B			Blacklining, total acreage listed on 4/10
4/3	Carlsbad Caverns NP		Rattlesnake Springs	4		Ignition
4/6-7	Carlsbad Caverns NP		Slaughter Canyon B			Blacklining
4/8	Carlsbad Caverns NP		Slaughter Canyon C	300		Blacklining
4/10	Carlsbad Caverns NP		Slaughter Canyon B	1100		Ignition
4/15-17	Carlsbad Caverns NP		Slaughter Canyon C	300		Ignition (200 bonus acres)
4/29;5/1	Bandelier NM		Upper Frijoles #14		140	Line construction
4/30	Santa Fe NF					S-217 refresher (module)
5/2	Bandelier NM		Upper Frijoles #19			Fire effects plots
5/5-8	Boise, ID					RX-230 (Rabel)
5/5-6	Bandelier NM					S-234 (module)
5/7	Bandelier NM		Upper Frijoles #9			Fire effects plots
5/8	Bandelier NM		Upper Frijoles #14		50	Line construction
5/14-15	Hubbell Trading Post		Piles	5		Ignition
5/19-21	Gila NF	Lilley		15000		Holding, monitoring, mapping
5/22-26	Gila NF	Rocky		5000		Holding, monitoring, mapping
5/27-6/4	Gila NF	Lilley		15000		Holding, monitoring, mapping
7/25	Saguaro NP		Devils Bathtub	118		Ignition
7/26-30	Saguaro NP		Spud Rock	Piles		Ignition
7/29-30	Saguaro NP	Verde		8		Holding, monitoring

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
8/6-8	Lassen Volcanic NP	Huffer		1200		Holding
8/12-13	Lava Beds NM		Eagle Nest		25	Line construction
8/16-20	Grand Canyon NP		Tiyo	445	35	Ignition, line construction
8/26-27	El Malpais NM		Lost Woman		136	Line construction, improvement
8/28	El Malpais NM		Cerritos Gap		20	Line construction
9/8-9	Grand Canyon NP	Swamp				Cancel and return
9/14-17	Big Bend NP		Basin	70		Ignition
9/19-20	Big Thicket NP		Block 1300	2000		Ignition
9/22-24	Big Thicket NP		Big Sandy		400	Line preparation
9/25	Big Thicket NP		Turkey Creek		80	Line preparation
10/2	Santa Fe NF				60	Los Alamos fuel break

	# of PNFs	ACRES	# of MIPFs (IGNITION)	ACRES	# of MIPFs (PREPARATION)	MILES	HAZARD FUEL REDUCTION (ACRES)
TOTAL	4	21208	16	5623	9	11.8	

APPENDIX B - WHISKEYTOWN MODULE

1. ROSTER

Mike Beasley	Module Leader
Glen Warner	Assistant Module Leader
KellyAnn Gorman	Module Member
Joe Hillenburg	Module Member
David Riess	Module Member
Robert Scarbrough	Module Member (first half of season)
Eric Small	Module Member (second half of season)
Paul Smith	Module Member

2. WORK SUMMARY PERCENTAGES

Prescribed Natural Fire	24.1%
Management Ignited Prescribed Fire (ignition)	27.5%
Management Ignited Prescribed Fire (preparation)	14.1%
Fire Suppression	1.5%
Travel	8.6%
Equipment	4.3%
Administration	4.2%
Training	4.8%
Physical Training	1.7%
Miscellaneous	9.2%

3. 1997 PRESCRIBED FIRE QUALIFICATIONS AND ASSIGNMENTS

Mike Beasley	RXB2(t), RXI2, RXFS(t), RXFM, CRWB, FALB, FFT1, HECM, HEXT, LSCT, PLDO(t)
Glen Warner	RXFM, RXI2, ENGB, FALB, FFT2, FFT1, FOBS, LSCT, PLDO(t)
KellyAnn Gorman	RXFM(t), ENOP, FALB, FFT2, FFT1
Joe Hillenburg	RXFM(t), FFT2, FFT1(t), FALB, HECM(t), LSCT
David Riess	FALB, FFT2, LSCT
Robert Scarbrough	FFT2
Eric Small	RXFM(t), FALC, FFT2, FFT1, HECM, HELB, HEMG
Paul Smith	RXFM, RXI2(t), FALB, FFT2, FFT1(t), HECM(t), READ

4. TRAINING

RX-450 Smoke Management	Beasley, Warner
RX-80 Fire Effects Plots	Riess
S-301 Fire Organization and Leadership	Warner
S-217 Helicopter Crewmember	Gorman, Riess, Smith
Basic OAS	Gorman
Instructor 1A	Warner
NPS Crew Academy	Smith
Park and Wilderness Fire Management	Beasley
Plastic Sphere Dispenser Operator	Beasley, Warner
Fire Shelters	Module
Look Up, Look Down, Look Around	Module
Standards for Survival	Module

5. ACCOMPLISHMENTS

The Whiskeytown Module assisted 14 NPS units, one National Wildlife Refuge, and two State Parks on 49 total assignments in 1997. For summary of accomplishments, see the following table.

WHISKEYTOWN MODULE

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
3/9-16	Yosemite NP		Soupbowl	200		Monitoring (Warner only)
3/11-12	Pea Ridge NB		Ford 1	400		Ignition (Beasley only)
3/12	Pea Ridge NB		Huntsville Road West	170		Ignition (Beasley only)
3/17	Buffalo NR		LBD Maintenance Area	80		Ignition (Beasley only)
3/19-20	Buffalo NR		LWA Savannah	420		Ignition (Beasley only)
3/21-22	Buffalo NR		Pruitt Complex Unit 1	315		Ignition (Beasley only)
3/26	Wilson's Creek NB		4B	10		Ignition (Beasley only)
3/26	Wilson's Creek NB		Cemetary	35		Ignition (Beasley only)
3/27	Wilson's Creek NB		NE Corner	147		Ignition (Beasley only)
3/27	Wilson's Creek NB		Ray's Corner	80		Ignition (Beasley only)
3/27	Wilson's Creek NB		SE Cornfield	7		Ignition (Beasley only)
3/27	Wilson's Creek NB		Manley North	43		Ignition (Beasley only)
5/7	Whiskeytown NRA		Spray Field	15		Ignition
5/12-16	Flagstaff, AZ					RX-80 (Riess)
5/13-14;16	Lake Mead NRA		Waring Ranch	110		Ignition
5/15	Lake Mead NRA		Fire Camp II	30		Ignition
5/17-18	Lake Mead NRA		Green Springs	20		Ignition
5/22-6/3	Yosemite NP	Kibbie		113		Monitoring, holding, mapping
5/22-26	Yosemite NP	Ribbon		3		Monitoring, holding, mapping
6/2	Yosemite NP	Slope		2		Monitoring, holding, mapping
6/9-12;20	Whiskeytown NRA		Salt Creek		19	Fuel break
6/9-12;16-17	Whiskeytown NRA		Monarch III			Burn plan
6/9-12	Whiskeytown NRA		?			Fire effects plots
6/13	Whiskeytown NRA		Towerhouse Meadow	7		Ignition
6/23-25	Lassen Volcanic NP		Trail		70	Line construction, snagging
6/26	Sacramento NWR		Tract 2	25		Ignition
6/30	Oregon Caves NM		Cave Creek		5	Hazard fuel reduction, prep
7/1-14	Bandelier NM	Lummis		1665		Monitoring, holding
7/15-18	Bandelier NM		Wilderness #48	300		Ignition
7/28-31	Oregon Caves NM		Cave Creek		36	Hazard fuel reduction, prep
8/4-5;11	Whiskeytown NRA		Coggins 4		20	Line construction

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
8/6-9	Lassen Volcanic NP	Huffer		1200		Holding, monitoring
8/12-14	Lassen Volcanic NP		Flatiron		21	Line construction
8/18	Redwood NP		Williams Ridge		23	Line construction
8/19	Redwood NP		Williams Ridge	70		Ignition
8/20-21	Redwood NP		Elk Camp		28	Line construction
8/22	Redwood NP		Williams Ridge East	50		Ignition
8/22	Redwood NP		Airstrip	30		Ignition
8/25	Redwood NP		Dolasen Prairie			Snagging
8/27-28	Whiskeytown NRA		Coggins 4		36	Line construction
9/2-5	Whiskeytown NRA		Clear Creek	35	30	Ignition, Line construction
9/8-12	Whiskeytown NRA					S-217 (Gorman, Riess, Smith)
9/8-11	Lava Beds NM		Eagle Nest		253	Line improvement
9/15-17	Muir Woods NM		Deerpark 2		60	Line construction
9/18	Calif. State Parks		China Camp	27		Ignition
9/19	Golden Gate NRA		McCurdy		4	Line construction
9/23-26	Whiskeytown NRA		Coggins 4	347		Ignition, SIDS training (Beasley, Warner)
9/27	Oregon Caves NM		Cave Creek 2	5		Ignition
9/28-29	Oregon Caves NM		Cave Creek 3		28	Line improvement, install hoselay
9/29	Oregon Caves NM		Cave Creek 1	8		Ignition
9/30-10/1	Oregon Caves NM		Cave Creek 3	5		Ignition
10/4-5	Lava Beds NM		Caldwell Butte	195		Ignition
10/6-7	Scottsdale, AZ					Southwest Fire Council Presentation (Beasley)
10/8;17	Whiskeytown NRA		Dry Creek	35		Ignition, monitoring (Warner)
10/14-19	Saguaro NP		Devils Bathtub	300		Ignition (55 bonus acres)
10/21-26	Whiskeytown NRA		Crystal	610		Ignition
10/22-23	Lassen Volcanic NP		Trail	126		Monitoring (Hillenburg)
10/27	Whiskeytown NRA		Coggins 4			Fuel loading transects
10/28-29	Golden Gate NRA		Strain Hill	75		Ignition
10/28	Whiskeytown NRA		Dry Creek 2	58		Ignition, monitoring
10/30	Calif. State Parks		Angel Island	7		Ignition
11/4-6	Whiskeytown NRA		Shasta Divide	140		Ignition

	# of PNFs	ACRES	# of MIPFs (IGNITION)	ACRES	# of MIPFs (PREPARATION)	MILES	HAZARD FUEL REDUCTION (ACRES)
TOTAL	5	2983	37	4537	14	7.9	

APPENDIX C - YELLOWSTONE MODULE

1. ROSTER

Nate Benson	Module Leader
Dan Warthin	Assistant Module Leader
Mark Belitz	Module Member
Mitch Burgard	Module Member
Kristin Churchill	Module Member
Ryan Melton	Module Member
Don Whitemore	Module Member

2. WORK SUMMARY PERCENTAGES

Prescribed Natural Fire	9.4%
Management Ignited Prescribed Fire (ignition)	23.8%
Management Ignited Prescribed Fire (preparation)	2.6%
Mechanical Hazard Fuel Reduction	6.3%
Travel	18.9%
Equipment	4.3%
Administration	7.6%
Training	5.2%
Fire Suppression	2.0%
Fire Effects	1.6%
Project	4.1%
Physical Training	2.8%
Leave	5.4%
Miscellaneous	5.9%

3. 1997 PRESCRIBED FIRE QUALIFICATIONS AND ASSIGNMENTS

Nate Benson	RXI2, RXFM, RXFS, CRWB, FALA, FFT1, FOBS, LSCT, HECM(t)
Dan Warthin	RXI2, RXFM, RXFS, CRWB, FALB, FELB, ICT4, LSCT, RXB2(t), HECM(t)
Mark Belitz	EMTB, FALB, FFT1, HECM, RXFM(t)
Mitch Burgard	RXFM, RXFS, CRWB, FALB, FFT1, HECM, HESM, HETM, ICT4
Kristin Churchill	RXFM, FFT2
Ryan Melton	RXFM, FFT2
Don Whitemore	RXFM, RXFS, EMTB, FFT1

4. TRAINING

S-212 Power Saws	Module
S-217 Helicopter Crewmember	Module
S-234 Firing Techniques and Methods	Belitz, Melton
S-490 Advanced Fire Behavior	Benson
RX-300 Burn Boss	Benson
RX-340 Introduction to Fire Effects	Benson
FARSITE	Benson
Fire and Urban Interface	Module
PFSM Orientation	Module
PNF Management	Benson, Warthin
SIDS Machine	Module
Standards For Survival	Module
Terra Torch Operations	Module

5. ACCOMPLISHMENTS

The Yellowstone Module assisted 15 NPS units, one National Wildlife Refuge, one Bureau of Land Management District, and one National Forest on 42 total assignments in 1997. For summary of accomplishments, see the following table.

YELLOWSTONE MODULE

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
3/11-12	Pea Ridge NB		Ford 1	400		Ignition, holding
3/12	Pea Ridge NB		Huntsville Rd West	170		Ignition, holding
3/17	Buffalo NR		LBD Maintenance	80		Ignition, holding
3/19-20	Buffalo NR		LWA Savannah	420		Ignition, holding
3/21-22	Buffalo NR		Pruitt Complex 1	315		Ignition, holding
3/26	Wilson's Creek NB		4B	10		Ignition, holding
3/26	Wilson's Creek NB		Cemetary	35		Ignition, holding
3/27	Wilson's Creek NB		NE Corner	147		Ignition, holding
3/27	Wilson's Creek NB		Ray's Cornfield	80		Ignition, holding
3/27	Wilson's Creek NB		SE Cornfield	7		Ignition, holding
3/27	Wilson's Creek NB		Manley North	43		Ignition, holding
5/5	Grand Teton NP		Uhl/Wallace Draw	570		Ignition
5/7	National Elk Refuge		Pederson	80		Ignition
5/8-9	Grand Teton NP		Lower Spread	3900		Ignition
5/13-14	Yellowstone NP					Hazard fuel reduction
5/16	Yellowstone NP					S-234 (Belitz, Melton)
5/21-22	Congaree Swamp		Boundary Line		60	Line construction, snagging
5/22-23	Congaree Swamp					Burn unit assessment
5/30	Everglades NP		Boyscout	20		Ignition
5/30	Everglades NP		Banana	Piles		Ignition
5/31	Everglades NP		Block P	10		Ignition
6/4	Everglades NP		Flamingo	1		Pile burning
6/5	Everglades NP		Chekika Towers			Prep
6/6-7	Everglades NP		LPK Campground	35		Ignition
6/9	Everglades NP					Helicopter ping pong ball training (module)
6/16-17	Yellowstone NP					S-217 training (module)
6/19	Yellowstone NP					S-212 training (module)
6/30-7/2	Yellowstone NP		Thorofare	2		Hazard fuel reduction, pile burning

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
7/4-13	Bandelier NM	Lummis		1665		Monitoring, holding
7/15-18	Bandelier NM		Wilderness #48	300		Ignition
7/22-24	Mesa Verde NP					Hazard fuel reduction, archeology rehab
7/26-28	Grand Canyon NP		Tiyo	160		Ignition
8/7-9	Lassen Volcanic NP	Huffer		1200		Holding
8/11	Whiskeytown NRA		Coggins 4		6	Line construction
8/12-14	Lassen Volcanic NP		Flatiron		21	Line construction
8/19-22	Point Reyes NS					Hazard fuel reduction
9/2-4	Grand Teton NP					Aspen survey
9/8-11	Grand Teton NP		Wolf Ridge			Burn plan (Warthin, Burgard)
9/9-11	Bent's Old Fort		Bent's Piles	2		Pile burning
9/15-19	Grangeville BLM		Sheep Creek			Burn plan (Warthin, Burgard)
9/15-19	Santa Fe NF		San Juan	500	3	Ignition
9/30-10/1	Yellowstone NP					Hazard fuel reduction
10/2	Yellowstone NP					PNF training (module)
10/6-10	Denver, CO					FARSITE training (Benson)
10/7	Grand Teton NP		Cow Lake			Fire effects plot set up
10/8	Grand Teton NP		Baseline			Fire effects plot set up
10/9	Grand Teton NP		Colter Bay	Piles		Ignition
10/18-19	Lava Beds NM		Eagle Nest	10		Ignition
10/21-24	Whiskeytown NRA		Crystal	610		Ignition
10/27;29	Yellowstone NP		Canyon	1		Pile burning

	# of PNFs	ACRES	# of MIPFs (IGNITION)	ACRES	# of MIPFs (PREPARATION)	MILES	HAZARD FUEL REDUCTION (ACRES)
TOTAL	2	2865	28	7908	10	1.1	15

APPENDIX D - ZION MODULE

1. ROSTER

Gary Benson	Module Leader
Matt Snider	Assistant Module Leader
Brian Hatfield	Module Member
Jeff Hickerson	Module Member
Jenifer Hochstrasser	Module Member
Michael Marion	Module Member
Jim Ashley	Detailer (Zion National Park)
Holly Henderson	Detailer (Zion National Park)
Karen Hobby	Detailer (Zion National Park)
Kara Painter	Detailer (Zion National Park)

2. WORK SUMMARY PERCENTAGES

Prescribed Natural Fire	45.9%
Management Ignited Prescribed Fire (ignition)	14.4%
Management Ignited Prescribed Fire (preparation)	12.6%
Mechanical Hazard Fuel Reduction	0.4%
Travel	14.0%
Equipment	2.2%
Administration	2.1%
Training	7.5%
Leave	0.9%

3. 1997 PRESCRIBED FIRE QUALIFICATIONS AND ASSIGNMENTS

Gary Benson	RXFM, RXI2, RXB2(t), RX-OSC2(t), DIVS, ICT3
Matt Snider	RXFM, RXI2, RXFS(t), CRWB, FALC, FFT1, ICT4(t)
Brian Hatfield	RXFM, RXFS, FALA, FFT1, CRWB(t), ICT4(t)
Jeff Hickerson	RXFM, RXFS, RXI2, CRWB, FALB, FFT1, ICT4(t)
Jenifer Hochstrasser	RXFM, RXFS(t), FALB, FFT1, CRWB(t)
Michael Marion	RXFM(t), FALA, FFT2, FFT1(t)

4. TRAINING

S-212 Power Saws	Hatfield, Marion
S-230 Crew Boss	Hickerson, Snider
S-260 Fire Business Management	Hickerson, Snider
S-270 Basic Air Operations	Hickerson, Snider
S-290 Intermediate Fire Behavior	Snider
S-301 Leadership and Organizational Development	Benson
S-390 Introduction to Fire Behavior Calculations	Module
S-490 Advanced Fire Behavior	Benson
RX-80 Preburn Monitoring Techniques	Hickerson
BEHAVE/RX Windows	Benson
Chainsaws	Module
Fire Behavior review	Module
Firing Methods/Equipment review	Module
Fire Shelter	Module
Human Factors/Decision Making	Snider
Look Up, Look Down, Look Around	Module
PFSM Orientation	Module
Safety Overview	Module
Standards for Survival	Module
Tactics Overview	Module

5. ACCOMPLISHMENTS

The Zion Module assisted 13 NPS units, one Bureau of Land Management District, and one National Forest on 23 total assignments in 1997. For summary of accomplishments, see the following table.

ZION MODULE

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
5/6-8	Chiricahua NM		Bonita	7	10	Ignition (250 bonus acres), line construction
5/9	Chiricahua NM		Wedge			Burn preparation
5/12-16	Flagstaff, AZ					RX-80 (Hickerson)
5/11-21	Gila NF	Lilley		15000		Monitoring, holding
5/22-24	Gila NF	Rocky		5000		Monitoring, holding
5/28-6/10	Gila NF	Lilley		15000		Monitoring, holding
6/17-19	Zion NP					S-212 (module)
6/23-24	Great Basin NP					PNF planning (Benson)
6/23-25	Zion NP		Lava Point			Burn preparation
7/1-11	Bandelier NM	Lummis		1665		Monitoring, holding
7/14-18	Saguaro NP		Devils Bathtub	60	60	Ignition, line construction
8/4-5	Zion NP					Hazard fuel reduction
8/7-9	Lassen Volcanic NP	Huffer		1200		Holding
8/11	Whiskeytown NRA		Coggins 4		6	Line construction
8/12-14	Lassen Volcanic NP		Flatiron		21	Line construction
8/18	Redwood NP		Dolasen		10	Line construction
8/19-20	Redwood NP		Williams Ridge	70		Ignition
8/20-21	Redwood NP		Elk Camp		25	Line construction
8/22	Redwood NP		Williams Ridge East	50		Ignition
8/22	Redwood NP		Airstrip	30		Ignition
8/26-28	Dinosaur NM		Chew	1200		Ignition
9/8-11	Grand Canyon NP	Swamp		251		Ignition, holding
9/16-18	Zion NP		Lava Point		3	Shaded fuel break
9/22-23	Sequoia NP		Mineral King			Cancel and return
9/24-25	Zion NP		East Mesa	6		Ignition
9/22-26	Zion NP					Computer training (Benson)
9/29	Zion NP		Lava Point		2	Shaded fuel break
10/2-3	Muir Woods NM		Deerpark 2		60	Line construction

DATES	LOCATION	PNF NAME	MIPF NAME(S)	ACRES	CHAINS	COMMENTS
10/7-14	Muir Woods NM		Deerpark 2	52		Ignition
10/16-18	Redding BLM		Deadwood Creek	300		Ignition
10/21-22	Pinnacles NM		Vineyard K	32		Ignition
10/23	Golden Gate NRA		McCurdy	60		Ignition
10/24	Golden Gate NRA		Strain Hill	50		Ignition
10/28-30	Zion NP					S-390 (module)

	# of PNFs	ACRES	# of MIPFs (IGNITION)	ACRES	# of MIPFs (PREPARATION)	MILES	HAZARD FUEL REDUCTION (ACRES)
TOTAL	5	23116	12	1917	9	2.5	

