Zion
Fire & Aviation Management

National Park Service
U.S. Department of the Interior

Annual Report 2008

Three Finger Mesa Rx

2008 Season Overview

The 2008 season was somewhat of a reprieve for Zion National Park's Fire and Aviation Management Program, especially after very busy 2006 and 2007 seasons. Nationally, it was more of a somewhat "normal" fire season with 80,084 fires burning 5,254,109 acres.

Zion had 13 wildland fires in 2008 that burned only 6 acres within the park. Zion was also involved in numerous wildland and prescribed fire support actions within the Color Country Interagency Fire Management Area and throughout the country.

Zion was in severity fire funding for much of the season and fire restrictions were once again enacted for the seventh year in a row.

Zion once again assisted with the fire management programs of its seven cluster parks (BRCA, PISP, TICA, GOSP, CEBR, GLCA, and CARE). Zion supported all fire management activities in these parks including prescribed fire in BRCA and GOSP and technical expertise for planned fuel treatment projects at other parks.

Zion continues its tradition of interagency cooperation as a member of the Color Country Interagency Fire Management Area whose response zone covers 14.7 million acres of federal, state and private lands in Southwest Utah and Northwest Arizona. This group helps to promote safe and effective fire management in Color Country through interagency cooperation and coordination. Zion representatives served on the Operations, Fuels and Information/Education Committees. The area had a rather slow wildland fire season with 338 fires reported totaling 6,483 acres burned. The area also hosted one Incident Management Team during the fire season.

Several Northern Arizona University Graduate students (and assistants) continued their cooperative project with Zion, collecting additional data within two recent wildfires areas funded through two BAER plans- Kolob Wildfire 2006 and Dakota Hills Wildfire 2007.

Kristine Evevson was welcomed to Zion's staff in April as the new Fire Program Management Assistant, after 20 years with the BLM in St. George.

2008 Season Highlights

- Hiring of three permanent positions including Fire Program Management Assistant, Lead Fire Effects Monitor and Lead Fire Use Module Crewmember
- Management of 13 wildland fires within the park totaling 6 acres
- Assisted with 119 fires outside the park (support actions).
- 5 Prescribed Fires (Rx) within the park involving 2,820 acres, including the 2,222 acre Three Finger Mesa Rx.
- Completed 9 mechanical fuel reduction projects totaling 80 acres.
- Continued development of Zion Fire Management webpage
- Fire restrictions were in effect for the seventh year in a row.
- Received severity funding for additional staffing from June 27 - July 26.
- The Zion Fire Use Module participated in over 1010 person days worked
- Zion Helitack Module flew approximately 281 hours in support of fire and other operations throughout Color Country
- Along with resource management, continued a forest management program to reduce hazardous fuels and provide for the restoration of aspen at Lava Point

Fire Effects Monitoring Program 2008

The 2008 Zion Fire Effects team enjoyed a productive year, drawing on the strong skills of new and transitioning members. Although the scheduled plot revisits were moderate in number, the crew remained quite busy because our fire program undertook multiple prescribed burns between May and October. The Fire Effects crew completed the additional immediate post-fire plot reads and assisted in the prescribed fire operations. This additional work led to a total of 33 plots completed at Bryce National Park and 35 plots completed at Zion National Park for the year. The crew also spent several days sampling vegetation data for a study which is examining the effects of fire on small mammal populations.

The program benefitted in terms of both leadership and continuity by hiring the former Lead Fire Effects Monitor for the position of Fire Ecologist. Although the rest of the crew members were new to Zion, they quickly formed a cohesive team. Both the Fire Effects Lead and Assistant Lead brought considerable fire effects experience and education to this year's program, while the crew members (one Biological Science Technician and one intern from Northwestern University) brought abilities from related fields. Additionally, Fire Effects received assistance from both local and regional resources (Helitack, Zion Engine Crew, Bryce Engine Crew, Exotic Plant Management, and Grand Canyon Fire Effects).

Several Northern Arizona University Graduate students (and assistants) continued their cooperative project with Zion, collecting additional data within two recent wildfires funded through two BAER plans- Kolob Wildfire 2006 and Dakota Hills Wildfire 2007. Their research is analyzing the effectiveness of several treatment combinations in hopes of finding effective ways to minimize the colonization of invasive non-native plants such as cheatgrass. The preliminary results presented to Zion this spring show some treatments had a significant effect, at least in the short term. Our monitoring program provided NAU with logistical assistance and joined one of their crews for a long day of data collection in the late spring. Final theses from the studies are projected to be complete between Fall 2009 and 2011.

Park	Monitoring Unit	Type of Plot	Preburn	Immediate	Postburn	Total Plots
Zion	GB Sagebrush	FMH Brush Plot	2	0	5	7
	Gamble Oak	FHM Brush Plot	0	4	3	7
	Pinyon-Juniper	FHM Forest Plot	2	2	2	6
	Pinyon-juniper	Sm. Mammal Plot	30	0	0	30
	Quaking Aspen	FMH Forest Plot	0	0	1	1
	Ponderosa Pine	FMH Forest Plot	0	4	8	12
	White Fir	FMH Forest Plot	0	0	2	2
Bryce Canyon	Black Sagebrush	FMH Brush Plot	0	0	4	4
	Ponderosa Pine	FMH Forest Plot	0	6	6	12
	Ponderosa Pine	Photo Point Plot	3	0	0	3
	White Fir	FMH Forest Plot	0	14	0	14
Totals			**37**	**30**	**31**	**98**

Fire Information and Education 2008

The Fire Information and Education program at Zion is coordinated by the Fire Information and Education Specialist (FIES) whose primary responsibility is to establish and coordinate internal and external fire information, education and prevention programs in order to present an integrated interdisciplinary fire program within Utah and Colorado and the National Park Service (NPS) as a whole.

2008 was another busy year for the Information and Education portion of Zion's Fire Management Program. The FIES served as Information Officer (PIO), either directly or indirectly, on all of Zions wildfires and prescribed fires. The incidents required the production and dissemination of fire information, both internally and externally, and in a variety of mediums, including press releases, media interviews, park memos, posters and webpages.

The FIES was also involved in the training of seasonal park employees and concession staffs in regards to fire management.

One of the major duties of the FIES is the updating and continued development of the wildland fire webpage (http://www.nps.gov/zion/naturescience/fire-management-homepage.htm), which is hosted by Zion's main webpage. The site contains a wealth of information regarding wildland fire management in Zion and the NPS.

The FIES is a qualified PIO1 and is currently serving in that function on a Type I Incident Management Team that manages wildland fires throughout the country. The FIES also served as a PIO on numerous wildland and prescribed fires in the Color Country area.

The FIES serves as the NPS representative for the Color Country Interagency Information and Education Committee, an active group that produces and disseminates wildland fire-related information and educational materials/programs. The FIES also represents the NPS on two other interagency committees including, the Great Basin Fire Education and Prevention Committee and the Utah Fire Communications Committee.

As well as the FIES duties in the Fire Management Program, the position also assists with the Public Information Program in the park. This involves the production of numerous press releases, media interviews, a park profile, co-managing the park's website and being a member of various park committees and work groups.

Following is a list of specific fire-related information/education activities for both Zion and associated national parks and the Color Country Interagency Fire Management Area. There are no exact figures for the number of people contacted in 2008 concerning non-personal fire-related messages, but it certainly numbered in the thousands.

Zion and other NPS Cluster Parks 2008

Information/Education Activity	Staff	Efforts	Contacts
Personal			
Kids Fire program	Interpretation	5	190
Interpretive Programs (Fire related)	Interpretation	33	2,078
Earth Day Booth	FIES, staff	1	536
Informal roving during fire activities	FIES, staff	5	378
Community Fire Meetings	FIES, staff	3	200+
Zion Staff Training	FIES, staff	3	34
Color Country Educ/Prev Programs	Interagency	16	9,000+
Color Country Media Day	Interagency	1	15
Non-personal			
Fire Webpage	FIES	on-going	-
Success Stories	FIES	6	-
NPS Fire Reporting	FIES	4	-
Fire Press Releases	FIES	9	-
Fire Restriction Newspaper Ads	FEIS	1	-
Bulletin Boards in Zion	FEIS	25	-

Zion Fire Use Module 2008

The 2008 fire season turned out to be similar to past seasons in one way- its uniqueness. With an early, intense season in Northern California, the implementation of appropriate management response (AMR) in various locations, another converted prescribed fire at Grand Canyon National Park (NP), as well as a high number of in-season prescribed fires, our season steadily grew into quite a busy one.

The module was available from April 14 through November 20 in 2008. During that time, we assisted 11 National Park Service (NPS) units with 15 projects, and 10 interagency units with 12 projects. We provided support for three wildland fire use events, 11 prescribed fires, and nine suppression events, including two of which were managed as limited suppression "AMR" fires.

Our crew's structure remained essentially intact from the 2007 season with only two exceptions. In the spring, Holly Miller accepted a permanent engine operator position with the Humbolt-Toiyabe National Forest (NF). Filling in behind Holly is our newest crewmember, Ben Suerig. Ben is the second crewmember we've brought over from the Zion Helitack Module. A long-time native of Southern Utah, Ben's fire experience includes several seasons with Moki Helitack in St. George, Utah, as well as time with the Fuels/Engine program in Zion NP.

The 2008 season started off with an excellent critical training week which included a number of important training sessions above and beyond the basic Firefighter Refresher. We consider this week an absolute necessity, especially when a new crewmember joins the fray. Seasoned crewmembers benefit from it as well, and the time spent together allows the entire crew to gel prior to a long season.

Just as our season was wrapping up for the year, we got word that our Lead Crewmember, Shane Paxton, had accepted a position with the Cherokee Hotshots in Tennessee. While we're disappointed to have Shane leave the crew, we're glad to know that he and his wife will be in the same area, living in a new home together. We will certainly miss all that Shane brought to our crew over the years. He added a great deal more than a list of qualifications. Shane added new perspectives, new language, and a great attitude.

Zion Fire Use Module 2008

Activity Summary

TASK	Person Days Worked	2008	Average (1996-2007)
Wildland Fire: Suppression	150	14.9%	12.9%
Prescribed Fire: Execution	263	26.0%	13.8%
Travel	115	11.4%	11.9%
Module Operations	188	18.6%	13.6%
Wildland Fire Use	146	14.5%	26.1%
Training	76	7.5%	8.2%
Prescribed Fire: Preparation	0	0%	6.8%
Hazard Fuels	72	7.1%	4.6%
Prescribed Fire: Planning	0	0%	0.4%
Fire Effects Plot Work	0	0%	1.1%
Total	**1010**		

2008 Acreage Accomplishments

Wildland Fire Fire Use		Wildland Fire Suppression		Prescribed Fire Execution		Hazard Fuels	
#	ACRES	#	ACRES	#	ACRES	#	ACRES
3	**2,800**	**9**	**11,490**	**11**	**6,493**	**4**	**12**

2008 Roster

NAME	POSITION	STATUS
Ed Waldron	Module Leader	GS-08 Permanent Full Time
Alex Viktora	Assistant Module Leader	GS-07 Permanent Full Time
Shane Paxton	Lead Crewmember	GS-06 Career Seasonal
Travis Hartsburg	Crewmember	GS-05 Career Seasonal
Sarah Cooper	Crewmember	GS-05 Career Seasonal
Kelly Boyd	Crewmember	GS-05 Seasonal
Ben Surig	Crewmember	GS-05 Seasonal

Zion Helitack Module 2008

2008 was another safe and work filled year for Zion Helitack, despite the slower fire season. Color Country did not see as many fires they have in previous years, and thus we did not fly as much on local fires. However, we did have many new and exciting things occur during the season.

Zion Helitack was approved to do Cargo Let Down training. We accomplished that early in the season, and certified two managers as qualified Spotters for CLD activities. We did not get a chance to use the CLD tool in an operational incident. We did do a lot of training and proficiencies throughout the season making certain to maintain currency and improve our skills in utilizing this ability. The idea behind Cargo Let Down is to deliver light weight loads of cargo to personnel on the ground in a situation when Long Line is not the preferred method or even an option. Examples of this may be when the load needs to be delivered to a location where the vegetation or canyon walls prohibit the use of a long line which is only 150' long or possibly a situation where the helicopter is needed for aerial observation following the delivery of the cargo. It is a wonderful tool that we are happy to now have the capability of using.

Due to our slow season, we spent a considerable amount of time off district. We assisted Central Utah on a couple of small fires that occupied our time for only a few days. We also spent 20 + days in Northern California supporting the Iron Complex. The ship flew a lot and the crew obtained some valuable experience in supporting the operations on a very large Helibase. We also had the unfortunate experience of being present during the Helicopter crash on H44, of an S-61. Although we did not personally know any of those onboard that perished in that crash, we had spent time working with the air crew and had spent many hours flying in and out of H44. It was a traumatic experience for most of the crew. This unfortunate event ended our off district assignment to California.

We finished the season with several resource management projects. We spent several days doing aerial ignition for the Puma RX at Bryce Canyon. We also extended the contract to support the Forest Service with several Wild Fire Use incidents. Overall it was a slow year, but a truly good year. We are excited to have another safe year behind us and are now looking forward to the anticipation of a new year!

Agency	Flight Time	Passengers	Internal Cargo (lbs)	External Cargo (lbs)	Water Delivered (gl)
Zion N. P.	64.5	196	9,605	75,650	4,060
B.L.M.	58.6	209	12,770	3,265	12,218
F.S.	67.3	153	4,635	10,765	25,385
State / Private	7.9	26	2,070	0	900
Off District	82.9	276	16,200	52,450	1,200
Totals	**281.2**	**860**	**45,280**	**142,130**	**43,763**

Initial Attacks = 25 / Fires supported = 16 / Off District = 2 / SAR's = 0 / Prescribed Fire = 1 / Projects = 6

Fuels Treatment Projects 2008

Project	Treatment Type	Acres
Campground Leaf Burning	Broadcast Burn	24
East Mesa Rx	Broadcast Burn	516
Lower Canyon Grass Rx	Broadcast Burn	36
Upper Canyon Grass Rx	Broadcast Burn	22
Three Finger Mesa Rx	Broadcast Burn	2,222
Lava Point Restoration	Biomass Removal	20
Pine Valley Peak Restoration	Lop and Scatter	17
Three Finger Mesa Restoration	Rx Prep	1
East Entrance Boundary	Hand Pile/Thin	6
Fire Pit Knoll Defensible Space	Hand Pile/Thin	8
Pine Creek Defensible Space	Hand Pile/Thin	10
Sinawava Defensible Space	Hand Pile/Thin	8
Kolob VC Defensible Space	Hand Pile/Thin	5
Administration Defensible Space	Hand Pile/Thin	5
Total		**2,900**

Communities Protected

- East Zion - (Focus Area of the Color Country Interagency Fire Management Area)
  - Little Ponderosa Subdivision
  - Zion Estates
- Kolob - (Focus Area of the Color Country Interagency Fire Management Area)
- Zion National Park Infrastructures

Zion Canyon Grass Rx

Taking weather readings on East Mesa Rx

Zion NP Wildland Fires – 2008

Wildland Fire	Date	Acres	Cause	Action Taken
Petroglyph	1/18	.1	Human	Suppression
MM22 SR9	6/20	.3	Human	Suppression
Barracks	6/29	.1	Lightning	Suppression
Slickrock	7/6	.3	Lightning	Suppression
Kolob	7/6	.3	Lightning	Suppression
Camp Creek	7/10	1.0	Lightning	Suppression
Dennett	7/19	.1	Lightning	Suppression
Lee Pass	7/24	.1	Human	Suppression
Lemon	8/1	.3	Lightning	Suppression
Spring Creek	8/4	3.0	Lightning	Suppression
Bravo 56	9/13	.1	Human	Suppression
Serendipity	9/28	.2	Lightning	Suppression
Election Day	11/4	.1	Lightning	Suppression

Total (13 Fires) 6 acres

Out of Park Assignments
Support Assignments - **119** (Includes support in interagency wildland and prescribed fire activities)

Camp Creek Wildland Fire

2008 Zion Fire Business Management

Fire Management at Zion National Park is a highly complex program incorporating a full range of management objectives. The authorized funding in fiscal year 2008 was over $1.7 million, including 9 FIREPRO base and 14 projects accounts.

All fire related fiscal and administrative duties are accomplished by the Fire Program Management Assistant (FPMA). The Fire Program Management Assistant oversees all office and administrative functions in the Fire and Aviation Branch, ensuring appropriate guidelines are followed as they pertain to budget, procurement, fleet management, personnel, payroll, travel and correspondence. The FPMA provides expertise in Incident Business Management to Zion National Park as well as 7 other parks in the Utah Group.

In 2008, duties included the timely and accurate preparation of Fire and Aviation Branch time and attendance reports for approximately 35 employees and 5 emergency hire personnel. The fire year resulted in the preparation and processing of 285 travel authorizations / vouchers related to training and emergency operations for branch employees.

FY 2008: AUTHORIZED FUNDING AMOUNTS

Readiness	$777,276
Fuels Management	$494.923
Fire Effects Monitoring	$90,400
Fuels Projects (Non WUI) - Mechanical	$0
Fuels Projects (Non-WUI) - Prescribed Fire	$25,400
Fuels Projects (Non-WUI) – Other	$3,000
WUI Program Management	$216,691
WUI Projects - Prescribed Fire	$36,300
WUI Projects – Mechanical	$61,500
WUI Projects - Other	$3,000
Burned Area Rehab	$14,700

2008 Permanent Staff

Fire Management Officer - Brent Woffinden
Assistant Fire Management Officer – Taiga Rohrer
Fire Program Management Assistant – Kristine Evenson
Fire Ecologist – Katie Johnson
Lead Fire Effects Monitor – Joel Silverman
Fire Information/Education Specialist – David Eaker
Station Manager – James Courtright
Engine Supervisor – David Brothwell
Engine Supervisor - Greg Bartin

Helitack Module

Helitack Leader – Mike Reid
Assistant Helitack Leader – Alicia Tanrath
Crewmember - Ben Thayer

Fire Use Module

Module Leader – Ed Waldron
Assistant Module Leader – Alex Viktora
Lead Crewmember - Shane Paxton
Crewmember – Travis Hartsburg
Crewmember - Sarah Cooper

2008 Seasonal Staff

Fire Effects Crew - Katie Walsh
Fire Effects Crew - Drew Ruiz
Engine Crew - Bill Whitacre
Engine Crew - Ryan Muff
Engine Crew - Kristy Hajny
Engine Crew - Jack Lipkin
Fuels Crew - Suri Card
Fuels Crew - Gina Allbright
Fuels Crew - Bryan Bird
Fuels Crew - Andrew Gavin
Fire Use Module - Kelly Boyd
Fire Use Module - Ben Suerig
Helitack Module - Norman Allen
Helitack Module - Shannon Eberhard
Helitack Module - Lacy Crawford
Helitack Module - Joshua Hinson
Helitack Module - Laura Delimont
Helitack Module - Chris Jensen
Bryce Canyon - Sarah Sorenson
Bryce Canyon - Joe Supik

Bryce Canyon

Fuels Specialist - Bruce Fields
Spervisory Forest Tech - Andrew Hostad