

# Division of Fire & Aviation Highlights of Our Successes - 2003



One of the many successes in the National Park Service Wildland Fire Management Program during 2003 included Yellowstone's Camp Wildness, a field camp for high school students in which instructors taught students about fire behavior, fire ecology, fire management, the history of fire in Yellowstone National Park, and the concept of Firewise. See page 4 for the full story.

# Glacier National Park ~ Montana

*Tours Give Community Members Understanding of Fire Ecology* 

Glacier National Park experienced its largest fire season in recorded history with almost 140,000 acres burned in the 2003 fire season. Despite the large acreages and high-profile evacuations of developed areas, there were no major injuries of firefighters or the public. Even before the smoke fully cleared, Glacier National Park and the Flathead National Forest seized the opportunity to work together and explain the fire season to the public by giving an overview of suppression actions taken and placing the fires within both a historical and ecological context.

Continuing and expanding on a tradition established during the 2001 Moose Fire, Glacier National Park and the Flathead National Forest offered public bus tours of the fire area. Flathead National Forest staff worked side by side with Glacier National Park staff to discuss fire ecology, fire management, firefighting and agency mandates. Four hundred visitors (from school groups to the general public) participated in the 17 bus tours and all tours were fully booked within a few days of the press release. The travel route through recent and historic burned areas allowed for an up-close learning experience, and several stops were made along the way. Staff narrated portions of the bus trip, explaining fire effects, ecology, history and other topics of interest. Highlights of the tours included short walks through burned areas that had been snagged, stops near the ignition point of the Robert Fire, views of Glacier Park fire lookout buildings, where the fires were reported from, and stops that demonstrated fire's impacts and ecological benefits.

Staff explained what happened and why, both from a local resident, firefighter, and ecological perspective, discussing management decisions, firefighting strategies, and an overview of evacuations and community impacts. Aided by large maps and laminated photos, the staff discussed fire return intervals and fire history. Hands-on materials such as firefighting line gear, tools and fire shelters allowed interpreters to demonstrate firefighting safety



Students learn how to use fire shelters during a tour of fire camp

equipment and tactics. Match-stick forest demonstrations illustrated the interaction of fuels, air, and heat - the fire triangle. The adjacent Moose Fire from 2001 allowed for discussions of post-fire regeneration. Green willows and grasses, already sprouting in areas affected by this summer's fire season, reinforced those messages. Using examples at various stops along the fire route, information was shared about tree identification and how plant, animal and bird species in northwest Montana have adapted to and live with fire. The local fire situation this summer included threats to homes and necessitated many evacuations. Using this teachable moment, staff discussed wildland-urban interface issues and urged tour participants to create defensible space and use fire wise building practices around their homes. Each participant returned home with a folder that included fire information, a chronology, map, and a defensible space handout



An information officer points out the fire from the shore of Lake McDonald

Fire is an emotional topic, and after a full afternoon of hands-on education, the comment forms after the tours reflected a wide range of opinions from 'it's awful what fire does' to '(I received) a better appreciation of the positive aspects of fire.' Other comments commended the interagency relationship with statements such as, 'the National Parks and the Flathead National Forest really care! Sometimes the news (media) doesn't portray that' and, 'two Federal Agencies can really work well together!' Regardless of whether the reaction to the burned areas was positive or negative, the tours were well received and enhanced the image of both agencies.

http://www.nps.gov/fire/download/pub\_firo3\_glac\_tours.pdf

## Bryce Canyon National Park ~ Utah

Fire Information and Education Seasonal Builds Community Successes

Changing public perception about land management policies, especially the issue of fire, cannot happen overnight. It takes time to develop local relationships and gain the trust and understanding needed for such a task. The Bryce Canyon Fire Information and Education seasonal position was a good example of how a dedicated staff person, dealing with this issue, can make a positive difference in a short period of time.

Highlights of the season include:

- Instituted a program to further community outreach in the local area by establishing dialogue, contacting key individuals, developing a mailing list of residents and presenting programs at community meetings.
- Developed and presented a series of school/ community outreach programs to grade school and middle school students in the local area, utilizing power point presentations and hands-on activities.
- Assisted with the development of a prescribed fire information packet for visitors and local communities to be utilized when the park is conducting burns.
- Created numerous draft fire-related publications and brochures for Bryce Canyon.
- Developed and presented several fire-related community and visitor programs including an evening campfire presentation (power point), a children's program and a hike.

http://www.nps.gov/fire/download/pub\_firo3\_brca\_fireed.pdf

## Cowpens National Battlefield ~ South Carolina

Work Continues to Return Battlefield to 1781 Appearance



Managers use mechanical and prescribed fire treatments to restore the battlefield

In 2002, as part of the Healthy Forests Initiative, Cowpens National Battlefield began a mechanical fuel reduction as the first phase of returning the battlefield to a safe condition and to its 1781 appearance. The next phase was a prescribed burn consisting of 52 acres which was completed May 14, 2003. The combination of the mechanical fuel reduction and prescribed burn will result in a strong and healthy forest with little undergrowth for catastrophic wildfire. The two methods are just what the doctor ordered!

http://www.nps.gov/fire/public/pub\_firo3\_cowp\_work.html

## Grand Teton National Park ~ Wyoming

International Audience Learns about Fire Program A recent U.S. Study Tour brought technical experts from Central Africa to visit U.S. national park and forest areas in Jackson Hole, Wyoming and allowed local land managers an opportunity to spotlight the interagency fire management program to an international audience. The study tour was planned in support of the Congo Basin Forest Partnership and is one component of a larger technical assistance program for that region. The project supports training for directors of forestry, wildlife, and parks in Congo Basin countries.

During their two-week visit, representatives from the countries of Gabon, Democratic Republic of Congo, and Cameroon experienced how land management planning and its implementation can be accomplished. Through on-the-ground site visits and discussion with National Park, National Forest, and Fish and Wildlife Reserve administrators, the group received an overview of area land management practices and partnerships. Fire managers, speaking through a French language interpreter, presented a session on fire's role in the ecosystem, fire management practices, community outreach programs, and interagency cooperation.

http://www.nps.gov/fire/download/pub\_firo3\_grte\_africa.pdf

## Mammoth Cave National Park ~ Kentucky

Mammoth Cave National Park Donates to Local Volunteer Fire Departments

In 2003, eight volunteer fire departments in the vicinity of Mammoth Cave National Park received \$54,440 in firefighting gear and equipment from the park through the Rural Fire Assistance Program: Park City; Cave City; Lincoln, Chalybeate, Kyrock, Rocky Hill, Cub Run, and Brownsville. Gear included Nomex pants and shirts, hard hats, goggles, and fire shelters. Pulaskis, leaf blowers, and chain saws.

"The fire departments around the park provide valuable service in wildland fire suppression, as well as structural fire protection, search and rescue, and emergency medical service response," said Caldwell. "I feel very fortunate that the Rural Fire Assistance Program allows the park to present these departments with quality equipment to enhance the safety of their firefighters."

Seven local volunteer fire departments currently have cooperating agreements with Mammoth Cave NP: Park City; Cave City; Lincoln, Chalybeate, Kyrock, Rocky Hill, and Cub Run.

http://www.nps.gov/fire/public/pub\_firo3\_maca\_donatetoVFD.html

### Whiskeytown National Recreation Area ~ California

Park Site Treats over 1,000 Acres during Fiscal Year 2003



A masticator in use at Whiskeytown National Recreation Area

Whiskeytown accomplished two significant prescribed burns in the park along the southern and eastern boundaries for a total of 1,205 acres. The Panther Gap prescribed burn (314 acres) was completed in the fall of 2002 and the Shasta Divide prescribed burn (891 acres) was completed in May 2003. Both burns are part of an interagency program to help reduce the threat of wildfire to our park neighbors.

One of the major accomplishments this year was the Kanaka shaded fuelbreak. This fuelbreak was 205 acres and located near the southern boundary. This fuelbreak will help to protect the park and nearby communities from catastrophic wildfire.

http://www.nps.gov/fire/download/pub\_firo3\_whis\_fuels.pdf

#### Yellowstone National Park ~ Wyoming High School "Camp Wildness" Piloted

Using Wildland Urban Interface funds, Yellowstone National Park piloted its high school field camp, Camp Wildness: Living with Fire, June 25, 2003 through July 24, 2003, in Silver Gate, Montana, near the park's Northeast entrance. The pilot represented a partnership between the National Park Service, the University of Idaho-Upward Bound Math-Science Program, the USDA Forest Service, and the Yellowstone Association.

Using the newly drafted 300-page *Camp Wildness* curriculum, field camp instructors taught students about fire behavior, fire ecology, fire management, the history of fire in Yellowstone National Park, and the concept of Firewise. In preparation for their fieldwork, students learned how to read topographic maps, how to use compasses, and how to take global positioning system readings. In the field, the students and their instructors joined the Yellowstone National Park Fire Effects Crew to collect fire data. During the summers of 2000, 2001, and 2002, fires burned through areas that had burned in 1988.

Their research aided in the creation of a fuel model that can be used to predict fire behavior in early postdisturbance forest areas of Yellowstone. A major component of Camp Wildness pilot was community service. Kari Vannice, with the USDA Forest Service-Gallatin National Forest, was instrumental in helping the National Park Service plan the Firewise component of the camp's curriculum. She also worked directly with the high school students and park staff to schedule and conduct Firewise assessments in the Silver Gate/Cooke City communities. Students assessed private properties and suggested actions to improve fire safety levels. Students implemented their own suggestions at the Whispering Pines Cabins and used that facility as a model at the camp's open house.

Some of the highlights during the month-long program included:

• July 21, 2003, high school field camp students presented their fire science projects to a group of younger students attending a summer day camp program (ParKids). Attendees were from the park's gateway communities. All presentations were handson and allowed the younger children to use tools involved in fire research.

- On July 22, 2003, high school field camp students hosted an open house attended by forty park neighbors. Working in pairs, the students designed and staffed a variety of learning stations and shared their knowledge and skills in the areas of fire suppression, fire ecology, fire effects, and fire management. The high school students demonstrated remarkable maturity, knowledge, and professionalism when responding to controversial questions and comments.
- July 31 to August 3, high school field camp students taught fire ecology and fire management to fifty Upward Bound Math and Science students during their three-day Yellowstone field trip.
- On August II, Park Superintendent Susanne Lewis hosted a Camp Wildness luncheon at her home to allow the park's Formal Education staff the opportunity to present a PowerPoint presentation highlighting the pilot's success stories. Park partners attended the luncheon.

Twelve high school field camp students and two college interns volunteered a total of 2,400 hours. These hours included fire studies/training, fire research work, and Firewise assessments. Seventeen Yellowstone National Park employees provided 180 hours of instruction and/or research/service facilitation. Fourteen teachers developed lesson plans for the field camp. Four park neighbors



Participants in the Camp Wildness pilot program

offered their expertise at campfire programs. More than fifty local residents attended the field camp's town meeting and open house. High school field camp students taught fire ecology and fire management to two other sets of students - nearly twenty ParKids and their parents and fifty Upward Bound Math and Science students.

http://www.nps.gov/fire/download/pub\_firo3\_yell\_wildness.pdf

## Ozark National Scenic Riverways ~ Missouri

Integrated Technology Helps Nearby Communities at Risk At Ozark National Scenic Riverways (NSR) in southeast Missouri, communities which surround the park are generally without emergency response systems such as "9-1-1." Many people do not even know which volunteer fire department serves their area.

The lack of information about the location of homes in the Wildland/Urban Interface(WUI)also makes planning difficult for park management. How can the fire program effectively plan its fuel treatment projects to protect the WUI, if it doesn't know where neighboring structures are concentrated?

To address these issues, Ozark National Scenic Riverways forged a partnership with Firewise, ESRI Software, the Student Conservation Association (SCA), Shenandoah National Park, and local rural volunteer fire departments. Firewise and ESRI contributed ArcView mapping software to the rural fire departments, free of charge, because a local representative attended the Firewise Workshop. The Student Conservation Association, under leadership of the National Fire Program in Boise, provided interns skilled in mapping with GPS systems. Alan Williams and Dan Hurlbert from Shenandoah National Park loaned Ozark NSR a fire risk home assessment system they had developed, that ties a Microsoft Access database of Firewise evaluation criteria to ArcView mapping capabilities. Local rural fire departments hosted meetings, assisted with community liasions, and committed to maintaining the system upon completion. Ozark NSR obtained National Fire Plan funding to support the project, and helped the fire departments with the Rural Fire Assistance (RFA) Program process. Fire program staff at Ozark NSR coordinated the project.

Thus far, nearly 1,300 structures in the Van Buren, Jadwin, and Timber (Missouri) rural fire department jurisdictions have been mapped. Homes have also been assessed for adherance to Firewise principles, and homeowner assessments are provided to participants interested in improving their home's "risk meter" rating. Residents are learning how to reduce their home's risk of ignition in the event of a wildland fire, and the maps give the fire departments accurate information about where to go once a fire is reported. The maps also show the locations of roads, potential hazards, water sources, topographical features, etc., so that firefighters can be prepared for what lies ahead.

Ozark National Scenic Riverways will use this information to prepare a Wildland/Urban Interface Plan, which will propose fuels treatment projects in accordance with the highest need. Recently, Firewise and SCA partners visited the park, to see for themselves the successful implementation of this diverse partnership. Thanks to the National Fire Plan's Community Assistance emphasis, and a diverse group of concerned people working together, we are making a difference in the Ozark NSR Wildland/ Urban Interface.

http://www.nps.gov/fire/public/pub\_firo3\_ozar\_wham.html

# New River Gorge National Scenic River ~ West Virginia

Park Distributes Equipment through Rural Fire Assistance



New River Gorge National Scenic River distributed \$60,000 worth of equipment to 18 fire departments in the four county region around the park in October 2003. Funding for the equipment came from the federal

Part of the equipment distributed with Rural Fire Assistance funds

Rural Fire Assistance program. Some of the equipment purchased locally includes chainsaws and leaf blowers.

Leaf blowers, not usually associated with firefighting, are very effective tools in surface fires in deciduous forests on rocky slopes.

http://www.nps.gov/fire/public/pub\_firo4\_neri\_rfa.html

# Fire Management Program Center ~ Idaho

Reflections on the experiences of Student Conservation Association (SCA) intern, Jenn D'Emilio, working at the National Interagency Fire Center



My experience during 2003 marked my third Student Conservation Association (SCA) Fire Education Corps internship. In its inaugural season, I was a team member stationed in Boise to

Jenn and Dick Bahr at the Fire Ecology Conference in Florida

educate homeowners about wildland fire and the ways in which they could reduce the potential risk to their properties. In 2002, I was the Lead Media intern for the entire program, which consisted of coordinating the media effort of the teams, handling program-wide media and attending meetings with important political figures when they met in the field with teams. Both of these internships allowed me to gain the knowledge and skills, as well as giving me the opportunity to prove my capabilities, for the position that I currently hold.

As the National Park Service (NPS)'s Fire

Communications intern at the National Interagency Fire Center (NIFC), I am surrounded by the inner workings of the wildland fire world. Here, I have many different projects that I work on. One of the first things that I was responsible for was to create fact sheets about the NPS Wildland Fire, Structural Fire, and Aviation programs. I also received the training necessary to fill in for the webmaster of the NPS Fire and Aviation website, for times when she would be on fire duty or out of the office. Traveling to various national parks has also been a part of my job. I visited Sequoia and Kings Canyon National Parks to attend training in interpretation. I also visited Big Cypress National Preserve in order to obtain footage and report back to the staff at NIFC about GyroTracs - new mechanical fuels reduction machinery that was received by the Preserve. I received in-depth training on how the machinery works. I have also attended various meetings, workshops and conferences to provide logistal support.

My experiences through SCA's Fire Education Corps will remain with me for all of my life. The things that I have learned, not only skills, but also my own personal development, will help me in fulfilling my career goal, to work as a Fire Ecologist, as well as personal goals.



Intern Jenn D'Emilio at Big Cypress National Preserve in Florida with the GyroTrac, a machine used for mechanical fuels reduction

The National Park Service's Wildland Fire Management Program (includes aviation that supports fire) is dedicated to firefighter and public safety. Fire Management protects property, and specific natural and cultural resources, from unwanted fire. Resource management objectives are accomplished through a wide range of fire management options within the diverse ecosystems of the National Park Service.

The Wildland Fire Management Program reflects not only NPS mandates, polices and regulations, but also interagency and interdepartmental collaborations. The National Fire Plan, the Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment (10-Year Comprehensive Strategy), and the Joint Interagency Performance Goals provide direction for the NPS and other federal and state land management fire programs.

The Wildland Fire Management Program makes significant contributions to NPS natural and cultural resource management programs, and is the responsibility of all NPS employees. The program utilizes the abilities of employees from all disciplines.

From: Wildland Fire Management Strategic Plan - 2003-2008

# **More Information**

The latest success stories from National Park Service Fire may be found at:

http://www.nps.gov/fire/public/pub\_firestories2004.html



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