



## A Good Year for a Slow Season

The Sierra Nevada is one of the most fire-prone and fire-adapted ecosystems in the United States. Wildland fire has helped shape the beauty of these mountains just like wind, rain, and snow.

The parks pride themselves on years of pro-active fire management including a robust prescribed fire program, managing wilderness fires to restore ecosystem health, and suppressing any fire that threatens life or property.

While the parks began with several successful prescribed fires this spring before it became too hot and dry, the summer months remained relatively quiet.

Several lightning fires were suppressed including the Woods Creek Fire above Cedar Grove, the Cactus Fire in the cliffs above Ash Mountain, and the Dennison Ridge Fire near the boundary with the Sequoia National Forest. Some of these fires may have been allowed to grow in other years.

However, California was experiencing a drought, with the parks receiving about one-third of normal snowpack. The state experienced record-breaking heat for much of the summer. A healthy respect for the force of fire, especially in a year like this, was the foundation for the following strategies:



*The Woods Creek Fire was located above Cedar Grove near the popular Rae Lakes Loop Trail. Several hikers were delayed by trail closures during fire response.*

*NPS photo*



*The parks' Helicopter 552 completes aerial ignitions on the Whitaker Prescribed Fire.*

*Photo courtesy of the Buck Rock Foundation*

- 1) The ability to support fire response elsewhere. Northern California and much of the west experienced multiple large fires this year, mostly started by lightning. These fires repeatedly and rapidly outgrew aggressive fire suppression. Engine 51, Engine 72, Crew 91, the Arrowhead Hotshots, and several other fire staff responded to these fires throughout the summer months. The parks maintained adequate staffing for local fire response.
- 2) The parks recognized the potential for rapidly growing fires that could threaten life and property and made efforts to prevent these fires.
- 3) Many high elevation fires that had low potential for growth were monitored and remained small. The parks kept firefighting resources in the front-country to respond to fire starts that could have quickly threatened developed areas during periods of high fire danger. This allowed for quick response to the Cactus Fire as well as assisting with the Forks Fire in Three Rivers.
- 4) This may not have been the year to use fire as an ecological tool. While fires were undoubtedly active and led to substantial growth in drought years in the past, much of the park is not restored to a natural fire cycle and fire may not have played its natural role. Fire managers wanted to avoid fire behavior that could become so severe that it would have negative ecological consequences.

## 2012 Fire Season in Review

In the spring newsletter, the parks anticipated that the spring prescribed fire window would likely shift –that it would start earlier and end earlier than usual.

The parks started their prescribed fires almost a month earlier than more seasonable years. The annual Ash Mountain Prescribed Fires (25 acres overall) were planned to provide strategic fuel breaks in the foothills where the risk and potential growth of unwanted fires near developed areas is significant.

The 50-acre Round Meadow Prescribed Fire was designed to reintroduce fire as a natural process as part of the restoration of the former Giant Forest Village as well as encourage conditions ideal for sequoia regeneration.



*Round Meadow Prescribed Fire.*

*NPS photo by Tony Caprio*

Visitors enjoyed the opportunity to witness firefighters at work from across the meadow, although bears, marmots with babies, and Douglas squirrels competed for visitors' attention.

The Whitaker Prescribed Fire in Redwood Canyon was a cooperative project with UC Berkeley's College of Natural Resources. This was a 504-acre unit (429 acres on park land, 75 acres on UC Center for Forestry land).

This area was an especially high priority for a prescribed fire for UC Berkeley since their land had no recent recorded fire history. This project reduced the amount of forest fuels that could feed an unwanted fire and created conditions that are better suited for giant sequoia regeneration.



*Allen Welch of Crew 91 completes hand ignitions on the Whitaker Prescribed Fire.*

*NPS photo*

This project was completed during an ideal air quality window. Close communication with the San Joaquin Unified Air Pollution Control District helped fire managers time the project. For much of the fire, smoke lifted up and dispersed to the east, leaving nearby communities mostly free of smoke.

The spring prescribed fires ended with Circle Meadow. Firefighters completed 143 acres, but did not finish the entire unit because of a diminishing air quality window as the warm summer pattern led to stagnant air. The parks fell out of prescription conditions almost a full month earlier than other years.



*Heading down the steep fireline on the Whitaker Prescribed Fire.*

*NPS photo*

## 2012 Season in Review (continued)

Fire crews assisted with wildfires throughout the west during the summer. Crews in the parks responded to 24 out-of-park incidents this year.

In the parks, only the Woods Creek Fire, at 326 acres, was of any significant size.

Fire crews completed the five-acre Faculty Flat mechanical thinning project in Mineral King.

The summer pattern persisted throughout September and part of October before rain and cooler temperatures brought the parks back into prescription.

In late October, the parks completed two small projects, the last 40 acres of Circle Meadow and the 22-acre Lodge Prescribed Fire in Grant Grove.

The Lodge Prescribed Fire provides critical fuels reduction next to the John Muir Lodge and for the Grant Grove area. Beautiful fire effects were observed.

This project was one in a series of concerted steps that fire managers have taken over the past 15 years to



*Fire crews pre-treat structures near the Lodge Prescribed Fire.  
NPS photo by Deb Schweizer*

reduce hazardous fuels around Grant Grove to protect this community from unwanted fire.

Crews completed the 297-acre Swale East Three Prescribed Fire before the rain and snow in November.

## The True Measure of Success

Firefighters here in the parks frequently focus their attention in sequoia groves when conducting prescribed fires. These areas are often close to developed areas and fuel reduction is one of the objectives of these projects.

Of course, prescribed fires in sequoia groves are also planned to encourage new sequoia seedlings to sprout; fed by the nutritious ash bed and sunny gaps in the canopy that the fire helped create.

While the seed scatter can be seen in the weeks following a prescribed fire, they often don't sprout until the spring of the following year, fed by melting snowpack and warming sunlight.

This young seedling (right), along with many others, was found this spring on the Swale East Prescribed Fire conducted in the fall of 2011. It was likely only a few weeks old.

As always, these young trees face long odds of surviving in the upcoming years and only a small percentage will likely live to become mature sequoia trees. However, it is rewarding that a new generation of sequoias is the result of the prescribed fires conducted in the parks.

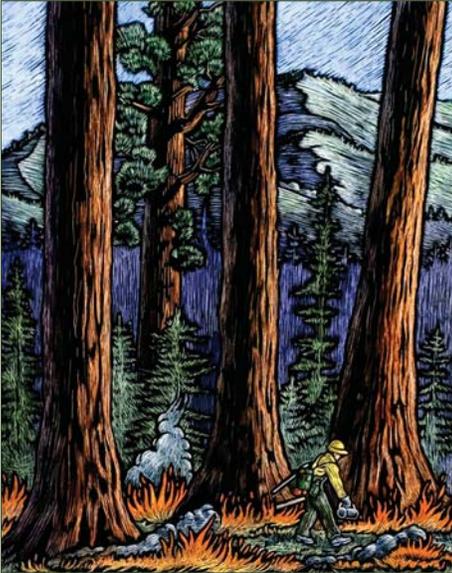


*NPS photo by Deb Schweizer*



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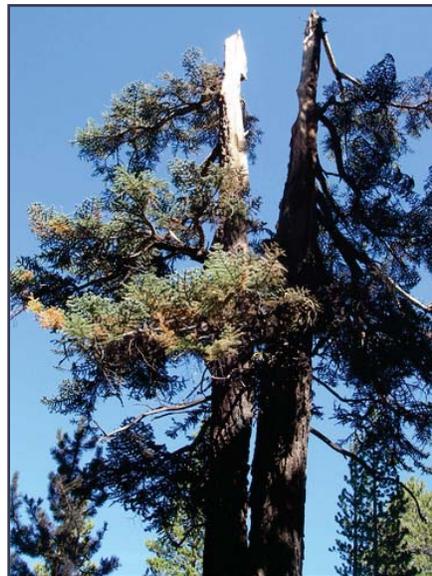
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[www.nps.gov/seki/naturescience/  
fire.htm](http://www.nps.gov/seki/naturescience/fire.htm)

## Strike Trees



First photo: This is the strike tree for the Willow Fire. Burning debris from the top of the tree may have dropped to the ground and started the fire, or the lightning strike may have also directly started the fire on the ground. Second photo: This is the strike tree from the Boreal Fire. You can see where the top fell and spread fire to the ground before it went out in the absence of burnable fuel. Firefighters look for strike trees to determine the cause of the fire. Both fires showed no significant growth. Some of these small fires may go undetected if they show little fire activity.

NPS photos by Morgan Munger and Larissa Perez