Change: Natural & unnatural

We often think of parks as outdoor museums. Caretaking a living ecosystem, however, is very different than protecting unchanging objects.

Both natural features and human facilities may be different each time you visit Both are changing all the time. How we take care of those features and facilities may also affect your visit. You won't notice the ozone monitor that works 24 hours a day, but you will see other activities such as revegetation, road work, painting, or trail maintenance. Some activities may unavoidably affect you, such as smoke from a prescribed fire, campsite closures due to revegetation, or bear management.

The park staff uses such actions as tools to maintain the landscape and protect its inhabitants and visitors. Your visit gives you but a snapshot of this process; Nature decides the timing of many of these actions. They all share one goal: preservation of these parks for us all, now and in the future.

Fire in the Sierra usually hugs the ground. Its low flames clear dangerous built-up fuels. Without it, these fuels would feed intense, hard-to-control wildfires. The natural burn pattern includes occasional hot spots. These leave important openings in the forest — the sunny, bare places where sequoia trees regenerate best. ©NPS Photo

Fire: A natural change

Years ago, we tried to banish fire from the landscape, believing it was destructive. In sequoia groves, that meant putting out lightning-caused fires that naturally start as frequently as every 5 to 20 years.

As time passed, we saw unanticipated consequences from this. Fire suppression blocked important ecological processes and caused many problems. Two problems were glaring:

First, sequoias were not reproducing. We learned that fires create the conditions that sequoias need to regenerate: Fires create a fertile ash seedbed and open the forest canopy, allowing sunlight to reach the seedlings.

Second, the amount of dead wood and small, dense white-fir trees increased tremendously. Natural fires used to burn these away frequently. Now, after fire's long absence, these fuels feed bigger, hotter blazes that are more dangerous for people, plants, and wildlife.

For over 40 years at Sequoia and Kings Canyon, we have studied fire and its effects on the land. Now, to protect human safety and benefit giant sequoia trees, the National Park Service works with fire to restore the benefits it brings.

We still put out fires that threaten life and property but, when and where it's appropriate, we may ignite prescribed fires or allow lightning fires to spread naturally, reducing fuels and improving resource conditions. Strong evidence shows that we are succeeding.

Why is this important? The National Park System exists to conserve resources "unimpaired for the enjoyment of future generations." We once thought that aggressive fire suppression met this goal. A more complete understanding of fire tells us that excluding this important natural agent of change only hurts what we are trying to protect.

WILDERNESS OVERNIGHTS

Each park trail has a daily entry quota for overnight trips, and between late May and late September a wilderness camping fee of $15 is required. The quota and fee are used to help protect your wilderness environment and experience. (They are not required for day hikes, or for overnights in the adjacent Monarch and Jennie Lakes wildernesses in US Forest Service. However, a free fire permit is required for any open flame on USFS land.)

A permit is required for each overnight trip. Reserved and first-come, first-served permits are issued the morning of your trip or after 1pm the day before at the park permit station/visitor center nearest your trailhead (see pages 8 & 9). If the quota for your preferred trail is full, you can choose another trail for that day or another day to start, if space is available. Permits are not issued after mid-afternoon as minimum distances must be reached before you camp.

Requests to reserve a permit for a certain date are accepted beginning March 1 and at least 2 weeks before your trip's start date.

Reserved permits must be picked up either the afternoon before or by 9am on the day of departure. If delayed, call the Wilderness Office or you may lose the reservation.

Camping in the park's "front-country" is permitted only in campgrounds. Camping or sleeping in vehicles is not allowed in parking lots, pull-outs, picnic areas, or trailheads in the park.

Wilderness Permit Reservations
Sequoia & Kings Canyon N.P.
47050 Generals Highway #60
Three Rivers, CA 93271
1-559-565-3766; Fax 565-4239

For more details, visit Wilderness Information at www.nps.gov/seki/planyourvisit/wilderness.htm or call.

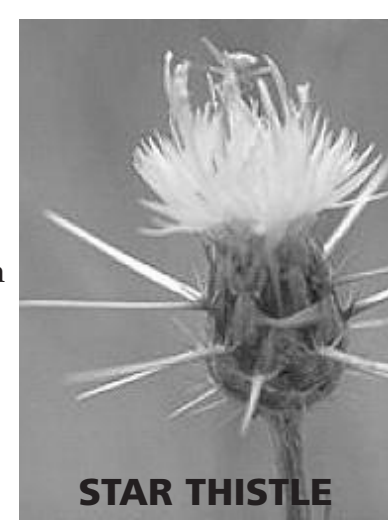
HIGH SIERRA LODGE

- **BEARPAW HIGH SIERRA CAMP** (DNCPR) www.visitsequoia.com Reservations required: 1-888-252-5757. Open mid-June, weather permitting, to mid-September. This tent hotel is at 7800´ on the High Sierra Trail, an 11-mile hike from Giant Forest.

Unnatural change: Alien invaders!

Plants and animals evolve together in communities over time. Often they keep each other in check. When species get brought in from other places, the newcomers may multiply wildly since the competitors, predators, and diseases they evolved with in their home communities are not here. They break links in the local web of life, badly disrupting species that depend on each other. Sometimes they completely replace native plants and animals.

Practice alien hygiene! Look for seeds and tiny animals attached to shoes, clothes, waders, equipment, tires, and pet fur. Wash mud from under cars and on tires before coming into the parks. The natives will thank you!



STAR THISTLE

Two immediate threats:

Star thistle is one of the most damaging non-natives in the state. Dense, thorny patches completely exclude native plants, and limit wildlife movements. It is not yet established here! If you recognize it from your home or travels, make sure not to bring it in.

New Zealand Mud Snails completely take over and change waterways that they invade. Due to their biology, just one snail can start a huge population! They stick on gear; check boots & waders thoroughly for this tiny invader. Common just east of the parks, they could easily be carried into the High Sierra.

NEW ZEALAND MUD SNAIL