



Living with Fire

Fire is nature's way of maintaining a healthy, biologically diverse ecosystem.

During your travels through Redwood National and State Parks, you may notice trees and landscapes (particularly prairies) that have been charred by fire. Some burns happened due to lightning strikes, some from American Indian-ignited fires of the past, and some from park management using prescribed fire.



American Indians

People of the Yurok, Tolowa, Chilula, and Hupa cultures have used fire for centuries to maintain prairies and oak woodlands.

Controlled burns enhance the health and growth of acorns, hazelnuts, berries, grasses, and bushes, providing food and materials for baskets, netting, and string.

Regular burning of the prairies helps eliminate competing trees, such as Douglas-fir, and renews prairie grasses, attracting deer and elk.

"The Douglas fir timber they say has always encroached on the open prairies and crowded out the other timber; therefore they have continuously burned it and have done all they could to keep it from covering all the open lands." from *To The American Indian* by Lucy Thompson, Yurok.

In addition, the tribes burned branches, shrubs, and undergrowth trees from the redwood forest floor to rejuvenate the forest and to aid travel.



Cultural Landscapes

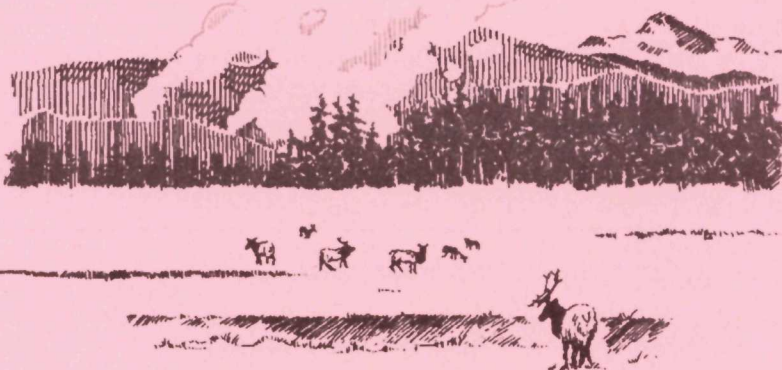
The American Indian method of managing plant communities with fire has contributed to the landscapes Americans cherish as part of their national heritage.

Most plants in the region are well adapted to fire, resprouting naturally from bud tissue.

Larger, older redwoods share this ability. They have thick, fire resis-

tant bark that enables them to survive all but the most intense fires. These fires provide openings in the understory which help redwood seedlings survive, and they eliminate less fire resistant trees, such as hemlock, which could take over the redwood forest.

However, a century of fire suppression has altered the parks' landscapes. Fuel buildup and overcrowding in the forest could lead to wildfire. The slow advance of Douglas-fir into open spaces could convert prairies to forests.





Fire Management

Redwood National and State Parks' managers are dedicated to preserving the cultural landscapes. Recognizing the benefits of fire, they have created the following integrated fire management program.

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Prescribed Fire

Periodic burning of selected areas to reduce the amount of hazardous fuel buildup or to maintain specific plant communities.



Wildland Fire Use for Resource Benefit

When a wildfire happens, it's managed and controlled to meet resource management objectives.



Wildland Fire Suppression

Suppression occurs when people, property, and irreplaceable natural and cultural resources are endangered, or lands adjacent to park borders are threatened.



Prescribed Fire Program Objectives

SHORT-TERM GOAL: to re-establish a 2-3 year fire frequency in the prairies and oak woodlands - approximating fire effects in these plant communities that American Indians maintained.

- Control and eliminate exotic plant species such as scotch broom.
- Restrict the spread of an exotic oat grass.
- Kill 80-90 percent of invading Douglas-fir less than 6-feet tall in prairies.
- Kill 60 percent of Douglas-fir less than 6-feet tall in oak woodlands.
- Restore native plant species diversity.
- Maintain or improve native plant to exotic plant species ratio.
- Collect data on the effects of fire on plant communities and wildlife.

LONG-TERM GOAL: use fire as a process to restore the prairie, oak woodland, and coniferous forest to the state that existed just prior to Euro-American contact and influence.



Old-Growth Burn Objectives

- Provide periodic disturbance to maintain an uneven-aged understory.
- Reduce duff layer and small dead and down material.
- Limit old growth mortality to one percent or less.
- Generate hardwood reproduction in the understory.
- Reduce fire intolerant species.
- Limit consumption of large dead and down material.



Smoke Management

All organizations conducting prescribed burns on the North Coast cooperate to reduce smoke and its impact on local communities.

To avoid health problems, check at a visitor center and find out where fires may be located.

If there is smoke in the parks during your visit, appreciate this unique and historic experience. You are not witnessing a tragic disturbance, but rather the reintroduction of an important part of the redwood forest ecosystem.

