

# TWENTY-SIX YEARS OF PRESCRIBED FIRE MANAGEMENT IN SEQUOIA AND KINGS CANYON NATIONAL PARKS: WHAT HAS BEEN ACCOMPLISHED IN RESTORING FIRE AND ITS EFFECTS?

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## ABSTRACT

Fire suppression, since the establishment of Sequoia and Kings Canyon National Parks in 1890, led to changes in forest structure, dangerous fuel accumulations, and reproductive failure of giant sequoia (*Sequoiadendron giganteum*). During 1968, the National Park Service initiated an evolving program of prescribed fire management to reverse those trends and to restore a natural fire regime. An analysis of area burned in the parks from 1969–1994 reveals that little progress has been made. For mixed conifer forests with an estimated presettlement fire-return interval of 5–25 years, fire generated by lightning, management, and other causes combined has produced an interval of 200 years. The interval for foothill chaparral is slightly less than a century. Intervals for all pyrophytic vegetation appear to be far greater than before settlement. At these fire frequencies, forest densities are continuing to increase, leading to ecological changes and the increasing potential for catastrophic fire.

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