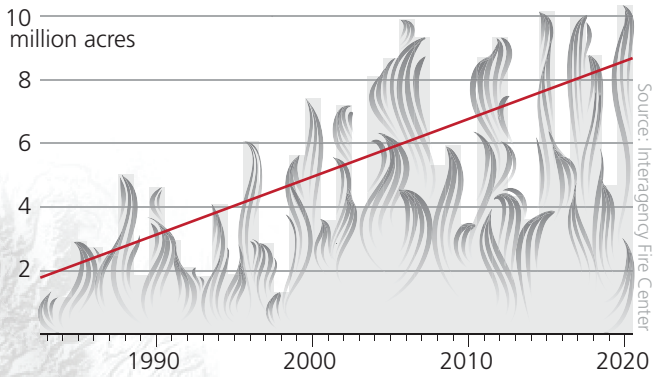
A Burning Threat

National Park Service
U.S. Department of the Interior

Sequoia & Kings Canyon National Parks
California

Giant sequoias are icons of resilience, adapted to survive thousands of years in a landscape visited by regular fire. However, a shifting climate combined with fuel buildup is driving a rise in severe wildfire in sequoia groves.

Area Burned by Wildfire in the US

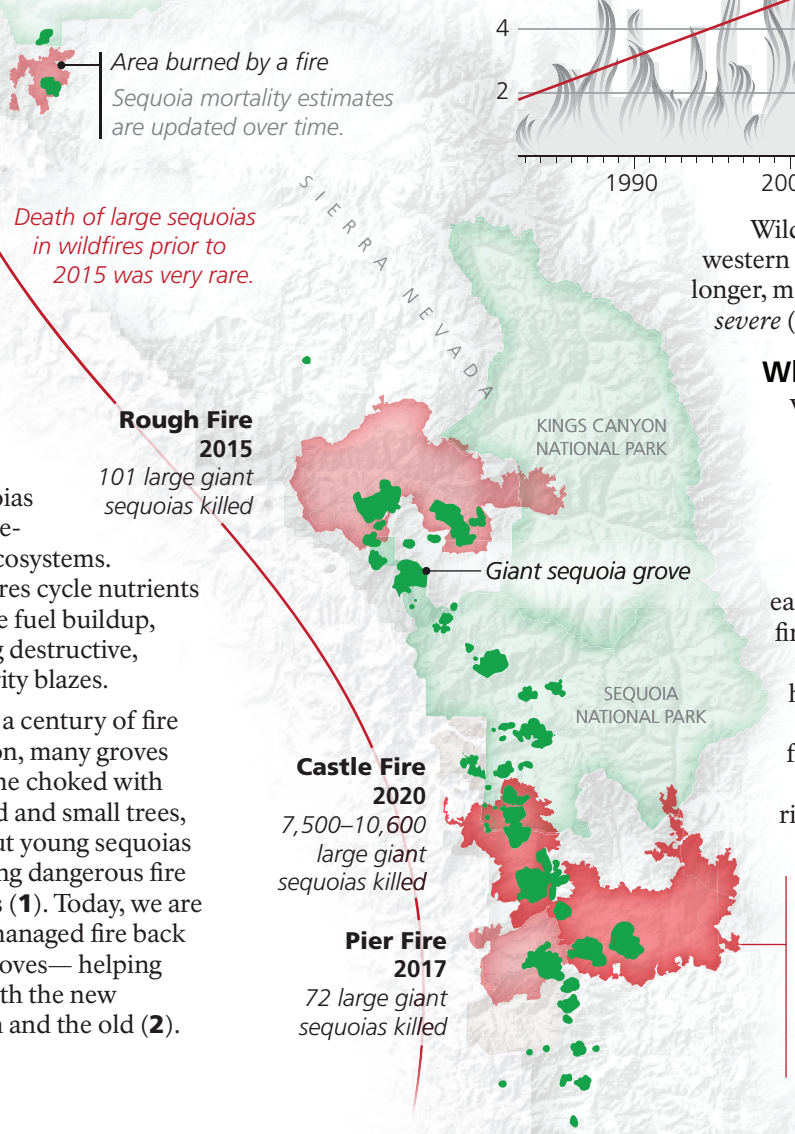


Wildfire is on the rise. Across the western US, fires have become larger, longer, more frequent—and also more *severe* (damaging to plants and soil).

What's Behind the Trend?

Wildfire is a complex process depending on many factors: previous fire patterns, forest management practices, and temperature and moisture.

Rising temperatures and earlier snowmelt lead to longer fire seasons. Warmer and drier conditions are also linked to higher-severity fire. Scientists studying these trends have found that climate change is a significant force behind the rise in fire we are seeing today.



scientists estimate that

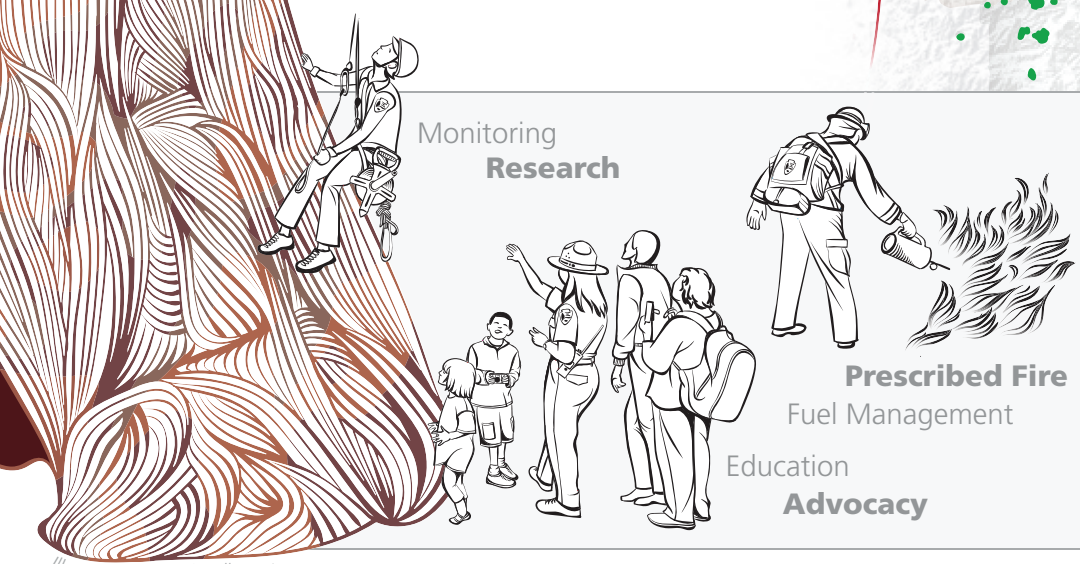
10–14%

of the world's giant sequoias over four feet in diameter were lost in the 2020 Castle Fire

Don't Sequoias Need Fire?

Yes! Sequoias grow in fire-adapted ecosystems. Periodic fires cycle nutrients and reduce fuel buildup, preventing destructive, high-severity blazes.

After over a century of fire suppression, many groves had become choked with dead wood and small trees, shading out young sequoias and creating dangerous fire conditions (**1**). Today, we are bringing managed fire back into the groves— helping protect both the new generation and the old (**2**).



Confronting a New Challenge

Threats to sequoias today do not stop at park borders. How can we protect these trees in a time of global change?

Scientific research is an important tool to help us understand the conditions sequoias need to survive. Prescribed burns and fuel management are used to restore groves to a more resilient condition. But perhaps the most powerful defenders of sequoias are all those who learn, teach others, and take steps toward a world where sequoias can thrive for thousands of years into the future.

Illustrations: Hazel Galloway