

Preventative fires credited with saving Yosemite sequoias

July 13 2022



A plane drops fire retardant on the Washburn Fire as it burns near the Mariposa Grove of giant sequoias and the south entrance of Yosemite National Park, in California, Monday, July 11, 2022. Credit: Eric Paul Zamora/The Fresno Bee via AP

A famed grove of giant sequoias in Yosemite National Park survived its

first wildfire in more than a century, thanks to efforts to regularly burn the undergrowth beneath the towering trees, a forest ecologist who toured the site said Tuesday.

Small, intentionally lit fires over the past 50 years essentially stopped the fire in its tracks when it hit the Mariposa Grove and allowed firefighters to stand their ground and prevent flames from doing more than charring the thick bark on the world's largest trees, Garrett Dickman said.

"We've been preparing for the Washburn Fire for decades," said Dickman, who works for the park. "It really just died as soon as it hit the grove."

The fire that started Thursday near the grove had burned 5 square miles (13 square kilometers) Tuesday, but was 22% contained and moving away from the largest grove of sequoias in the park. Based on prevailing winds, it was unlikely to return to the grove.

The blaze started near a trail. Authorities said it wasn't from lightning and wouldn't comment on whether it was sparked accidentally, intentionally or through negligence.

Hundreds of visitors and residents were evacuated from the nearby community of Wawona on Friday and the grove and southern entrance of the park were closed. The rest of Yosemite remained open, though it has been blanketed in heavy smoke at times.



A CalFire firefighter puts water on a tree as a backfire burns along Wawona Road during the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. (Stephen Lam/San Francisco Chronicle via AP)/San Francisco Chronicle via AP)

Some of the sequoias were charred by flames that reached 70 feet up their trunks, but Dickman said he surveyed the grove and did not think any of the trees would die. The Galen Clark tree, a large tree at the top of the grove named for the park's first guardian, was one of the few named trees that burned.

"It got a little bit of heat," Dickman said. "But from the pictures I've seen it, too, is gonna survive."

The sequoias are adapted to fire—and rely on it to survive. But more than a century of aggressive fire suppression has left forests choked with dense vegetation and downed timber that has provided fuel for [massive wildfires](#) that have grown more intense during an ongoing drought and exacerbated by climate change.

So-called prescribed [burns](#)—most recently conducted in the grove in 2018—mimic low intensity that help sequoias by clearing out downed branches, flammable needles and smaller trees that could compete with them for light and water. The heat from fires also helps cones open up to spread their seeds.



A CalFire firefighter monitors a tree as a backfire burns along Wawona Road during the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP

While intentional burns have been conducted in sequoias since the 1960s, they are increasingly being seen as a necessity to save the massive trees. Once thought to be almost fire-proof, up to 20% of all giant sequoias—native only in the Sierra Nevada range—have been killed in the past five years during intense wildfires.

Fighting fire with fire, however, is a risky endeavor and has occasionally gotten out of control.

In New Mexico, firefighters were working Tuesday to restore mountainsides turned to ash by the largest [wildfire](#) in the state's recorded history that broke out in early April when prescribed burns by the U.S. Forest Service escaped containment following missteps and miscalculations.

The Santa Fe County Commission in an afternoon meeting blasted [federal officials](#) and unanimously passed a resolution calling on the Forest Service to conduct a more comprehensive environmental review as it looks to reduce the threat of wildfire in the mountains that border the capital city.



Water is seen from a hose as a CalFire firefighter monitors a backfiring operation against the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP

The Mariposa Grove, home to over 500 mature giants, and Yosemite Valley were protected by President Abraham Lincoln in 1864—almost a decade before Yellowstone became the first national park in 1872 and decades before Yosemite was added to the system in 1890.

Dickman said the grove had not seen a wildfire in over 100 years. Several large blazes have come close in the past decade but they stopped before reaching the grove.

The current [fire](#) remains small by those standards and has not been

driven by wind. But it is burning in forest littered with dense stands of trees killed by bark beetles and drought, as well timber blown down in a powerful windstorm last year that also toppled more than two dozen sequoias.

The previous prescribed burns in the grove gave firefighters a chance to set up sprinklers to protect trees that have lived longer than 3,000 years and grow above 300 feet (90 meters) in height.



Firefighter Matt Shibuya, right, and assistant engine operator John Carter with the U.S. Forest Service Cleveland National Forest unit, draw a hose to mop up hotspots in Mariposa Grove while battling the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



Firefighters work on a backfire while battling the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



A sequoia tree damaged by the Washburn Fire is seen at Mariposa Grove in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



An air tanker makes a retardant drop while battling the Washburn Fire in Yosemite National Park, Calif., Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



A firefighter tends to a backfire along Wawona Road while battling the Washburn Fire in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



The Wawona Hotel, undamaged from the Washburn Fire, is seen under a smoke-filled sky in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



A firefighter walks past a backfire while battling the Washburn Fire in Yosemite National Park, Calif., Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



The Wawona Hotel, undamaged from the Washburn Fire, is seen under a smoke-filled sky in Yosemite National Park, Calif. Monday, July 11, 2022. Credit: Stephen Lam/San Francisco Chronicle via AP



Firefighters move into an area where a back fire took place near the Yosemite National Park south entrance, as the Washburn Fire continues to burn, Tuesday, July 12, 2022, in Calif. Credit: AP Photo/Godofredo A. Vásquez

So far in 2022, over 35,000 wildfires have burned nearly 4.7 million acres (1.9 million hectares) in the U.S., according to the National Interagency Fire Center, well above average for both wildfires and acres burned.

In Utah, smoke and ash emanating from a growing wildfire in rural Tooele County blew into Salt Lake City on Saturday. By Monday night, the Jacob City Fire had grown to 6.4 square miles (16.6 square kilometers), with 19% containment, officials said.

Elsewhere in Utah, firefighters contending with heavy winds battled the 15.9 square-mile (41-square-kilometer) Halfway Hill Fire in Filmore. Law enforcement on Saturday arrested four men who investigators said abandoned a campfire that ignited the blaze.

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