

Centuries-old sequoias damaged during prescribed burn at California park; one may not survive

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Credit: Unsplash/CC0 Public Domain

Two historic giant sequoias were damaged in a prescribed burn last fall at Calaveras Big Trees State Park—and one of them may not survive,

park officials and tree enthusiasts agree.

The trees, known as The Orphans, are estimated to be at least 500 years old, with one possibly twice that age, said John Buckley, executive director of the Central Sierra Environmental Resource Center. The older of the two monarch sequoias, Buckley said after visiting the burn site, "has a high risk of dying."

He added, "One of the trees has a fairly high chance of survival because it still has green canopy crown and suffered less of a loss of the needles that are so essential for the tree to be able to take in sunlight and photosynthesis."

California Department of Parks and Recreation officials said the damage was discovered when part of the park reopened after winter closures.

Prescribed burn when it was 'incredibly bone dry'

In October, California State Parks conducted a [prescribed burn](#) in the North Grove area of the park.

Prescribed burns are done to help reduce wildfire risk and promote giant sequoia regeneration, the department said in a statement.

After the Walter W. Smith Memorial Parkway reopened from winter closure, the department said one of the two trees was found to have suffered significant scorch within the prescribed burn perimeter.

Kristen Shive, a fire ecologist and assistant professor at UC Berkeley, did not see The Orphans in person, but saw photos of them and said it looks like the crown damage was the result of heat from fire on the [forest floor](#) and from fire that consumed a neighboring non-[sequoia](#) tree.

"In general, that's what brown needles mean," Shive said. "If fire was engulfing the crown, then most of the needles would be consumed."

Buckley, who served as a Stanislaus National Forest wildland firefighter for 13 years, said he talked to fire crews and understands that part of the reason for The Orphans being damaged is that it was the third year of drought in the area.

"The fuels were so incredibly bone dry and the trees had less moisture to resist heating and to be resilient from being slightly scorched or damaged," Buckley said. "Those extreme drought conditions last year are probably the key reason why what was otherwise normal burning ended up, in this case, being more than those two trees could easily accept."

Community members respond to the loss

Calaveras County District 3 Supervisor Martin Huberty, leader of the Calaveras band of Mi-Wuk Indians Adam Lewis, members of the parks department and others gathered at the state park Sunday to hike to The Orphans and pray for their survival.

Arnold resident Tom Van Lokeren organized the blessing. Board members of the Calaveras Big Trees Association, the nonprofit partner of the park, also participated in the ceremony.

"I think the solidarity here is important not just to say, 'Oh, we lost a couple of giant sequoias but we've got 1,000 more,'" Van Lokeren said. "These are two very special giant sequoias."

Paul Prescott, president of the association, said prescribed burning is an essential tool in the efforts to bring forests back to health.

Because of policies by governments over the last century to suppress

fires, Prescott said, forests are choked with thin trees and dead debris, which are fuel for wildfires.

"Occasionally and sadly, a prescribed burn will burn something you didn't want burned," Prescott said "That's why (the association) has been advocating this last year to get more resources to the park so that they can thin more trees and clear more debris before the next burn."

So far, Prescott said the efforts have been unsuccessful.

Future planned burns at Calaveras Big Trees State Park

The parks department, in cooperation with Cal Fire, plans to burn up to 155 acres inside Big Trees, including areas along Highway 4 this week, weather permitting.

While the park will remain open during the burn, the department said visitors should expect some closures, potentially including a section of West Moran Road inside the park and one lane of traffic control on Highway 4 near the park entrance.

The department plans to do a much larger burn in the South Grove of the park in the fall.

The prescribed burn will cover 1,300 acres, and Huberty has expressed concerns about whether the area will be properly prepared before the burn.

Shive said it's impossible to do a prescribed fire with zero risk to the sequoias.

"The only alternative to that risk is to do nothing," Shive said. "Doing nothing would keep the groves fuel-loaded and at high risk of severe [fire](#) that has the potential to kill far more of these incredible trees."

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