



# SIERRA CLUB

## TEHIPITE CHAPTER

### National Park Service Ignores Evidence in Misguided Sequoia Planting Project

by Jeremy Clar and Dr. Chad Hanson

(This is an updated version of a Valley Voices Op-Ed which appeared in the Fresno Bee on Oct. 20, 2023)

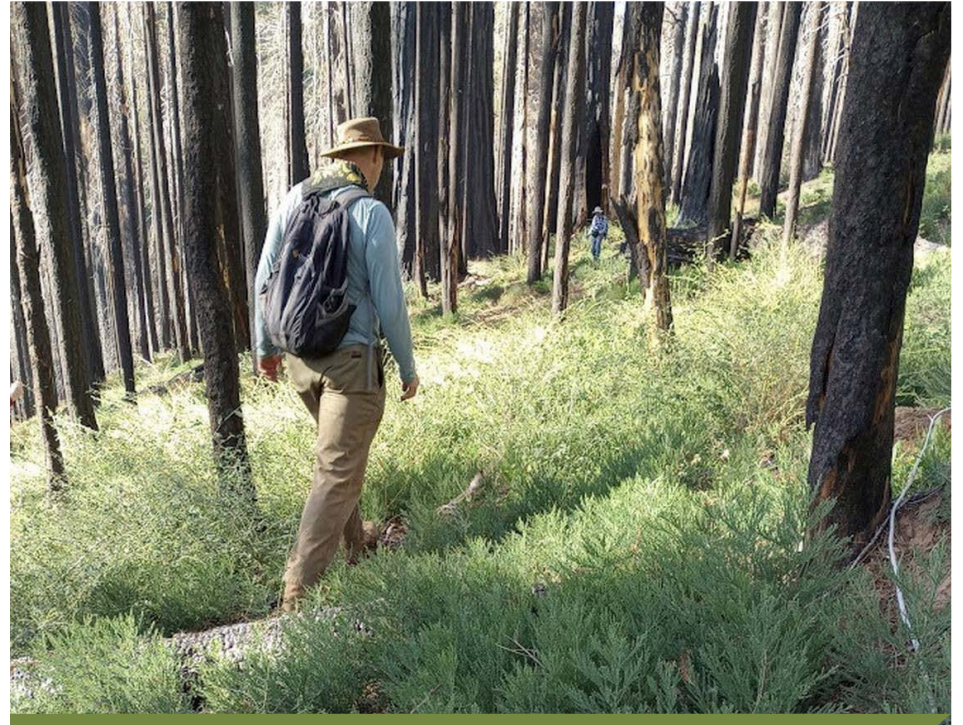
Two years ago, a forest fire, including a few hundred acres of high-intensity fire, burned through Redwood Mountain Sequoia Grove in Kings Canyon National Park. Park management quickly concluded—without evidence—that the fire had been of such an unprecedented intensity that the sequoia forest ecosystem “is unlikely to recover.” Without action, management warns, these forests will instead convert to frequent fire shrub communities. Now the Park has launched a project to replant 120,000 sequoia seedlings in six groves in designated Sequoia and Kings Canyon National Park Wilderness Areas.

Fortunately, Nature has ignored this gloomy forecast: *incredible numbers of sequoia seedlings have sprouted* in the aftermath of the fire, which cleared the forest floor, creating a nutrient-rich ash medium for the new trees. This spectacular growth has not been witnessed in over 100 years, dating back to when fire suppression was begun in these world famous groves.

Contrary to the National Park Service’s press release, Sequoia trees have lived with fire for tens of millions of years, and high-intensity fire is *ideal* for sequoia tree regeneration. In the Redwood Mountain Grove of Kings Canyon National Park, and elsewhere in the 60-mile wide band of Sierra Nevada sequoias, high-intensity fire has produced, in some areas upwards of 40,000 sequoia seedlings per acre (one per square foot). Photos barely do justice to this amazing sight.

Unwilling to admit that they were wrong, however, Park management began a misguided replanting project on October 17. Little about this project makes sense. Park plans state that seedlings will be planted only in areas of the Grove containing fewer than 14,112 sequoia seedlings per acre (one every 2x2 feet). Yet, in areas surveyed by our volunteer Sierra Club team, germinating Redwood Mountain Grove seedlings are so dense that it’s difficult to avoid stepping on them. Also, the seedlings are already two to three feet tall, and Park management fails to explain how planting 3-inch seedlings would improve the chances of the grove’s regeneration, given that hundreds of thousands of natural seedlings have already established themselves. As Marek Warszawski noted in the *Fresno Bee*, it would make sense to plant in an area *without any naturally-regenerated sequoias*. But, according to the Park’s own data, sequoias are regenerating in 100% of locations surveyed in the high-intensity fire areas, and the new crop of 2023 seedlings survived the 3rd-hottest summer and 2nd most severe summer drought on record at a time in their development when they were most vulnerable. *There’s no reason to be pessimistic that the sequoia grove will recover from the fire.*

What is the harm from attempting this tree planting experiment? Two main concerns: first, the current project’s activities could seriously harm the six groves planned for tree planting. Helicopters, chainsaws, explosives, and mule teams are being introduced into designated Wilderness, altering the habitat for endangered species, and interfering



Dr. Chad Hanson visiting a carpet of natural sequoia seedlings in the aftermath of the 2021 high-intensity fire. Redwood Mtn. Grove, Kings Canyon Natl. Park, Sep-2023.

with the public’s right to quiet enjoyment. Also, if Park management is not satisfied with the survival of their planted seedlings (regardless of the actual number of surviving seedlings), then it would open the door to herbicide spray (Roundup) on the forest floor.

Second, there is a threat of infecting the sequoia groves with tree seedlings grown in nurseries, which can harbor invasive, sometimes deadly, root pathogens. These can spread and infect native seedlings and mature sequoia trees, too, stunting growth, or even causing widespread tree mortality. Just one of the “several dozen species of these pathogens killed 50 million trees in California after planting. Last month we learned that the seedlings being planted in the Redwood Mountain Grove were raised in nurseries not on the accredited list of nurseries which screen for root pathogens. Park management has refused to answer whether their seedlings are being screened.

The Precautionary Principle tells us that the *burden of proof* is on the Park to demonstrate that this drastic intervention is required in designated Wilderness. The National Park Service needs to comply with federal law by preparing an Environmental Impact Statement to evaluate the harms to be caused by this project.

**In sum:** Park management should trust in the resilience and persistence of our majestic giant sequoia groves which have adapted to high-intensity fire for tens of millions of years, and whose reproductive success depends on high-intensity fire. Sequoia trees have survived for eons without human assistance — and they don’t need our help now. Any benefits created by this project are simply outweighed by the risks.

Jeremy Clar, based in the Fresno area, is the Chair of the Tehipite Chapter of the Sierra Club. Dr. Chad Hanson is a research ecologist with the John Muir Project, and author of the book *Smokescreen*. **If you want to learn more about this project or join the Tehipite Chapter giant sequoia field volunteers, contact Jeremy at [jclar440@gmail.com](mailto:jclar440@gmail.com) or call Gary at 559-790-3495.**

### Thursday, December 14 at 7 PM via Zoom

The Sierra Club Tehipite Chapter presents forest and fire ecologist **Dr. Chad Hanson** for a presentation on “Giant Sequoia Regeneration” after recent fires in the Sierra. Dr. Hanson will present scientific evidence refuting claims that sequoias cannot regenerate in larger high-intensity fire patches, claims being

used to justify destructive logging and artificial planting projects in giant sequoia groves. Join the Zoom meeting and learn more about giant sequoia reproduction now taking place in previously-burned local forest areas.

Visit [sierraclub.org/tehipite](https://sierraclub.org/tehipite) now to register in advance to get on the mailing list to receive the Zoom link on Dec. 14 prior to the event.