Restoring Cuyamaca's tree canopy is years away: Some birds may never return

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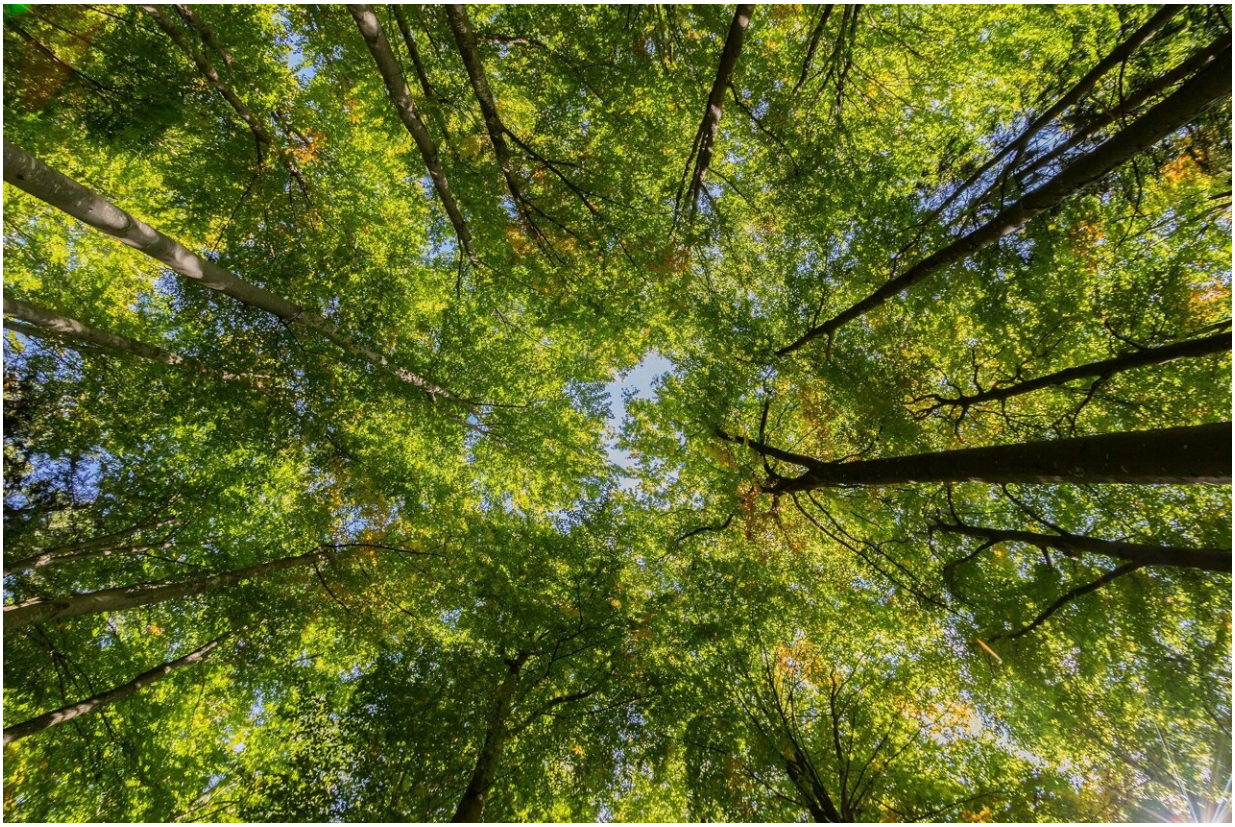

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It is a 2.6-mile hike up Lookout Road to reach Cuyamaca Peak from Paso Picacho Campground.

The paved path winds its way upward, gaining more than 1,600 feet of elevation as it passes through endless thickets of shrubs dotted with snags, those blackened and sun-bleached vertical reminders that this used to be a forest trek.

Twenty years after the Cedar fire ripped through Cuyamaca Rancho State Park in eastern San Diego County, there is a lot more sunshine and a lot less birdsong. The dappled shade of tall conifers has long ago given way to broader views of the surrounding mountainside after the fire took in hours what nature required centuries to build.

Those who keep pushing toward the peak, through that endless ocean of ceanothus bush, arrive at a true shrine in the wilderness, 100 acres on a ridge that leads to the peak. Here are pines and cedars and firs that survived the fire, their trunks still visibly scorched down low, a testament to the fact that the blaze passed through, largely because there was not enough brush present for it to make the devastating climb into upper branches that killed more than 95% of the park's conifers.

On a recent morning, state parks service environmental scientist John Lovio said he makes sure he visits this spot now and then to remind himself of the big picture, the point of the multimillion-dollar reforestation effort that has sprouted and planted about a quarter-million saplings grown from the seeds of the few remaining trees that made it through the firestorm.

In the years since the fire, and even as recently as a few years ago, ecological advocacy groups have pushed back against replanting these mountainsides, arguing that long-term trends in climate change will make the future decades too arid to sustain broad stands of stately pines and firs.

Standing in this remnant of the old forest, Lovio gestured to towering

sugar and Jeffrey pines, then to saplings at their bases. Here, in one tableau, all ages and stages can be found thriving 20 years after the Cedar fire passed through. Here, he notes, the forest still has the ability to drop seeds and see them grow.

"This is what we're trying to emulate," he said. "If you have a canopy, you'll get reproduction. I mean, look at the varied age structure; we've got little trees, big trees, these little guys on the right are sugar pines.

"We know, climate change or not, we're getting conifer reproduction."

But this stand exists above 6,000 feet where air is cooler and moisture more available. Will this survivability translate down slope, at lower elevations?

Nobody knows for sure though the walk up to the peak presents endless opportunities to check in on the progress of those saplings planted in recent years. Some pockets of planted trees can be seen poking up above the ubiquitous shrubs in some locations—that's the exception. It's necessary to go off the path to find many of these transplants and many are surrounded, often even shaded, by quick-growing shrubbery.

As the climate changes, science suggests that mountains are warming for complex reasons that go far beyond rainfall alone. However, in terms of moisture, records show that the period after the Cedar fire, as measured at nearby Lake Cuyamaca, has been only somewhat drier than those that came before.

Data published by the San Diego County Water Authority show an average of 26.49 inches of precipitation was measured per year from 2004 to 2022 compared to an average of 30.97 in the 19-year period before the fire.

On the ground, results are mixed.

In one location, Lovio stops and locates three trees planted in 2021 that are growing, albeit slowly. Not far away, upslope, another cluster of trees is dead. One key difference is that the survivors were planted in a location that was mechanically cleared of brush and the remaining plant material was burned. The areas where there were fewer survivors just got manual brush removal, but no controlled burning.

"Generally, we're finding that burning is better," Lovio said.

Overall, he said, a little under half of new plantings don't make it, though official attrition figures weren't available. Overplanting, the ecologist added, is designed to help the project survive even though many young trees won't make it.

But it has been remarkable how quickly stands of ceanothus return. Ground cleared and subjected to a controlled burn in 2021 is already full of the bushes with many slower-growing trees now overshadowed. Plans are in the works, Lovio said, to prune bushes away from young trees, though an extensive pruning effort would require additional funding.

Pulling back to the big picture, though he said he believes that the project has a good chance of producing a new forest, no one expects that to be the case anytime soon. Counting rings on pines that burned, he noted, indicates that many were 80 to 100 years old.

"I'm thinking we're not going to see a serious forest here for about that amount of time, 80 or 100 years," Lovio said.

And, until that day, it's unlikely that this region will sound like it used to. The white-headed woodpecker used to inhabit this forest, which was on the southernmost end of its range. Owls and a small songbird called the

brown creeper are among those species that have disappeared, Lovio said.

"There has been a measurable loss of wildlife species and, for many of them, we need a forest to bring them back," Lovio said.

It could, adds San Diego State University landscape ecologist Janet Franklin, be even longer. Having done research in the area for the parks service after the fire, she said that 150 years might not be an unreasonable guess as to how long it might take to reestablish an overhead forest canopy similar to the one that the Cedar fire burnt away.

And there are signs that a different species, the Coulter pine, may end up making up a larger percentage of the new forest in Cuyamaca. This species, known for its massive spiky cones that are often called "widowmakers," actually benefits from fire and did have spontaneous saplings springing up shortly after the Cedar fire at a time when other species were simply snuffed out.

"The Coulter, it's kind of a small pine, it doesn't get as big and grand as the Jeffrey's or the Pondorosa, but it's more fire tolerant and just a little bit better of a competitor," Franklin said. "Fifteen years ago, when I was out there doing research and counting them as seedlings, now they're almost 20-year-old trees and they're maybe 15, 20 feet tall."

While there are surely many who yearn for this missing forest, many report that the changes it has undergone have not turned the public away.

Firefighters were able to defend Paso Picacho Campground, Lake Cuyamaca and other key areas from the Cedar fire, keeping their original trees intact. Those remnants have seemed to be enough to keep crowds flooding in during the busy summer season and on the weekends into the fall.

On a weekday morning, Don Rodriguez and Michelle Layton came from Mission Viejo to enjoy the post Labor Day peace and quiet that becomes available once kids are back in school.

Stopping on Lookout Road to chat, Rodriguez, a retired firefighter, said he has returned again and again after being assigned to help fight the Cedar fire, diverted from his regular beat in downtown Los Angeles.

Over the past 20 years, he said, it has been amazing to watch nature reclaim what for several years looked like a bomb went off.

The landscape, especially in October, he said, delivers what many are really looking for, a little solitude.

"I just like it here at this time of year because, on a weekday, there's nobody here," Rodriguez said. "It's peaceful."