

When visiting Cuyamaca Rancho State Park on October 1st, 2016, we noticed that the health of the forest varied along the Stonewall Peak trail. We learned from Global Forest Watch that a great deal of deforestation occurred in the area during 2003 (Source 1). We suspect that this is likely due to fires rather than logging. During October and November of 2013, the Cedar Fire greatly impacted California's geography, forcing a large number of people to evacuate their homes for safety and damaging extreme portions of the area. The fire spread over 280,000 acres of San Diego County, which included over 98% of Cuyamaca Rancho State Park, according to the California Department of Parks and Recreation (Source 2). What was once a green and dense forest has become sparse, and dry. Our photos depict the effects of this well, as many of the burned and dry tree stumps and branches litter the ground.

However, the forest is building its strength back. As displayed in our photos, there are multiple layers within the forest, a great portion consisting of dry, charred trees that suffered from the fires. Another layer is dominated by shrubs and herbs, largely depicted in our photos. Smaller trees that have also begun to grow, largely due to the Cuyamaca Rancho State Park Reforestation Project by the California State Park department (Source 3). Not only did the fire destroy the old oak trees, but the seed bank as well, making it difficult for coniferous trees to regrow in the area without the help of the State Park department. This is an example of secondary succession: after the fire destroyed the original community, new species have taken over, beginning with small shrubs and eventually supporting larger trees, mainly oaks.

We learned that our hypothesis of believing the wildfires to be the cause of the Cuyamaca Rancho State Park's forest was correct. It is important that we continue the efforts to reestablish the forest's health since it is at greater risk of being destroyed by another catastrophic fire while it is in the process of secondary succession (Source 4). The average temperatures and precipitation today isn't quite as dangerous as it was in 2003, but is still not ideal for the forest's recovery (Source 5).

Sources:

1. <http://www.globalforestwatch.org/>
2. <http://www.parks.ca.gov/667>
3. <https://www.parks.ca.gov/pages/667/files/crsp%20reforestation%20project%20-%20summary%202013.pdf>
4. <http://foresthealth.fs.usda.gov/fhas>
5. <http://droughtmonitor.unl.edu/>