

Aerial Detection Survey, Pacific Southwest Region Central Coast, Preliminary Report, July 2019

Objective: The objective of this survey is to detect and record recently killed and damaged trees. Most of the mortality and damage is caused by insects and diseases.

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Methodology: Recent tree mortality is mapped using Digital Mobile Sketch Mapping systems. Surveyors draw polygons or affix points (points not shown on map) and annotate percent of forested area affected along with damage type, tree species, and causal agent. The five-class rating system is: Very Light (1-3%), Light (4 -10%), Moderate (11-30%), Severe (31-50%), and Very Severe (>50%).

Survey Highlights:

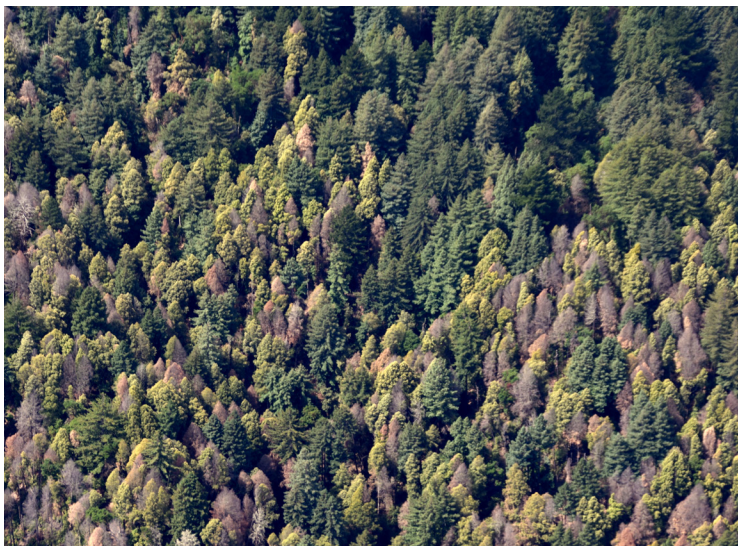
This report is of preliminary findings in and around the Los Padres National Forest and along the Coastal Range north to the San Francisco Bay Area.

- Tanoak mortality was detected across 21,600 acres. Approximately half of the mortality was rated as having a light intensity. The forest damage was concentrated across the Santa Cruz Mountains north and east of Santa Cruz and along the western boundary of the Monterey Ranger District of the Los Padres National Forest.
- Jeffrey, ponderosa, and Coulter pine mortality was detected across 4,400 acres. The forest damage was observed on the mountains and foothills surrounding Lockwood Valley in Mount Pinos Ranger District of the Los Padres National Forest.
- Mixed oak mortality was detected across 2,200 acres. Mixed oak was comprised of Engelmann, white, black, and canyon oaks. The mortality was concentrated along the western foothills of the Santa Lucia Ranger District of the Los Padres National Forest and in the Santa Cruz Mountains.
- White fir mortality was observed across 1,150 acres. The mortality ranged from very light to light, and was mostly concentrated on the Los Padres National Forest from Frazier Park west.
- Other conifer mortality was detected across 250 acres and includes knobcone pine and Santa Lucia, or bristlecone, fir. Santa Lucia fir mortality was clustered in the mountains east of Big Sur and was classified as light intensity. Knobcone pine mortality was sparsely scattered throughout the Central Coast at mostly light intensity.

Preliminary Summary (numbers may change)

Area surveyed: 6.2 million acres
Acres with mortality: 29,885 acres

Host	Acres with Mortality
Tanoak	21,600
Jeffrey, ponderosa, and Coulter pine	4,400
Mixed oaks	2,200
White fir	1,150
Other conifer	250
Other hardwood	250
Live oak	35
Total	29,885



Heavy tanoak mortality near Pfeiffer Big Sur State Park on the Los Padres NF.



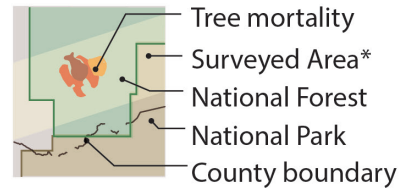
Recent mortality of increasingly rare Santa Lucia fir southeast of San Luis Obispo.



UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST HEALTH PROTECTION AERIAL DETECTION MONITORING

2019 SURVEY Central Coast



*This map depicts tree mortality **only** within the surveyed area.

Percent Trees Affected

- Very Light (1-3%)
- Light (4-10%)
- Moderate (11-29%)
- Severe (30-50%)
- Very Severe (>50%)

Map only depicts dead trees surveyed in 2019.
Areas of tree mortality are for visualization purposes only.



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