USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Aerial Detection Survey, Pacific Southwest Region
Central Coast, Preliminary Report, August 2021

Preliminary Summary
(numbers may change)
Area surveyed: 5.5 million acres
Acres with mortality: 11,380 acres

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

Surveyors: J. Moore, S. McKelvey

Methodology: Recent tree mortality was mapped using Digital Mobile Sketch Mapping systems. Surveyors drew polygons and annotated 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%).
Small groups of trees were recorded as point data and have no acreage assigned until later processing. The Central Coast had a high incidence of point data that is not tabulated in this report but is depicted on the map at an exaggerated scale.

Survey Highlights:

This report presents preliminary findings in and around the Los Padres National Forest and along the Coastal Range north to the San Francisco (SF) Bay Area.

- Tanoak mortality was detected across 1,600 acres and was mostly observed at light to very light intensity. Mortality was concentrated south of the SF Peninsula, along Big Sur and along the southern Santa Lucia Range.
- Jeffrey, ponderosa, and Coulter pine mortality are difficult to differentiate from the air and were collectively mapped across 4,700 acres. Scattered mortality was observed throughout coastal and inland areas, but mortality was most concentrated around the Mount Pinos area of the Los Padres National Forest.
- Mixed oak mortality was detected across 1,500 acres. Mixed oak was comprised of white, black, Engelmann, and interior and canyon live oaks. Mortality was widely scattered throughout their ranges.
- Mortality of acacia and other hardwood tree species was observed in several areas around the eastern Bay Area. Aerial survey recorded 900 acres with suspected acacia mortality and 1,300 acres of eucalyptus mortality, with concentrated severe mortality around the San Pablo Reservoir and south.
- Other conifer mortality was detected across 1,300 acres and includes Monterey, pinyon, gray, knobcone, and bristlecone pine, white and Santa Lucia fir, and redwood. Santa Lucia fir mortality was clustered in the mountains east of Big Sur and was mostly classified as light intensity. Pinyon pine mortality was recorded in the Mt. Pinos area, mostly at moderate intensity.
- 2,700 acres of severe redwood discoloration was detected west of Palo Alto.
- Eucalyptus discoloration was observed but not mapped, as it was ubiquitous across the Central Coast flight area.

Host	Acres with Mortality
Jeffrey, Coulter, and ponderosa pine	4,800
Tanoak	1,600
Mixed oaks	1,500
Eucalyptus	1,300
Blackwood	900
Monterey pine	300
True firs	300
Douglas-fir	300
Other conifer	300
Unknown hardwood	80
Total	11,380

Suspected acacia mortality surrounding San Pablo Reservoir, Contra Costa County.

Douglas-fir mortality, likely due to flatheaded fir borer, in Northern Briones Regional Park, Contra Costa County.

Please direct questions pertaining to this report to Jeffrey Moore
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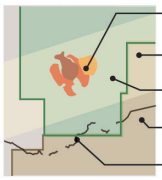
UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST HEALTH PROTECTION
AERIAL DETECTION MONITORING

2021 SURVEY
CENTRAL COAST



Tree mortality
Surveyed Area*
National Forest
National Park
County boundary

*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%)

Number of Trees Affected (points)

- Very Light (1 tree)
- Light (2 - 5 trees)
- Moderate (6 - 15 trees)
- Severe (16 - 30 trees)
- Very Severe (>30 trees)

Map only depicts dead trees surveyed in 2021.
Areas of tree mortality are for visualization purposes only.