

Aerial Detection Survey, Pacific Southwest Region Central Coast, Preliminary Report, July 2022

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.

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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.

Survey Highlights:

This report presents preliminary findings in and around the Los Padres National Forest and along the Coast Ranges north to the San Francisco (SF) Bay Area. Central California had a high incidence of point data that is not tabulated in this report but was depicted on the map at an exaggerated scale. Large fire footprints within the last three years were mostly avoided, reducing overall acreage covered.

- Tanoak mortality was detected across 4,000 acres, and observations ranged from very light to moderate intensity. Mortality was concentrated on the San Francisco 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 9,200 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.
- Singleleaf pinyon pine mortality was detected across 1,100 acres, ranging from very light to moderate intensity. Observations were primarily recorded near the Mount Pinos area of the Los Padres National Forest.
- Douglas-fir mortality was detected across 1,500 acres, ranging from very light to moderate intensity. Most observations were recorded on the San Francisco peninsula.
- Mixed oak mortality was detected across 720 acres. Mixed oak was comprised of white, blue, black, and valley oaks, as well as coast, interior and canyon live oaks. Mortality was widely scattered throughout their ranges.
- Other conifer mortality was detected across 1,200 acres and includes Monterey, gray, and knobcone pines; 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.

Preliminary Summary (numbers may change)

Area surveyed: 4.2 million acres
Acres with mortality: 17,970 acres

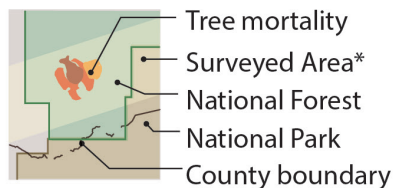
Host	Acres with Mortality
Jeffrey, Coulter, and ponderosa pine	9,200
Tanoak	4,000
Douglas fir	1,500
Singleleaf pinyon pine	1,400
Mixed oaks	720
Other conifer mortality	690
White fir	390
Monterey pine	70
Total	17,970



Yellow (likely Jeffrey) pine mortality located west of Alamo mountain, Los Padres National Forest, Ventura County.

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2022 SURVEY NORTHEASTERN CALIFORNIA



*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 2022.
Areas of tree mortality are for visualization purposes only.