USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Aerial Detection Survey, Pacific Southwest Region
Central Coast, Preliminary Report, June 2023

Preliminary Summary
(numbers may change)
Area surveyed: 4.3 million acres
Acres with mortality: 6,200 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, N. Stevens

Methodology: Recent tree damage and mortality was recorded using Digital Mobile Sketch Mapping systems. When dead or damaged trees were observed surveyors drew a polygon around the trees on a map and recorded the percent of that area that was dead or damaged, the tree species, and the suspected causal agent. It is likely that other pathogens are contributing to damage and mortality, however, they are difficult to assess from the air; therefore, they are not recorded during the aerial survey. Severity of mortality and damage within each polygon was rated as follows: very light (1-3% of mapped area affected), light (4-10%), moderate (11-29%), severe (30-50%) 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. For 2023, the central coast has experienced approximately 6,200 acres with mortality, which is less than the five-year annual average of 27,600 acres. It should be noted that previous year's acreage estimates include converted point data, while the current year point data have yet to be converted and all data is still in draft form and subject to changes.

- Tanoak mortality was detected across 1,600 acres and observations ranged from very light to moderate intensity. Mortality was concentrated on the San Francisco Peninsula, Santa Cruz Mountains, 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 2,300 acres. Scattered mortality was observed throughout coastal and inland areas but was most concentrated in the Mount Pinos area of the Los Padres National Forest.
- Single-leaf pinyon pine mortality was detected across 1,600 acres, ranging from very light to moderate intensity. Observations were primarily recorded near the Mount Pinos area of the Los Padres National Forest.
- Mixed oak mortality was detected across 650 acres. These oaks were 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 450 acres and includes Monterey, gray, and knobcone pines; white and Santa Lucia fir; and Douglas-fir. Santa Lucia fir mortality was clustered in the mountains east of Big Sur and was mostly classified as light intensity.

Host	Acres with Mortality
Yellow pine	2,300
Pinyon	1,600
Tanoak	670
Mixed oak	650
Unknown hardwood	520
Other conifer (knobcone, Monterey, and gray pine, Santa Lucia fir)	450
Total	6,200

Severe yellow pine mortality, west of Pine Mountain Club, Los Padres National Forest.

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

2023 SURVEY
CENTRAL COAST

- Recent excluded wildfires
- 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 2023.
Areas of tree mortality are for visualization purposes only.

FOREST SERVICE

https://www.fs.usda.gov/detail/r5/forest-grasslandhealth/?cid=fsbdev3_046696