

Aerial Detection Survey – Update, June 28th 2012

Background: Annual aerial detection surveys for tree injury and mortality have been conducted in California since 1994. This is an update of survey status for the 2012 survey season.

Objective: Detect and map tree injury and mortality in California / USFS Region 5.

Surveyors: B. Oblinger, J. Moore, T. Coleman and H. Mehl

Dates: June 26th - 28th 2012.

Methodology: Recently dead or injured trees (trees still retaining dead foliage) were mapped visually by surveyors using digital aerial sketch-mapping systems flying in a light fixed-wing aircraft approximately 1,000 feet above ground level. Surveyors recorded number and species of dead trees and type of damage (mortality, defoliation, branch flagging) at each mapped location.

Details:

- Almost 5.4 million acres were flown over portions of 15 counties (Figure 1). The Los Padres National Forest, Golden Gate National Recreation Area, various State Parks, County and locally owned lands and private lands were surveyed.
- The primary damage agent mapped was sudden oak death (SOD). Extensive tanoak mortality due to SOD was mapped in Monterey (Figure 2) and Santa Cruz Counties. Relatively few coast live oaks were mapped in Marin County and in the East Bay Area. Mortality due to SOD increased dramatically compared to last year, with over 15,500 acres mapped compared to 530 acres mapped in 2011.
- Scattered pine mortality (knobcone, Monterey, Coulter, ponderosa, Jeffrey, bishop and pinyon pines) was observed throughout the Los Padres NF and coastal areas. Santa Lucia fir mortality was mapped on the Monterey Ranger District again this year (likely due to wood borers and Scolytus engraver beetles).
- Oak defoliation was mapped around Carmel Valley where California oakworm was detected in 2011. In addition, extensive hardwood discoloration was observed south of Carmel Valley.

Figure 1. Flown area and mapped tree damage

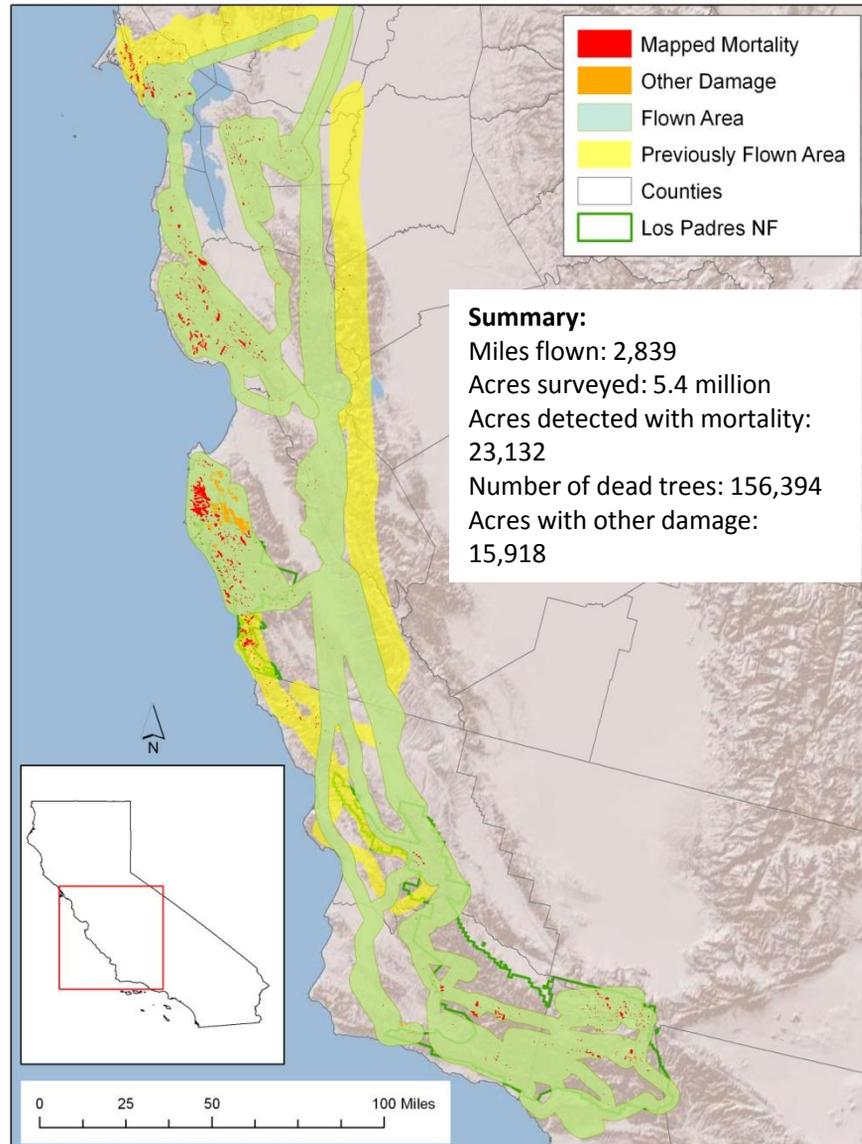


Figure 2. Tanoak mortality caused by sudden oak death south of Carmel Valley, California.

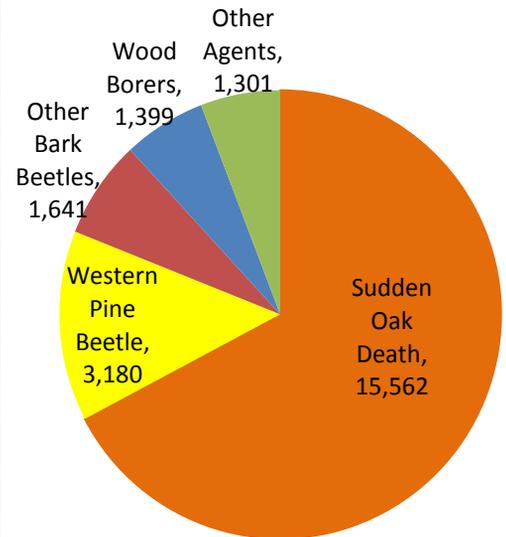


Figure 3. Mortality Agents Mapped (in Acres)

Direct questions pertaining to this report to Zachary Heath (email: zheath@fs.fed.us phone: 530-759- 1751). Report Date June 28, 2012.