

Aerial Detection Survey – Update, June 16th, 2011

Background: Annual aerial detection surveys for tree injury and mortality have been conducted in California since 1993. This is an update of survey status for the 2011 survey season for June 16th, 2011.

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

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Date: June 16th, 2011. The early timing was selected to avoid seasonal color change of California buckeye.

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:

- Over million acres were flown over portions of 6 counties – Yolo, Solano, Napa, Marin, Sonoma and Mendocino Counties. The Point Reyes National Seashore and parts of the Golden Gate National Recreation Area were surveyed. See Figure 1.
- The primary damage agent mapped was from sudden oak death (SOD), with almost 4,000 acres mapped. See Figure 2. This is up from 800 acres mapped in the same area in 2010. The number of tree killed also increased dramatically. The majority of SOD mortality was mapped in Sonoma County, and very little was mapped in Mendocino County. About 800 acres of damage and mortality from pitch canker was mapped near Point Reyes, and flat-headed fir borer was mapped throughout the survey area. See Figure 3.

Figure 1. Flown area and mapped tree damage

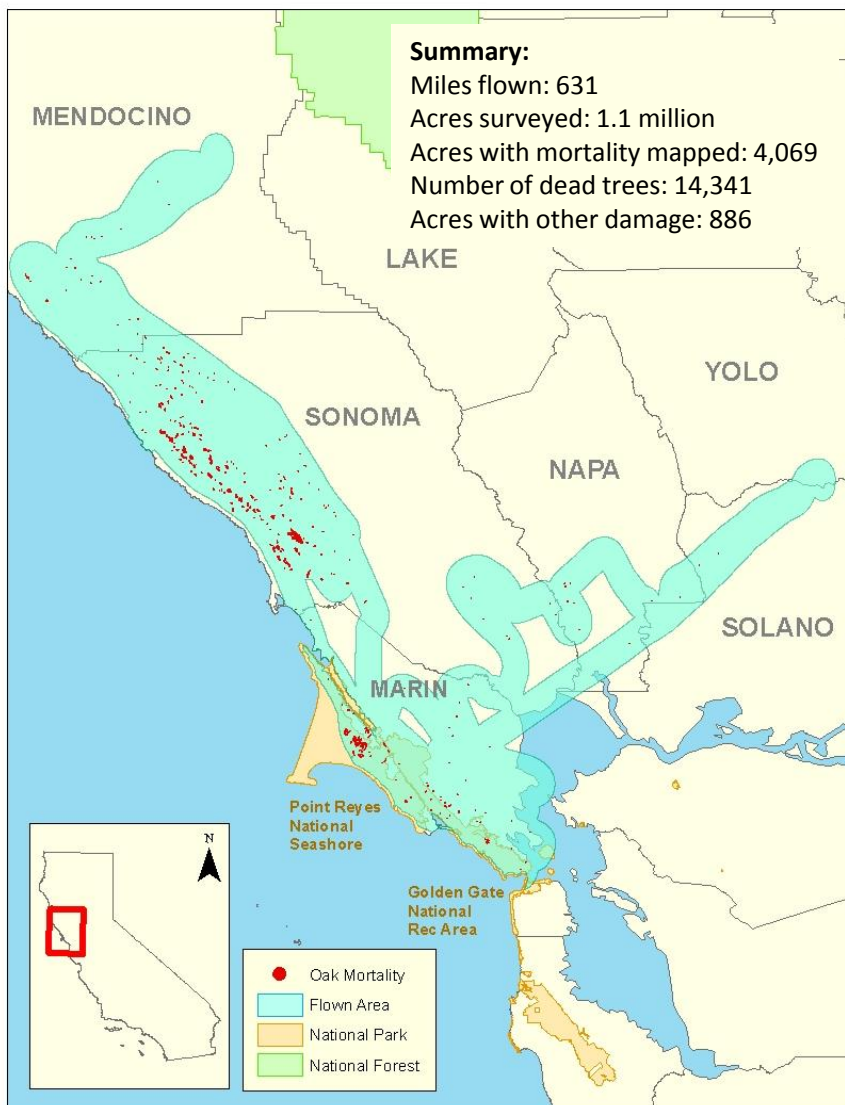


Figure 2. Tanoak mortality in Sonoma County.

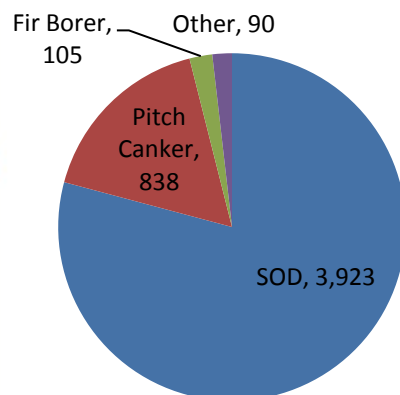


Figure 3. Agents mapped (in acres)

Direct questions pertaining to this report to Zachary Heath (email: zheath@fs.fed.us phone: 530-759-1751). Report Date June 17, 2011.