

Aerial Detection Survey – Update, July 5th, 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 for July 5th, 2012.

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

Surveyors: Z. Heath, B. Oblinger, B. Jones and M. Elliot

Dates: June 22nd, July 2nd and July 5th, 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 record the number and species of affected trees and type of damage (mortality, defoliation, branch flagging) at each mapped location.

Details:

- Acres with sudden oak death-related mortality increased dramatically from 2011. Over 315,000 dead tanoak were mapped over 45,000 acres within the survey area. In comparison, only 24,000 trees on 5,300 acres were mapped in 2011 in the same area.
- Coastal Sonoma County, especially areas around Guerneville and Jenner, had some of the highest levels of mortality. Lighter mortality was observed throughout southern Mendocino County (Figure 2), with an isolated outbreak in and around Montgomery Woods State Park.
- Only the southwestern extent of the SOD infestation in southern Humboldt County was surveyed, but appears that mortality has increased slightly in distribution to the south and west in that area since last year.
- Extensive bear damage in redwoods was observed in a localized area on the northern Mendocino Coast, north of Mackerricher State Park (Figure 3). This is the same location where bear damage to large redwoods and grand fir was documented by CalFire and U.C. Cooperative Extension staff in 2011.
- The manager of the United Kingdom’s sudden oak death aerial survey program, Ben Jones, participated on the June 22nd flight in order to observe Forest Health Protection’s methodology for detecting tree mortality.

Figure 1. Flown area and mapped oak mortality

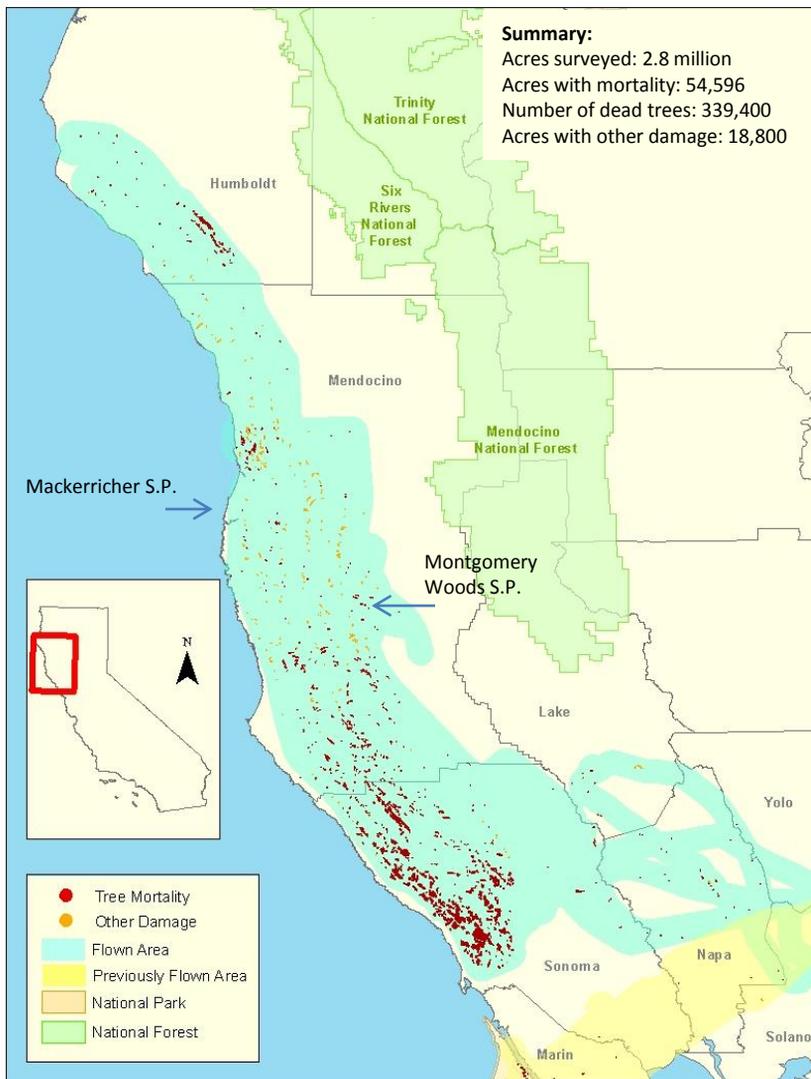


Figure 2. Dead tanoak north of Anderson Valley in Mendocino County.

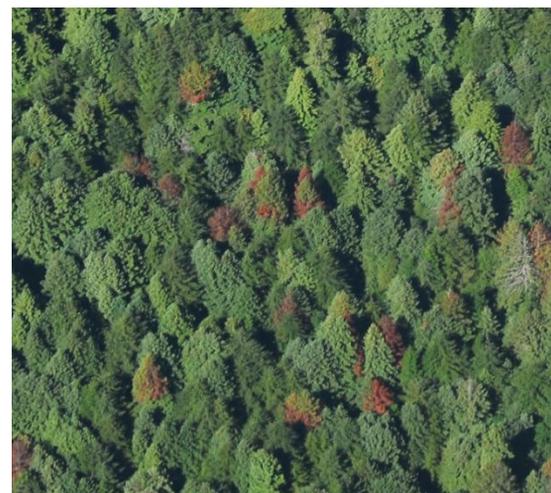


Figure 3. Bear-damaged conifers in Mendocino County.

Direct questions pertaining to this report to Zachary Heath (email: zheath@fs.fed.us phone: 530-759-1751). Report Date July 6th, 2012.