

Aerial Detection Survey – Update, July 18th, 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 18th, 2012.

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

Surveyors: B. Oblinger, J. Moore and B. Bulaon

Dates: July 17 and 18th, 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:

- 1,396 miles were flown, covering over 2.8 million acres over the Sequoia and Sierra National Forests, and the Sequoia Kings-Canyon National Park.
- Pockets of ponderosa pine mortality from western pine beetle were observed throughout the west side of the Sierra Range, especially on the Sierra National Forest (Figure 2). Many pockets contained hundreds of dead trees.
- High numbers of large sugar pine were seen scattered throughout the survey area.
- Localized winter damage to conifers (redbelt) was observed on the Sierra N.F. near Patterson Mountain (Figure 3).

Figure 1. Flown area and mapped oak mortality

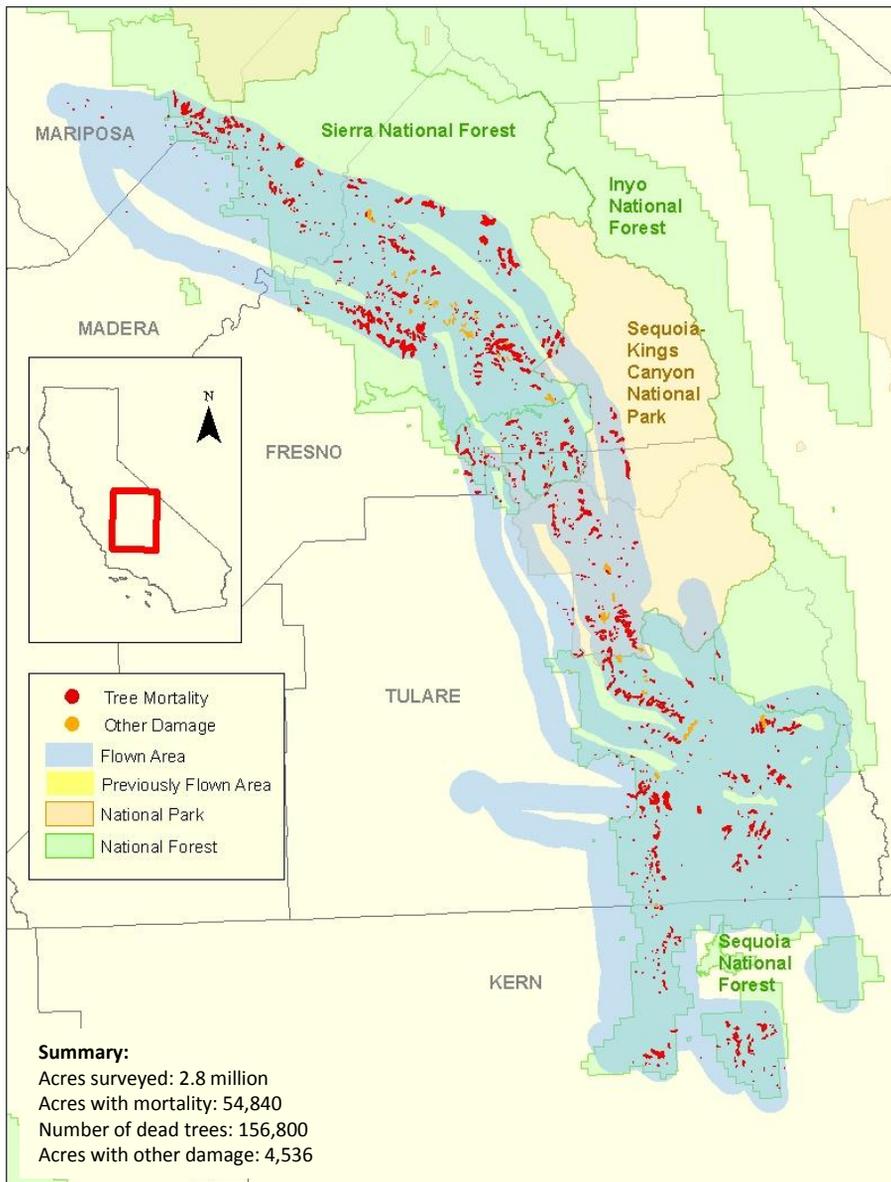


Figure 2. Western bark beetle activity south of Shaver Lake, Sierra N.F.

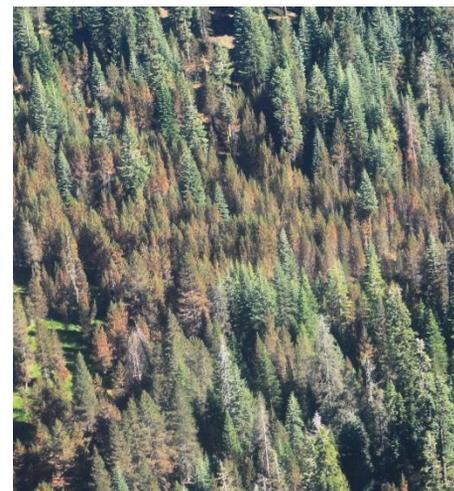


Figure 3. Winter damage to lodgepole pine.

Direct questions pertaining to this report to Zachary Heath (email: zheath@fs.fed.us phone: 530-759-1751). Report Date July 20th, 2012.