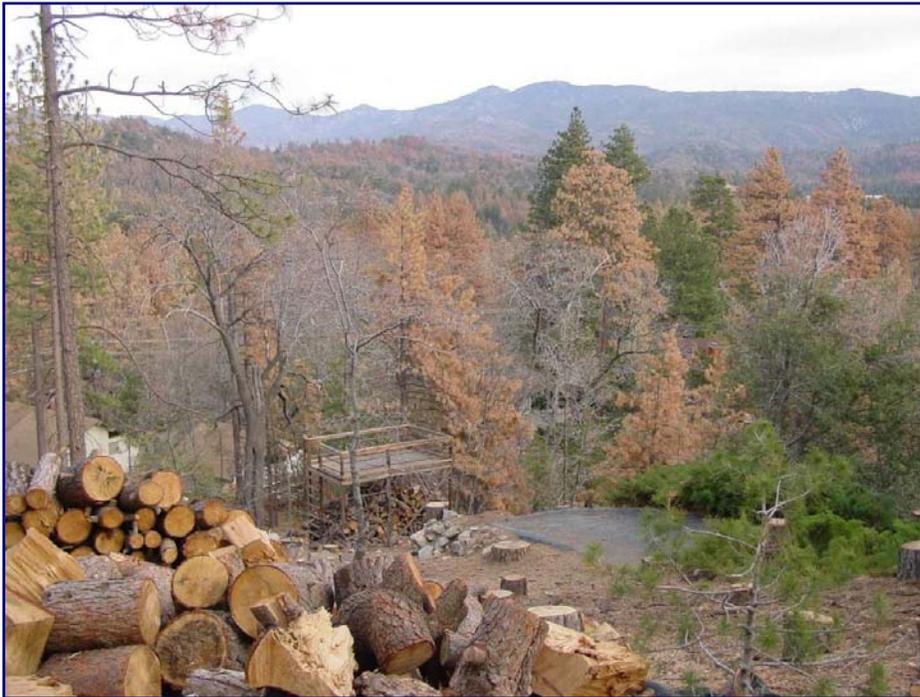


# Forest Health Highlights In California - 2002

## August 2003

### Insects

The winter of 2001-2002 was dry in southern California. The San Bernardino Mountains and the Peninsular Ranges received historically low precipitation in what was the fourth consecutive year of **drought**. The result has been elevated vegetation mortality – pines, white fir, cedar and chaparral – that affects over 151,000 acres in the San Bernardino Mountains with tree mortality of 10% or more on 114,000 acres. The magnitude and extent of mortality has produced fuels that pose major threats to life and property, ecosystem structure, function and long-term sustainability. Losses include high value landscape trees and aesthetics (Fig. 1).



*Figure 1: Pine mortality in the summer and fall of 2002, north shore of Lake Arrowhead, San Bernardino Mountain, California.*

Although some tree mortality was locally significant in northern California, mortality was low region-wide relative to past droughts. Should the winter months of 2003 prove to be dry, increased tree mortality in northern California is anticipated.

Populations of **defoliating insects** were variable. The fruittree leafroller (southern California) and lodgepole pine needleminer (Yosemite National Park) remained high. The fall webworm declined and populations of the California budworm remained low. Few gypsy moths were trapped by the California Department of Food and Agriculture. Long unreported, the Pandora moth appears to be in the initial stages of outbreak in Jeffrey pine on the Inyo National Forest.

## Diseases

New [pitch canker](#) infections continue to occur within the 18 counties of the Zone of Infestation. Rate of spread this past year may be slower as compared to earlier years in areas where the disease is well established. However, in stands where the disease has recently become established, incidence and severity are increasing rapidly.

[Sudden Oak Death](#): Isolation of *Phytophthora ramorum* from redwood, Douglas-fir and canyon live oak brought the total number of known native species affected in California to 22. The number of infected counties is now 12 with the addition of Humboldt and Contra Costa Counties. The confirmation of *P. ramorum* on the Los Padres National Forest near Big Sur is the first report from a National Forest. All confirmations remain within 50 miles of the Pacific Ocean.

A second, previously undescribed species, *P. nemarosa*, is occasionally isolated from lethal cankers on tanoak and coast live oak and from foliar lesions on tanoak and California laurel. In forest settings it is usually associated with death of single trees rather than expanding patches of mortality characteristic of *P. ramorum*.

[Port-Orford-cedar root disease](#) continues to expand in the upper Sacramento River Canyon and cause tree mortality. The southern extent of [white pine blister rust](#) has now been established in the area of Breckenridge Mountain on the Sequoia National Forest.

## Animal Pests

Damage to trees was reported from 25 counties in California. A variety of species were involved with pocket gopher, black bear, deer, woodrats and tree squirrels being the most troublesome in terms of acres affected.

## Contacts and Additional Information

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