2014 Drought and Bark Beetle Tree Mortality in Wrightwood





Tree health in Swarthout Valley is seriously declining due to an extended drought



Annual rainfall in Swarthout Valley averages 17" per year

2010-2011 36.91"

2011-2012 9.97"

2012-2013 5.83"

2013-2014 9.31" (so far)

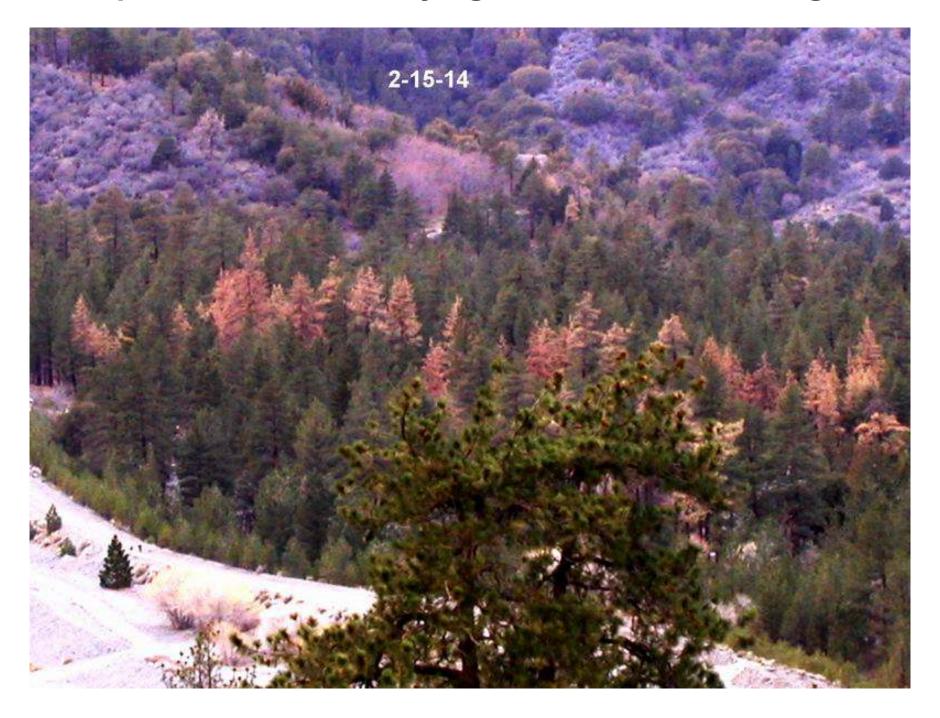


Bark beetles can cause high levels of tree mortality, primarily influenced by forest stand and drought conditions.

A dramatic rise in the number of dead trees follows one to several years of inadequate precipitation. The more severe and prolonged the drought, the greater number of dead trees.



With this year's mild winter and little precipitation pockets of dead & dying trees started showing

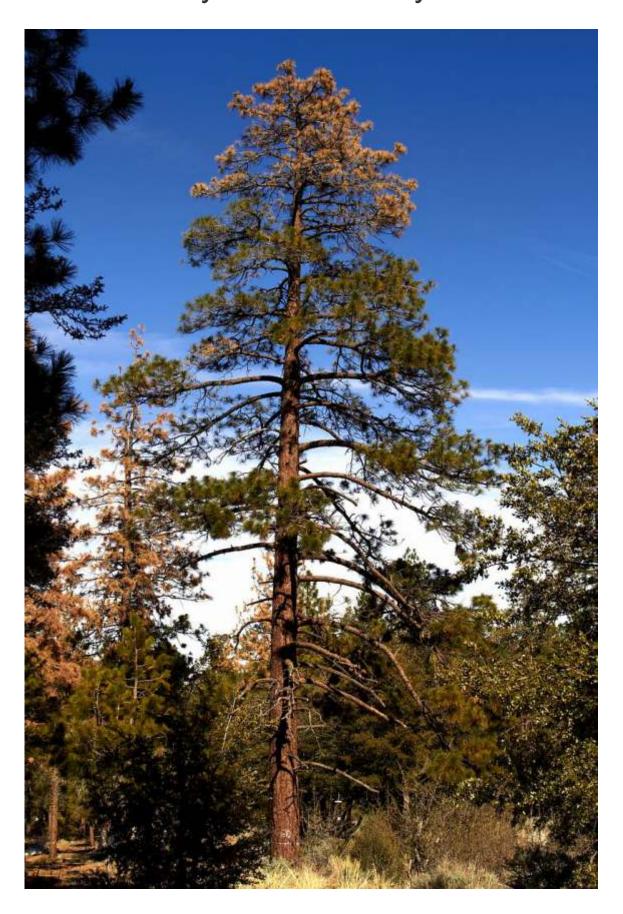


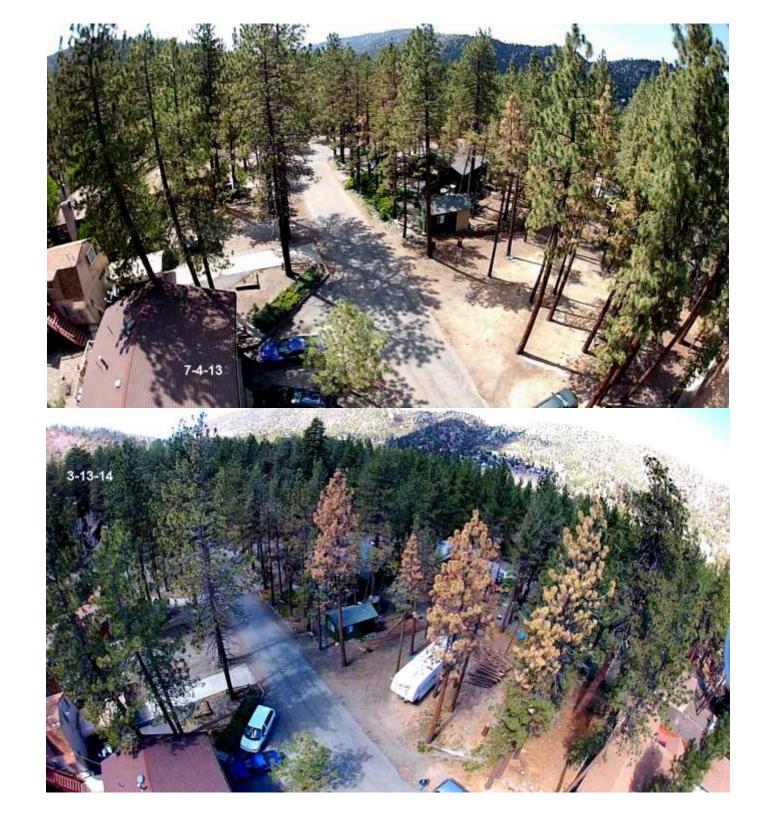
California Fivespined Ips (Ips paraconfusus)





Fading needle color is an early sign of colonization Needles fade from dark green to pale green to straw yellow to a rusty red.





Pockets of Drought and Bark Beetle Tree Mortality













Logs and Firewood Management









6 mil clear plastic sheeting



Edges completely covered with dirt to seal Left untouched for at least 6 months



Slash Management

(woody debris, branches & twigs)

This beetle attacks fresh slash of almost any diameter



Slash Management

(woody debris, branches & twigs)

Critical to remove from community immediately, take to landfill or chip



If chipped must be spread thinly in direct sunlight

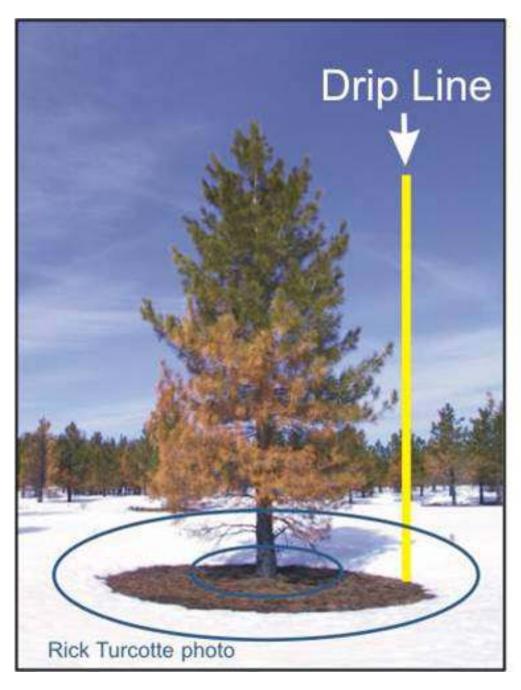


Management - Tree Stumps

Freshly cut tree stumps must be treated with Sporax to prevent spread of Annosus Root Disease



Deep watering high value trees



Pine Tree Deep Watering

Apply water in a donut shaped area centered under the drip line.

Deep water with a soaker hose. Soil should be moistened to 2 feet in depth. 2-3 weeks later, dig a 6 inch deep test hole if dry, water.

Do Not over water!

