



WILDFIRE IS COMING...
ARE YOU READY?



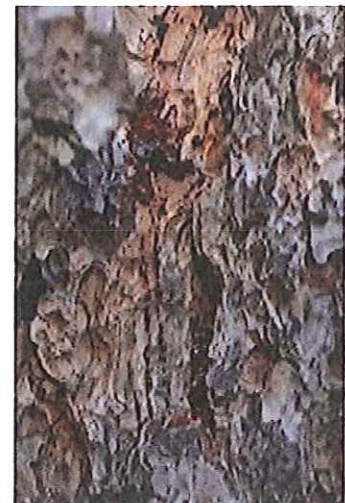
BARK BEETLES & DEAD TREES

SIGNS OF BARK BEETLE INFESTATION

Check your trees for signs of bark beetle infestation. Bark beetle activity starts on the bark surface and extends to the inner bark of twigs, branches or trunks. The following are signs that a tree may be infested by bark beetles:

In the Bark

- Trees react by releasing pitch as their natural defense against bark beetle attack. This response from the tree will leave small white or reddish-brown pitch tubes on the outside of the bark. (Pitch tubes may resemble $\frac{1}{2}$ - $\frac{3}{4}$ inch blobs of sap-like substance.)
- A white pitch tube means the beetle was successfully repelled by the tree. If the pitch tube is reddish brown, most likely the beetle was successful in attacking the tree.
- The pitch is accompanied by a sawdust-like substance, called frass, created by bark beetles and their larvae as they borethrough the bark.
- Frass has accumulated in tree crevices and may have fallen to the ground, resembling very fine, reddish-brown coffee ground material at the base of the tree.
- Bark flaking or holes in the bark caused by woodpeckers foraging for bark beetles are also a good indicator that bark beetles are present.





Removing bark sections will reveal holes created by bark beetles, as well

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Leaves or Needles

- The needles on conifer trees, like pines, begin to turn a reddish-brown color. Often the change begins at the top of the trees and moves down.
- Some trees may slowly fade in color from green to brown.
- Some trees may die within a few weeks of infestation, but may not show yellow-green, fading or red foliage for several months. Other types of trees may survive years before dying; by the time a tree appears dead, it cannot be saved.



Note: Unless trees are regularly monitored to detect bark beetle activity, any chemical spray application made after beetles have penetrated the bark is likely to be too late and ineffective. If detected early, chemical treatment must target the adults by spraying the bark so that beetles are killed when they land on trees and attempt to bore into the bark to lay eggs.

Caution: Chemically treating infested trees provides no benefit and could kill other beneficial insects. Please follow the instructions as directed on the label.

Identifying Dead and Dying Conifers on Private Land in California 



PRINTABLE FACT SHEET