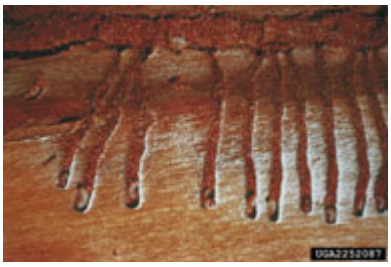
PEST FACT SHEET:

Bark Beetles

1. Bark beetles are a group of small but destructive insects that kill or damage trees by tunneling under the bark. Adults are dark colored and typically the size of a grain of rice, while the larvae are off white in color, "C" shaped, and have a light brown head.
2. Bark beetles are the #1 forest pest. In a typical year, they are the single largest cause of tree loss, accounting for more volume lost than losses from forest fires.
3. Most bark beetle species are fairly specific as to what species of tree they attack, and what part of the tree they prefer, with some species attacking the top and branches, some attacking the main trunk, and others attacking the tree base.
4. Beetles attack the tree by tunneling through the bark to the wood surface. As the tunnels are extended under the bark, boring dust (frass) is expelled through the entrance hole.
5. Trees fight off bark beetle attack by releasing pitch into the beetle's entry hole and essentially flushing or "pitching" the beetle out.
6. If the tree is under any kind of stress, it may not be able to produce the amount of pitch necessary to expel the beetle, and the chances of the tree being killed increase dramatically.
7. Adult females lay their eggs in tunnels constructed under the bark. The eggs hatch and the larvae burrow away from the "egg" tunnel. The larvae pupate and after becoming adults, they bore out through the bark, leaving it riddled with "shot holes".
8. Most species of bark beetles produce several generations per year.
9. Once a suitable tree is found, the beetles produce a powerful attractant (called a pheromone), which attracts more beetles from the surrounding area.
10. Signs of bark beetle attack include pitch tubes on the trunk, where the tree attempted to pitch the beetles out, sawdust-like, boring dust in bark crevices, emergence holes, and tunnels, or "galleries" under the bark on the wood surface.
11. Symptoms of beetle attack include gradual or sudden tree death, yellow to brown foliage, and sections of bark missing where woodpeckers have removed the bark in search of beetle larvae.
12. Chemical controls such as the use of pesticides and horticultural controls such as irrigating during droughts are not practical in most situations. Prevention of severe attack by maintaining a healthy forest is the best method to minimize tree loss.

Adult



Galleries with Larvae

Damage to Trunk