

PINE BARK BEETLE



WHAT IS THE THREAT:

Several species of bark beetle (*Dendroctonus*) including Southern Pine Beetle, Black Turpentine Beetle, Mountain Pine beetle, Western Pine Beetle and Ips Engraver Beetles are known to attack and kill pines. These beetles bore into the cambium in large groups and disrupt nutrient and water movement, thus killing the tree. Several of these species also introduce a fungus, known as blue stain, which may kill a tree by clogging its vascular system.

WHERE IS THE THREAT:

Some bark beetles occur nationwide, while the Mountain and Western Pine Beetles appear west of the Rocky Mountains. The Southern Pine Beetle originated in the southeastern United States, but is now found as far north as New Jersey and as far west as Texas.

SYMPTOMS:

Most of these beetles will attack healthy pines but severe environmental stress from drought and excessive heat increases susceptibility. Individually attacked trees may look faded or have mixed tan and green needles progressing to red, followed by tree death over several weeks. Cream to red colored pitch tubes will be present in the lower bole of the tree. As water becomes limited, the pitch turns from cream to red and will be crumbly. Most of these beetles carry a fungus that serves as a food base for young larvae. The introduced fungus then adds to inhibited water transport ability and hastens tree mortality.

WHAT TO DO ABOUT IT:

A trunk injection of TREE-äge® will provide up to two years of protection from bark beetle damage. Preventive treatment is best, as trees with existing beetle infestations are less likely to survive. In areas where beetles carry the blue stain fungus, it is recommended that a systemic fungicide such as Propizol® be added as a sequential treatment to eliminate additional stress from the fungus.



Mountain pine beetle larva



Mountain pine beetle damage



Pine bark beetle galleries

Header Image taken by: Ron Long, Simon Fraser University, Bugwood.org, Mountain Pine Beetle Larva taken by: William M. Ciesla, Forest Health Management International, Bugwood.org Mountain Pine Beetle damage taken by: Dave Powell, USDA Forest Service (retired), Bugwood.org , Bark beetle galleries taken by: Roger Anderson, Duke University, Bugwood.org