

The Mountain Pine Beetle

The Mountain Pine Beetle (MPB) is a native bark beetle that develops in pines particularly lodgepole and ponderosa pine.

The MPB has a one-year life cycle. The adult leaves the dead trees starting in July and ending in September. They seek out living green trees, generally stressed, that they attack by tunneling under the bark. Mass attacks by many beetles are common. If the attack is successful, each pair mates, forms a vertical tunnel (egg gallery) under the bark and produces about 75 eggs. Following egg hatch, larva (grubs) tunnel away from the egg gallery, producing a characteristic feeding pattern. MPB larva spends the winter under the bark. They continue to feed in the spring and transform into pupa in June and July. Emergence of new adults begins in July commencing a new cycle. Each infested tree will host enough beetles to attack an average of seven new trees.

All MPB carry the bluestain fungus, which is introduced into the tree during attack. The fungi then grow within the tree. This mutual network of beetle galleries and bluestain fungi disrupts transport of water in the tree and rapidly kills it. The fungi give a blue gray appearance to the sapwood.

To determine if you have MPB on your lot look for the following signs:

- "Pitch tubes" on the trunk where tunneling begins.
- Boring dust at the base of the tree or in bark crevices.
- Needles turning yellowish or reddish throughout the crown, Usually 8 to 10 months after attack.
- Bluestain sapwood.
- The most certain indication of attack is the presence of eggs, larva, pupa or the adult beetle under the bark. Use a hatchet to remove the bark.



"Pitch Tubes" indicating trunk attacks by MPB



Needles turning yellowish or reddish



Cut tree showing characteristics of pattern bluestaining



Characteristic tunnels (galleries) of MPB

If you determine you have infested trees they should be felled and treated by burning (hauling to the community slash pile before the winter burn), chipping, or solar treatment. Several companies in the area specialize in this work.

The above information was obtained from the Colorado State Forest Service.

See <http://csfs.colostate.edu/pdfs/MPB.pdf> for additional information.