

# Cedar Bark Beetles

Can kill twigs, branches, or entire trees

**Name and Description**—*Phloeosinus* spp. [Coleoptera: Curculionidae: Scolytinae]

Cedar bark beetles are small, reddish brown to black beetles that are approximately 1/8 inch (3 mm) long. Larvae are small, cream-colored, legless grubs with brown head capsules similar to other bark beetle larvae. Cedar bark beetles are not known as aggressive tree killers but can kill twigs, branches, or entire trees.

**Hosts**—Rocky Mountain, Utah, and one-seed junipers, as well as ornamental and windbreak plantings of eastern red cedar.

**Life Cycle**—There is one generation per year. Beetles overwinter beneath the bark as larvae. Adults mature and fly to colonize new hosts from July through September. Timing depends on the particular beetle species and local weather conditions.

**Damage**—Cedar bark beetles typically colonize broken branches and trees stressed by drought, soil compaction, stem breakage, animal damage, and other similar factors. Beetles feed on twigs prior to brood production. Twigs are hollowed out and their tips die as a result. Dead twig/branch tips (often called flagging) may be scattered throughout a tree's crown. This impact may or may not be significant, depending on factors such as number of flagged branches, tree size, and overall tree health. Cedar bark beetles' most significant impact is when they colonize a tree's branches and trunk to produce brood beneath the bark. Death of major branches or of the entire tree may result.

Evidence of beetle colonization, though often difficult to see, includes the presence of very fine boring dust in bark crevices and around the base of the trunk. If boring dust is present, distinct galleries can likely be detected by removing a small section of bark. The gallery pattern will be etched into the face of the sapwood (fig. 1). Crowns of infested trees will fade from green to yellow and eventually to red. By the time the entire tree crown is red, beetles have likely matured and are gone, having flown to other host trees. If so, many tiny, dust-free holes should be evident on the surface of the bark.

**Management**—Management of cedar bark beetles is seldom necessary in general forest settings. Preventive insecticide sprays, applied in late spring or early summer, have been used to protect individual high-value trees in recreational and historic settings and within windbreaks.



Figure 1. Galleries of cedar bark beetles that are etched into the face of sapwood. Photo: William M. Ciesla, Forest Health Management International, Bugwood.org.

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1. Furniss, R.L.; Carolin, V.M. 1977. Western forest insects. Misc. Publ. 1339. Washington, DC: U.S. Department of Agriculture, Forest Service. 654 p.
  2. Leatherman, D.; Lange, D. 1997. Western cedar bark beetles. Colorado State Forest Service. Unnumbered leaflet. 4 p.