

Bronze Birch Borer

Identification, Biology and Management

The bronze birch borer (*Agrilus anxius*) is a native pest to North America. The bronze birch borer is a pest in southern Canada and the northern United States. The insect is a serious pest of native white or paper birch and the European white birch. Bronze birch borer attacks are more frequent on ornamental birches planted in the urban environment than native birches growing in natural forests.



Damage: Bronze birch borer is considered an opportunistic pest since it usually attacks trees that are weakened due to drought, stem decays, heavy pruning, and prolonged defoliation. Stem and twig dieback that begins in the upper tree canopy indicate symptoms of tree stress. Stressed trees attract bronze borer adults that lay eggs along the main stem and crotches of large branches. Rapid tree dieback and decline ensues once borers invade dead and dying stem tissue.



Bronze birch borer larvae cause significant feeding injury by producing tunnels beneath the bark layer. The winding tunnels in the cambium cause girdling of the stems that disrupts water and nutrient transport. Borer larvae produce D-shaped exit holes in the outer bark as they emerge from dead or dying stem tissue.

Description: The adult bronze birch borer beetle is flat, elongate in shape, and olive-green to black with a metallic bronze overtone. The adult beetle ranges in size from 7-11 mm in length. Adults emerge from dead wood from mid-June until early August. Adults deposit eggs in branch crotches and crevices on the tree stem until mid-August. Bronze birch borer larvae are flat, elongate, legless, with a brown head and white body and forceps at the end of the body. Larval development occurs over 1-2 winters depending on the condition of the tree.

Control: Healthy vigorous birches are most resistant to bronze birch borer attack. Good tree vitality can be accomplished through fertilization according to soil test reports, irrigation during dry periods, proper pruning, and mulch in the root zone. Pruning should occur when early dieback symptoms are evident in the upper crown. Fall pruning is encouraged since it limits fresh wounds and sap bleeding that may attract adult borers. Preventative and therapeutic chemical treatments may be applied in areas that have a history of bronze birch borer activity.