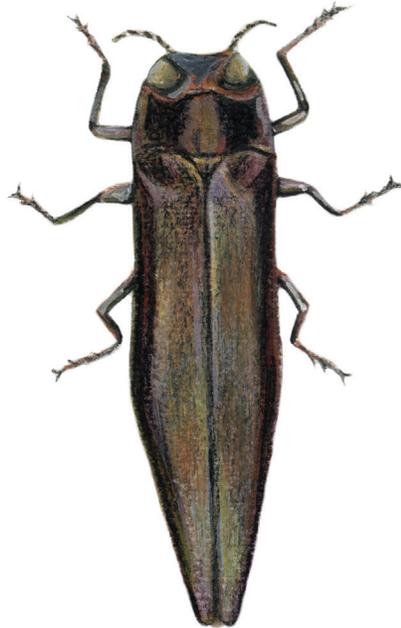


The best protection from the BBB is prevention. Maintain tree health by watering during drought, mulching, and minimizing damage to the root zone that could cause root injury and stress.

Bronze Birch Borer



BBB is native to North America and occurs on birch from Newfoundland to British Columbia and south to Colorado, Idaho, Ohio, Oregon, and West Virginia.

The BBB is most recognizable by the metallic brown wings, although adults are rarely seen.

Bronze Birch Borer (BBB)

Native to North America, damage caused by the BBB dates back to the late 1800's and continues to present day. This pest is known to attack all native and non-native species of birch, although susceptibility varies. The BBB is opportunistic and thrives in birch trees that are weakened or stressed by agents such as drought, soil compaction, root injury, other insects, and old age. Birch trees tend to prefer cool and moist growing sites, which are not typically found in most residential and urban areas. With frequent stress caused by dehydration, high temperatures, and compacted soils, landscape birch trees are commonly attacked by this pest.

Attacks Birch Trees

Early symptoms of the BBB include yellow leaves, branch dieback, and an overall thin appearance to the upper part of the canopy. Larvae feed underneath the bark and disrupt the flow of water to the canopy. Wound tissue forms around these disruptions, creating a serpentine lump underneath the bark. Eventually the symptoms progress downward to the lower branches and trunk.

What To Do

Despite the challenges presented by the BBB you can take steps to protect your tree. Current insecticide technology, Xytect, can protect your tree from BBB and other insects, including the birch leafminer. With one soil treatment your tree will have year long protection. Success is ultimately determined by both tree condition and treating the tree before it is challenged by BBB.



feeding galleries



BBB larvae under the bark



"D" shaped exit holes

Bronze Birch Borer Symptoms

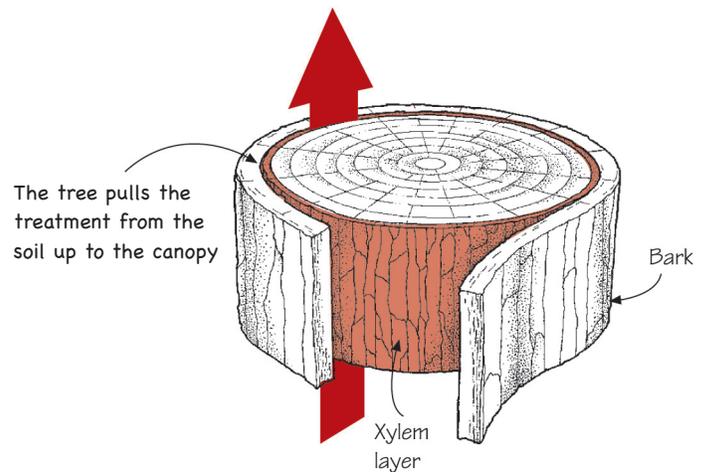
Adult beetles cause relatively little damage, but the larvae feed on the xylem layer and disrupt the movement of water and minerals within the tree. Early symptoms can be difficult to diagnose, but eventually the canopy dies from the top down. Trees may be infested for several years before symptoms are visible in the canopy.

Xytect™ Transtect™

How it works

Xytect and Transtect are systemic insecticides that protect the vascular system of the tree. Xytect should be applied in the spring or the fall and Transtect should be applied in the summertime. Both are applied at the base of the tree and are evenly distributed throughout the canopy by the pull created by the leaves. When the insect ingests the treatment they quickly stop feeding and die.

Transtect will provide rapid protection (within a week on most sized trees) and will last the entire season. Xytect can take up to 6-8 weeks to be active in the canopy but will provide 12 months of protection. Which treatment will be recommended is dependent on the time of year the treatment will be applied.



BBB Treatment Considerations

- Treat important trees first: specimen trees, trees shading your home, patio trees, etc. These trees should be healthy and vigorous.
- Research trials have shown systemic insecticide treatments are highly effective at protecting birch trees.
- Preventively treating your tree is the best defense against BBB.
- Once treatments begin, you will need to treat your tree yearly to maintain protection.

Added Protection

- Xytect or Transtect will also protect your birch tree from these other insects: Birch Leafminers, Aphids, Spittle Bugs, Flat Head Borers, Leaf Hopper, Soft Shell Scale.
- Adequate water is a key factor in maintaining healthy birch trees. A slow, deep watering event once per week during dry conditions will help maintain soil moisture levels and minimize the stress that invites the bronze birch borer.
- Mulch is very beneficial for trees because it reduces competition with turf and moderates soil temperature and moisture levels. The addition of 2-4 inches of wood chips or shredded bark under the drip line can have a very beneficial effect.



Soil application of Xytect or Transtect provides protection for your birch tree.