



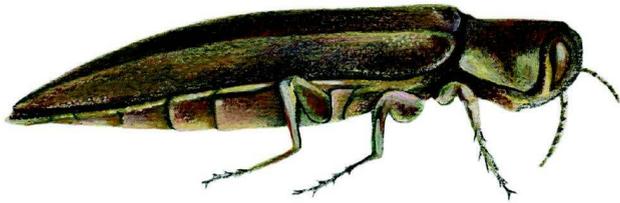
(206) 789-0534  
seattletreecare.org

# Bronze Birch Borer

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



actual size



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.

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.

## Bronze Birch Borer (BBB)

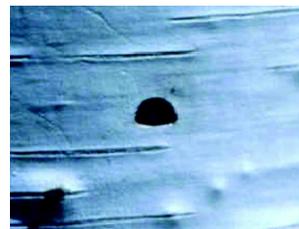
Native to North America, damage caused by the BBB dates back to the late 1800's and continues to present day. This pest is known to attack all native and non-native species of birch, although susceptibility varies. The BBB is opportunistic and thrives in birch trees that are weakened or stressed by agents 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.

## The Bronze Birch Borer 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.

## 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.



D-shaped exit holes



Larvae under bark

## Options for Treatment

*Treat important trees first: specimen trees, trees shading your home, patio trees, etc.*

While preventively treating your tree is the best defense against BBB, you can take steps to protect your tree with both soil applications and stem injections. Current insecticide technology, Xylect and Mectinite, can protect your tree from BBB and other insects, including the birch leafminer. Research trials have shown systemic insecticide treatments are highly effective at protecting trees, but success is ultimately determined by both tree condition and treating the tree before it is challenged by BBB.



Feeding galleries

Seattle Tree Care Arborists will help you understand your options for treatment and help you weigh your concerns and goals to find the right care solutions.

## Treatment: Soil Application



# Xytect™ Transtect™

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 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.

### 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.

Installing a thick layer of Arborist chips around the base of the tree will help it resist drought stress. The mulch also slowly feeds the tree, improves the soil, and prevents mower damage. *Ask your Seattle Tree Care Arborist about including this option in your treatment plan.*

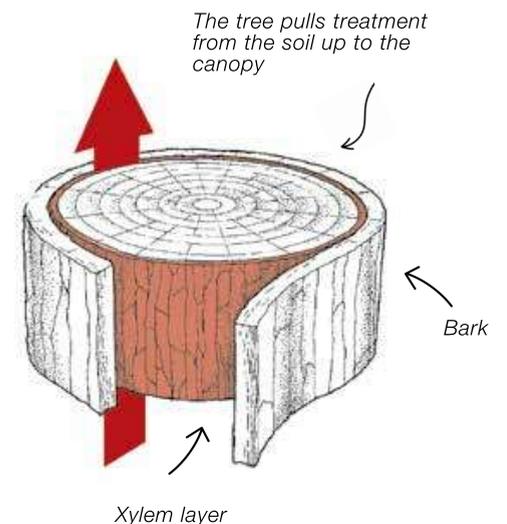
Adequate water is a key factor in maintaining healthy birch trees. A slow, deep watering every week, especially during dry conditions, will help maintain soil moisture levels and minimize the stress that invites the bronze birch borer.

## Treatment: Stem Injection

# MECTINITE™

4% EMAMECTIN BENZOATE

If you have a tree that is infested, or a large tree that is in a high risk area your arborist may recommend a treatment using Mectinite. Mectinite is applied by injecting it into the root flares of the tree and has been shown in University trials to get excellent control of actively feeding larvae. Mectinite works for 2 growing seasons.



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