

# BRONZE BIRCH BORER



## WHAT IS THE THREAT:

The Bronze Birch Borer (*BBB*, *Agrilus anxius*) is a wood boring beetle in the northern half of the United States that attacks all species of birch. The BBB typically attacks trees that are already stressed or in decline. Adults are visible in the late spring and are slender, copper/bronze colored beetles. The larvae are hidden under the bark from early summer until they pupate the following spring. Larvae cause extensive vascular system damage by creating galleries through the phloem, vascular cambium and the xylem, effectively girdling the tree. This widespread feeding eliminates avenues for nutrient transport and eventually leads to canopy dieback and tree mortality.

## WHERE IS THE THREAT:

The Bronze Birch Borer typically attacks birch trees that are already stressed or in decline. BBB is a pest in the northern half of the United States into Canada. Current infestations expand from Maine across the Great Lakes Region, to the cascade mountains of Oregon and Washington. Additional infestations are present from Maryland to Kansas.

## SYMPTOMS:

A birch infested with BBB will start showing crown dieback that increases in severity as the infestation continues. The tree responds to canopy dieback by sprouting new (epicormic) branches below the disrupted tissues. In later stages of infestation, the trunk will show D-shaped, rust-stained exit holes and may also have swollen extrusions under the bark where the tree tried to grow over larval galleries. If the infestation goes untreated, trees can die in as little as two years.

## WHAT TO DO ABOUT IT:

Trunk injection with the TREE-äge® family of products or IMA-jet® will provide both preventative and curative control, depending on the time of year treatment is applied. Applications should be made in the spring, about 30 days prior to adult emergence, or in late September, which will minimize early pest damage the following spring.



Bronze Birch Borer larva



Exit hole in bark



Damage from Bronze Birch Borer



Larval tunnels on birch

Photo Credit: Adult Beetle: Steven Katovich, USDA Forest Service, Bugwood.org; Larva: Whitney Cranshaw, Colorado State University, Bugwood.org; Exit hole: Whitney Cranshaw, Colorado State University, Bugwood.org; Damage: USDA Forest Service - Northeastern Area, USDA Forest Service, Bugwood.org; Tunnels: Whitney Cranshaw, Colorado State University, Bugwood.org