



THE UPPER GREAT LAKES CENTER FOR EXOTIC SPECIES

Quick Guide

MichiganTech

Emerald Ash Borer, Agrilus planipennis

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Introduction

- This metallic green beetle, in the family Buprestidae, was recently discovered on dead or dying ash trees in southeastern Michigan
- Beetles in this group generally attack already weakened or stressed trees.
- This is an exotic species to Michigan. Its native range includes eastern Russia, northern China, Japan, and Korea.
- This insect appears to have a one year life cycle in Michigan with adults emerging between late May and mid-June.

Description

- The adult beetle is recognizable by its striking metallic green color. It is 3/4 inch in length and 1/16 inch wide.
- Adult emergence holes are D-shaped (right).
- Egg-laying occurs after emergence, and larvae then tunnel into the tree to feed on the living portion of the bark.
- To date, this species has only been found in ash.
- The role of this beetle in the death of weakened ash trees is unclear.



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Signs of Infestation

- Infested trees often exhibit symptoms of canopy dieback which often progresses down from the top of the tree.
- Characteristic 2-4 inch vertical splits in the bark result from larval tunneling activity.
- Removal of the outer bark reveals winding tunnels in the inner bark where their larvae have tunneled (left).

Prospects for Management

- Ash trees throughout the north central region are also affected by other serious pest problems, including ash yellows and ash decline. This borer is currently known to be present only in southeastern lower Michigan.
- Research is needed to determine whether insecticides can be used to treat infested trees or to protect healthy trees from attack.
- Ash trees that are cut down or pruned should be chipped and left on site if possible.
- Preventing the spread of this beetle is very important and can be achieved by limiting the movement of ash trees from nurseries, untreated ash logs, ash firewood and other ash products.