

Emerald Ash Borer

What is it?

The emerald ash borer (EAB) is a small, metallic-green beetle, typically about 1/2 inch long, and capable of destroying fully grown ash trees.



Where is it?

The EAB originated in Asia and was first discovered near Detroit, Michigan in 2002, possibly through wooden packing materials from China. Today their primary home is midwestern and eastern U.S. and parts of Canada. Unfortunately, the EAB is spreading fast! Check out the map at www.emeraldashborer.info for a current list of EAB confirmed locations.

Symptoms of EAB

- Thinning or dying ash tree crowns
- Suckers at the base of the tree
- Splitting bark

What do they do?

Emerald ash borers attack ash trees only, one of North America's most abundant woodland trees. Depending on how warm the weather is, adult EAB will appear in mid-to-late-May due to infestations the previous year, when the females laid their eggs. The larvae tunnel into the ash tree and feed under the bark, leaving visible tracks underneath. Larvae feeding stops the tree from properly transporting water and nutrients, so the tree suffers from dieback and split bark.



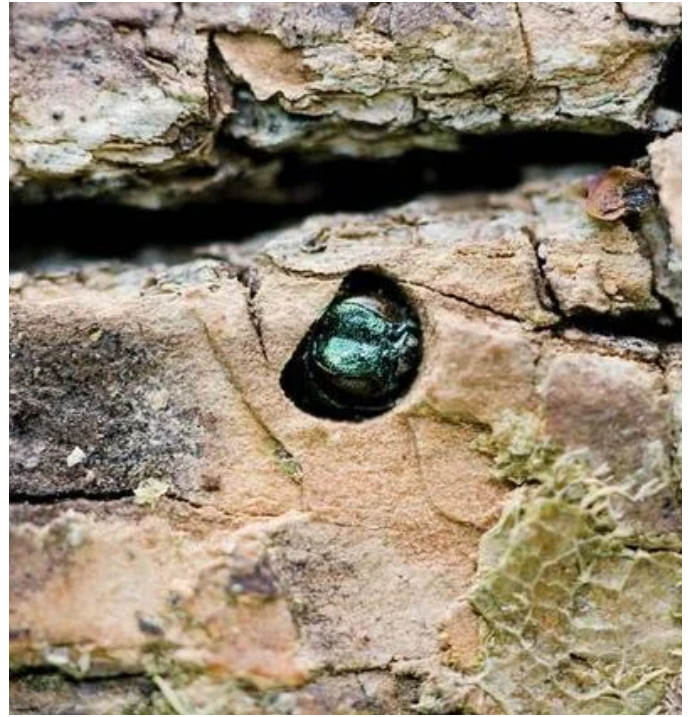
Tracks made by EAB.

- Tunneling under the bark
- D-shaped exit holes
- Woodpecker activity

Why it's a problem

Since its debut, the emerald ash borer has demolished at least 40 million ash trees in Michigan and millions across other states and Canada, with the total number of U.S. ash trees estimated at 7-9 billion. Small ash trees can die as early as 1-2 years after infestation, and larger trees can survive up to for 3-4 years.

When trees begin to deteriorate from the food and water cutoff, their limbs become brittle and frail. Wind and ice can effortlessly push limbs from the trunk, which can cause damage to homes, cars, people, and electric lines. EAB damage has cost municipalities, landowners, nursery operators and other industries hundreds of millions of dollars.



D-shaped EAB exit hole.

How to help...

The best way to prevent more infestations from happening is to stop the spread. Follow all laws and guidelines regarding firewood transportation; firewood cannot be moved in several areas due to EAB quarantine. Be conscious of this issue when dealing with all trees, especially ash.

Treatment Guide

Who should treat my tree?

If the DBH (diameter at breast height) is less than 20 inches, the homeowner can treat the tree using available insecticides. If the tree is 20 inches or larger, a certified arborist must determine the best treatment option. Insecticides available to homeowners are not effective on trees 20 inches and larger in DBH. To determine the DBH of a tree, measure the distance around the tree trunk 4.5 feet above ground level.

**If you want to keep
your ash tree, treat it!**

What treatments can I use?

Imidachlorprid

Apply liquid drench onto soil within 18 inches of trunk. Treat annually in early spring (late March through mid-April).

Dinotefuran

Apply granules onto soil within 18 inches of the trunk. Treat annually in early spring (between early and late April).

What treatments might the arborist use?

Emamectin benzoate

Applied via trunk injection every 2 or 3 years, depending on the level of EAB population. Treatment takes place in late April to mid-May (optimal) or in early summer (alternative).

Dinotefuran

Applied via bark spray or soil application annually. Treatment takes place in late April to mid-May (bark spray) or between early and late April (soil applications).

How do I know whether to treat my tree?

Consider treating if the ash tree is:

- healthy and growing with less than 50% dieback (dead branches/missing leaves)
- showing early or few symptoms of EAB
- valuable to the owner by providing shade, energy savings or aesthetics
- historically significant

Removal suggestions:

- Remove unhealthy trees with more than 50% dieback or severe injuries.
- Remove small trees or those rooted in poor sites (too close to utility lines, buildings, or sidewalks).
- If you decide to remove the tree, dispose of it locally to prevent the spread of EAB.

For more information on this topic visit:

- www.arboday.org/trees/health/pests/emerald-ash-borer.cfm
- agriculture.mo.gov/plants/pests/eab-management-guide.pdf

If you see a dying ash tree on or near the Citizen's Electric right-of-way, contact us at 1-877-876-3511.

Bayer
Advanced
Tree & Shrub
is a common
insecticide
used to treat
ash trees.



Azadirachtin

Applied via trunk injection every 1-2 years, depending on the level of EAB population. Treatment takes place late April to mid-May (optimal) or in early summer (alternative).

Imidacloprid

Applied via trunk injection or soil application annually. Treatment takes place in mid-to-late-May (optimal) or in early summer (alternative).



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