

You Can Help...

Do Not Move Firewood!



Photo: Canadian Food Inspection Agency

- Emerald ash borer can easily be transported in ash logs.
- Purchase firewood locally from a known source.
- Be sure to use all of the firewood in the cold months so that no hidden emerald ash borer larvae or adults can survive on logs left through the spring.
- Monitor the health of ash trees. Look for dead and dying branches at the top of the tree's crown.

If You Think You Have Emerald Ash Borer:

- For assistance in identifying suspect insects visit www.emeraldashborer.info/ or www.na.fs.fed.us/fhp/eab/
- Call the national EAB hotline 866-EAB-4512
- Contact Illinois Department of Agriculture's Pesticide Hotline at 800-641-3934 or in the Chicago area use 312-74BEETL (312-742-3385)
- Contact your city or village forester or arborist for assistance.
- Contact the University of Illinois Extension Service office in your county. Find a nearby office at <http://web.extension.uiuc.edu/cie2/offices/findoffice.cfm> or by calling 217-333-5900
- Contact a certified arborist. You may find one nearby at www.isa-arbor.com/findArborist/findarborist.aspx
- Or contact The Morton Arboretum Plant Clinic at 630-719-2424



For more information about The Morton Arboretum
visit www.mortonarb.org

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*Stop the Borer,
Save Ash Trees*



Emerald Ash Borer

Emerald Ash Borer

The emerald ash borer, (*Agrilus planipennis* Fairmaire) is a small (1/2 inch long, 1/8 inch wide) metallic green beetle native to Asia. Though it was first found in Michigan in 2002, it was likely that a beetle population had been established in the Detroit area for many years prior. More than 15 million ash trees have been killed. It has been also detected in Ohio, Indiana, Virginia, Maryland, and Ontario, Canada.



Actual size

Biology

The adult emerald ash borer emerges in May – July and the female lays numerous eggs in bark crevices and between layers of bark.

The eggs hatch in 7 – 10 days and larvae bore into the tree where they chew the inner bark and phloem creating serpentine galleries as they feed. This cuts off the flow of water and nutrients in the tree, causing dieback and death.



Larva

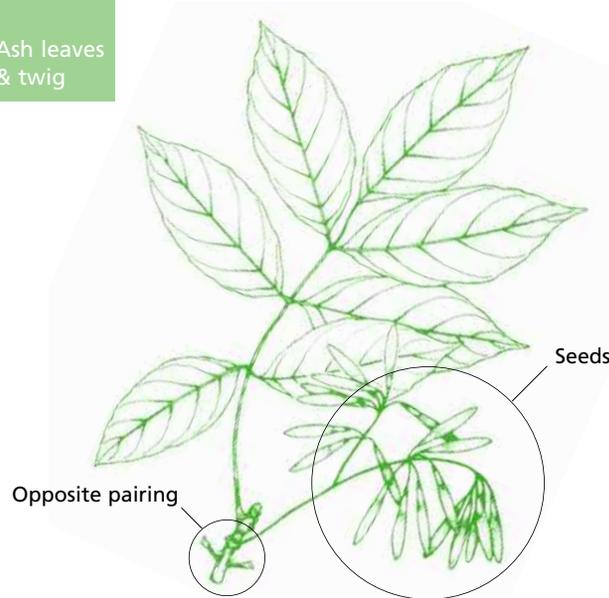


S-shaped galleries

Ash Trees

Ash trees are very common in landscapes and most species, namely white ash (*Fraxinus americana*) and green ash (*F. pennsylvanica*) are native to Illinois forests. It is estimated that as much as 20% of street trees in the Chicago area are ash.

Ash leaves & twig



Opposite pairing

Seeds

Characteristics of ash:

- Compound leaves made up of small, glossy green leaflets.
- Leaves, twigs and branches grow in opposite pairs.
- Bark of mature trees is gray and furrowed, often appearing in a diamond pattern.
- Some ash trees will produce small canoe paddle-shaped seeds.
- Seedless ash trees may develop ash flower galls that turn from green to brown and may persist in the crown throughout the year.



Dieback



Epicormic branching or suckers



Bark slits



Emergence hole - Shown actual size of 1/8" and D-shaped

Signs and Symptoms

The most visible sign of infestation is crown dieback, which appears after the first year. Branches at the top of the crown will die and more branches will die in subsequent years. Typically, the tree will be completely dead in about three years, though suckers will sprout from the base of the tree and on the trunk. The bark may also split vertically and woodpeckers may feed on the beetle leaving visible damage on the bark. Treatments with insecticides are being studied. However, all ash trees proximate to any new infestation will be lost.

Adult beetles emerging from trees will leave a very small, 1/8 inch diameter distinctly "D" shaped exit hole that may appear anywhere on the trunk or upper branches.

Other Stressors:

Ash trees may suffer from a large number of pest and disease problems that cause similar symptoms. Native borers also attack ash trees, though they leave larger exit holes up to a 1/4 inch in diameter that are usually circular or oval in shape.