

Emerald Ash Borer

Agrilus planipennis



The exotic emerald ash borer (EAB) has been killing ash trees across North America. Native to China, eastern Russia, Japan, and Korea, it was first discovered near Detroit in 2002 and has since spread to 30 states, including New Jersey.



Damage

This metallic green insect infests and kills ash trees—all ash species are susceptible, with the exception of mountain ash. EAB larvae feed on the inner bark and disrupt the movement of water and nutrients, essentially girdling the tree. This insect often infests the upper branches of the tree first and may affect branches as small as 1" in diameter. It takes 2-4 years for infested trees to die, but mortality is imminent.

Signs and symptoms

Often the first sign that a tree is infested is woodpecker damage. When feeding on EAB, woodpeckers scrape off outer bark, leaving smooth, light colored patches. Under the bark of an infested tree, you can often see S-shaped galleries weaving back and forth on the surface of the wood. The beetles also leave 1/8" D-shaped exit holes. Between May and August, you may find the 1/2" long metallic green adult beetles which have a copper color abdomen under the wing covers.

Images by David Cappaert



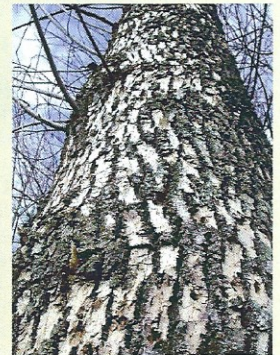
Adult beetle



D-shaped exit hole



Larva



Woodpecker damage on an EAB infested tree

Emerald Ash Borer in New Jersey

Since its discovery in North America, EAB has spread rapidly. It occurs in 30 states and 2 Canadian provinces. It was first discovered in NJ in 2014. The greatest impact will be for community trees and privately owned trees.

The beetles are strong fliers, and good at finding ash trees. When the beetle first arrived in Maryland, the infested area expanded about 1/2 mile per year.

Often people unintentionally spread this insect when they move firewood from an infested area to a new location. Beetles and larvae also hitchhike to a new area in nursery trees and saw logs.

Over the next few years, 99% of NJ ash trees will die due to emerald ash borer infestations

Ash in New Jersey Facts

- Forests contain 24.7 million ash trees
- 24% of all forested land contains ash
- Ash is found in forests throughout the state, but concentrated in northern New Jersey
- Ash has been commonly planted as a street and landscape tree throughout the state

Managing Your Ash Trees

For Landowners

EAB is in New Jersey. Plan for EAB now if you have ash. Know what's at risk: how much ash you have, its size and quality, and where it's located. Consider the ecological, aesthetic, and economic value of your ash, your tolerance of risk, and your objectives for ownership.

Forest Management Plan

If your land is enrolled in Farmland Assessment or the Forest Stewardship Programs, you must follow your approved forest management plan or an approved amendment.

Contact your consulting forester if you wish to change your planned activities, treatment schedule, or management objectives. Remember that the state forester needs to approve any changes before the management activity begins.

With an approved forest management plan that addresses EAB, you can salvage and restore ash in riparian areas when they follow the prescribed Best Management Practices.

Reassess your plan if EAB is detected in or near your county. Go to emeraldashborer.nj.gov for current EAB detection in the state. The threat of imminent tree mortality increases when EAB is within 10 miles of your property.

Salvaging Ash Logs

Work with a consulting forester or Certified Tree Expert to get the most from your forest. Studies have shown that owners who use professional forestry services before they cut make more money and are more satisfied with the results than owners who sell timber on their own.

More information www.myhealthywoods.nj.gov

Take action

Identify ash trees. Ash species have opposite branches and leaves and a compound leaf with 5-11 leaflets. The bark has a unique diamond-shaped ridge bark on older trees, but younger trees may have smoother bark.

Monitor your ash trees for EAB, you will know when the risk of mortality becomes urgent. Look for the dying branches at the top of the tree, woodpecker damage, galleries under the bark, D-shaped holes, green adult beetle, and sprouting.

Spread the message, "Don't Move Firewood." Visitors who bring infested firewood to second homes or campgrounds near you put your trees at risk. Talk with neighbors and campground owners in your community.

Report EAB sightings to the NJ Department of Agriculture. Collect and/or photograph any suspect insects and larvae. Note that several insects look similar to the EAB.

For Municipalities

If your municipality or county currently has an approved Community Forest Management Plan and ash is a major component of your community's forests along streets or in parks, consider including a section in your plan that addresses your community's response to EAB. Contact a Certified Tree Expert for assistance.

Municipalities with ash trees should:

- Conduct a tree inventory: know the size, health status, and where ash trees are located
- Begin to remove ash trees that are in decline and replace with non-host species
- Identify high value ash trees that you would like to treat to protect them from EAB
- Determine how infested ash tree removals be handled
- Identify a contact for EAB management issues (ie; Shade Tree Commission, Department of Public Works, Environmental Commission)
- Plan for restoration efforts with non-host species

More information on the community forestry management plan program
www.communityforestry.nj.gov

More information on the emerald ash borer
www.emeraldashborer.nj.gov



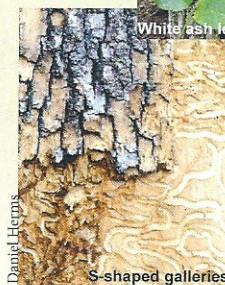
Troy Kimoto

EAB infested ash wood



Wanda Rice

White ash leaf and bark



Daniel Herms

S-shaped galleries

New Jersey EAB Task Force



More information

www.emeraldashborer.nj.gov

Report sightings to Department of Agriculture NJ Forest Service 609.406.6939 609.292.2532

Info from USDA www.stopthebeetle.info
Look-alike beetles www.nyis.info/index.php?action=identification

This publication was made possible through grant funding through the USDA Forest Service