

# Pest Alert

## Emerald Ash Borer

*Agrilus planipennis*



The exotic emerald ash borer 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 18 states, including Pennsylvania and New York, New Jersey's neighbors.

### Damage

This metallic green insect is no treasure to New Jersey's ash trees - all species of ash, with the exception of mountain ash, are susceptible. The emerald ash borer larvae feed on the inner bark and block 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 to live trees. When feeding on emerald ash borer, 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 June and August, you may find the 1/2" long metallic green adult beetles which have a purple abdomen under the wing covers.



Adult beetle



D-shaped exit hole



Larva



Galleries under bark

## Ash Trees in New Jersey

Since its discovery in North America, emerald ash borer has spread rapidly. It occurs in 18 states and 2 Canadian provinces but has yet to be seen in New Jersey.

To confirm the presence or absence of the insect, New Jersey foresters set out 360 traps across the state in 2012. They did not find a single beetle.

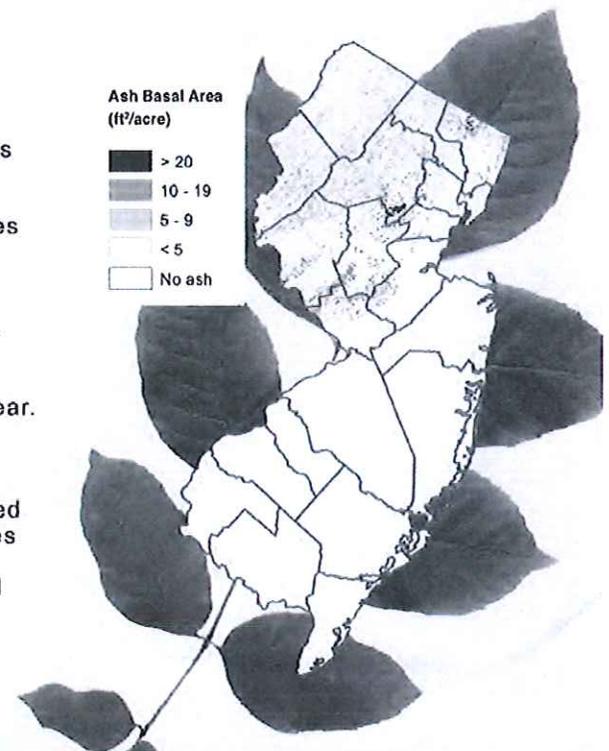
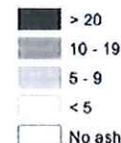
However, foresters expect emerald ash borer to spread to our state. With approximately 25 million ash trees statewide, the impact could be significant.

The closest known infestations are around Bucks County, PA and in New York's Hudson Valley. Both are within 50 miles of New Jersey's border.

The beetles are strong fliers, and good at finding ash trees. When EAB 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.

Ash Basal Area  
(ft<sup>2</sup>/acre)



# Managing Your Ash

Although it's possible that emerald ash borer may reach our state soon, it still could be many years before it shows up in your woodlot. Plan for emerald ash borer 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.

## Your 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.

Woodland owners with an approved forest management plan that addresses emerald ash borer can salvage and restore ash in riparian areas when they follow the prescribed Best Management Practices.



Forest management plan

Reassess your plan if emerald ash borer is detected in or near your county. The threat of imminent tree mortality increases when emerald ash borer is within 10 miles of your property.

## Selling Ash Logs

Work with a consulting forester to protect your interests and your forest. Studies have shown that woodland 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.

Growing ash sawlogs is a riskier long-term investment than it used to be. During scheduled harvests, take steps to limit loss. Reduce the percentage of ash if it exceeds 20%. Review your diameter target (how big to grow trees before cutting them) with your forester, discussing site quality, tree condition, and available markets. To keep from degrading your woodlot, retain good quality trees of a variety of species.

If you're growing trees for timber income, don't cut immature ash too early. If the trees are too small to yield high value sawlogs, you may get a better return if you allow them to grow. They will increase in volume, and may improve in grade, which will lead to a better return. Discuss with your forester balancing this with potential EAB.

## 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 emerald ash borer,** 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, and green adult beetles.

**Use trap trees to detect emerald ash borer** in your community or woodlot. If the emerald ash borer is in the area, it will be attracted to these girdled trees.

**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 emerald ash borer sightings to your local forestry office.** Collect and/or photograph any suspect insects and larvae. Note that several insects look similar to the emerald ash borer.



State Forestry Services  
Department of Environmental Protection  
[njparksandforests.org](http://njparksandforests.org)

## More information

Info from USDA [www.stopthebeetle.info](http://www.stopthebeetle.info)  
Trap trees [www.emeraldashborer.info/files/handoutforpdf.pdf](http://www.emeraldashborer.info/files/handoutforpdf.pdf)  
Look alike beetles [www.nyis.info/index.php?action=identification](http://www.nyis.info/index.php?action=identification)

Contact your regional forestry office to report a sighting or for more details.

North	973.786.5035
Central	609.726.1621
South	609.825.1124