

**Emerald ash borer (EAB)** is a non-native insect pest that infests and kills all species of ash trees. With 24.7 million ash trees, approximately 9 percent of New Jersey forests are susceptible to emerald ash borer attacks. Although rarely the most abundant tree in a forest stand, ash is still found in 24 percent of all forest land. The greatest numbers of ash trees can be found in the northern part of the state. Ash is also commonly planted along streets, as landscape trees in yards, and in parks throughout the state.

### **The Insect**

The adult EAB is approximately ½" long and 1/8" wide, metallic-green in color, with a metallic-copper red abdomen. The larvae are white or cream colored, measure approximately 1 - 1 ¼" long and have 10 abdominal segments that are bell shaped. EAB adults emerge in May or early June creating D-shaped exit holes, 3-4 mm in size on the branches and trunks of infested trees and stay active through August. The EAB feed on the margins of the ash leaf and have a 1 year lifecycle. After feeding, the female EAB deposits eggs in bark crevices or under bark flaps on the trunk or bark. After the egg matures, larvae burrow under the bark and feed on the cambium - the water and nutrient transporting layer of the tree. The larvae become adult beetles in April or May.

### **Signs and Symptoms**

EAB first infest the top of the tree's crown, which makes spotting adult beetles or exit holes nearly impossible from the ground. Woodpecker activity and damage on live trees is often an initial sign of an EAB infestation. As EAB populations increase, crown dieback, epicormic branching, bark splits, and exit holes lower on the bole become more prevalent. Trees will only live an average of 3-4 years after infestation.

### **Quarantine**

Movement of firewood and ash are under federal and state quarantine. Contact USDA's Animal and Plant Health Inspection Service at [firewood@aphis.usda.gov](mailto:firewood@aphis.usda.gov) for appropriate permits before moving wood or ash trees outside of NJ.



## Homeowners

You might have an ash in your yard as it is a popular landscape tree species. If you have ash and live within 10 miles of a known infestation, you can treat your tree to protect it from infestation. If your tree is unhealthy, it should be removed. Contact a [certified tree expert](#) for more information.

## Landowners

Emerald ash borer is in our state now—if you have ash, plan for EAB. 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 emerald ash borer, you can salvage and restore ash in riparian areas when they follow the prescribed Best Management Practices. 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. Woodland owners not enrolled in these programs should contact their [regional forestry office](#) for more information.

## Selling Ash Logs

Work with a consulting forester 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. Growing ash sawlogs is a riskier longterm investment than it used to be. 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 ash that is too immature or the trees could be too small to yield high value sawlogs. If you allow them to grow, they increase in volume, and may improve in grade, which leads to a better return. Ask your forester about balancing this with potential emerald ash borer.

## Municipalities

If your municipality or county currently participates in the NJ Community Forestry Program and 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 that addresses your community's response if emerald ash borer is found in your neighborhood. [Contact a Certified Tree Expert](#) for assistance. To enroll in any community forestry program, contact the community forestry coordinator at (609) 292-2532.

## Municipalities with ash trees should develop an EAB response plan which should include:

- Conduct a tree inventory: know the size, health status, and where ash trees are located
- Begin to remove ash trees that are in less than healthy status and replace with non-ash species
- Identify high value ash trees that you would like to treat to protect them from EAB
- How will infested ash tree removals be handled?
- Who will take the lead on EAB management issues

- Plan for restoration efforts with non-ash species
- Budget (use the [Purdue University EAB Cost Calculator](#))

### **Do your part to combat the effects of EAB on NJ trees:**

• **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, bark splits, sprouting at tree base and along trunk, and green adult beetles.

• **Use traps** 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 purple prism traps.

• **Spread the message**, "Don't Move Firewood." Visitors who bring infested firewood to second homes or campgrounds near you put your trees at risk. Use only locally sourced or certified firewood. More info on [don't move firewood](#). Talk with neighbors and campground owners in your community.

• **Report sightings** to your [regional forestry office](#). Collect and/or photograph any suspect insects and larvae. Note that several insects [look similar to the emerald ash borer](#).

**This information has been provided by the NJDEP, NJ Forest Service,**

**[http://www.nj.gov/dep/parksandforests/forest/community/Emerald\\_Ash\\_Borer.htm](http://www.nj.gov/dep/parksandforests/forest/community/Emerald_Ash_Borer.htm)**