

Emerald Ash Borer Information

November, 2014

1. What is the Emerald Ash Borer (EAB) problem? Potentially one of the most destructive invasive pests ever introduced into the United States, Emerald Ash Borer (EAB) has recently been found in New Jersey. First discovered in southeastern Michigan in 2002, EAB has rapidly spread across the Midwest, killing millions of ash trees, and is now starting to appear within east coast states. A confirmed infestation has not been observed in West Windsor Township yet, but it is anticipated that the insect will arrive in the coming years.
2. Where did the emerald ash borer (EAB) come from? The natural range of *Agrilus planipennis*, or the Emerald Ash Borer, is eastern Russia, northern China, Japan, and Korea. It is not native to North America.
3. Does EAB attack trees other than Ash? EAB has not yet been found to damage native shade or forest canopy trees other than Ash.
4. Does it only attack dying or stressed trees? Healthy ash trees are also susceptible, although beetles may prefer to lay eggs or feed on stressed trees. When EAB populations are high, small trees may die within 1-2 years of becoming infested and large trees can be killed in 3-4 years. A tree killed by EAB can be very brittle.
5. What happens to infested ash trees? The canopy of infested trees begins to thin above infested portions of the trunk and major branches because the borer destroys the water and nutrient conducting tissues under the bark (image above). Heavily infested trees exhibit canopy die-back usually starting at the top of the tree. One-third to one-half of the branches may die in one year. Most of the canopy will be dead within 2 years of when symptoms are first observed. Sometimes Ash trees push out sprouts from the trunk after the upper portions of the tree dies. Although difficult to see, the beetles leave unique "D"-shaped exit hole in the bark, roughly 1/8 inch in diameter, when they emerge in June. However, woodpeckers can alter the holes.
6. What do emerald ash borers look like? The adult (flying) beetle is dark metallic green in color, 1/2 inch long and 1/8 inch wide. There are other common beetles that look similar.
7. How does this pest spread? We know EAB adults can fly at least 1/2 mile from the tree where they emerge. Many infestations, however, were started when people moved infested ash nursery trees, logs, or firewood into un-infested areas – please - do not move any Ash firewood or logs. Once found in a community EAB infestations can spread to most Ash trees within 3 or 4 years.
8. How big a problem is EAB? EAB is a huge fiscal, environmental, and public health problem. The scope of this problem could reach the billions of dollars nationwide. In West Windsor, EAB could result in the death of all Ash trees, including about 2,000 street trees and 500 park trees, and will require significant funds to treat, or remove and replace them. Additionally, Ash trees are planted in many private parking lots, buffers, and residential yards. Ash represents a significant percentage of the Community Forest and contributes tremendous value and services, including: oxygen replenishment; pollutant absorption; aesthetic and climate enhancement. The potential loss of Ash trees would have a significant community impact.
9. Is there a treatment for Emerald Ash Borer? Insecticide treatments can be effective in protecting trees from Emerald Ash borer. The treatment available for homeowner use is a sole application of imidacloprid (such as Bayer Advanced Garden Tree and Shrub Control) in accordance with label instructions. The application should be made in early May and is most effective on small trees. Tree care professionals can apply products to larger trees, such as trunk injections and trunk and foliage sprays.
10. What can Residents do?
 - Do not move any firewood, tree branches, or logs from or to your property.
 - Homeowners should first determine if there are any Ash trees on their property. This is a link to help identify Ash trees. <http://www.emeraldashborer.info/files/e2942.pdf>
 - Homeowners can also help by carefully monitoring their Ash trees for signs and symptoms of EAB throughout the year. It is not cost effective to treat trees until EAB has been discovered within a 15 mile radius, so homeowners should monitor reports on the spread of EAB. This is a link to help identify EAB presence. <http://www.nj.gov/agriculture/divisions/pi/pdf/EABGreenMenace.pdf>
 - Consider hiring an NJ Certified Tree Expert or IAA Certified Arborist to help you identify Ash trees and determine the condition of your Ash trees. Remove Ash trees that are declining or exhibit dangerous flaws now. Review treatment options with the Arborist so you can plan for treatment or replacement when EAB reaches West Windsor.

