

Cornell University Cooperative Extension Rockland County

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# **Emerald Ash Borer**

Emerald Ash Borer (EAB) is a small destructive beetle that infests and kills all North American ash tree species, including green, white, black and blue ash. Originating from Asia and probably introduced in solid wood packing material used in cargo shipments, EAB is an invasive insect that does not have any predators to keep its population in

check. It was first found around Detroit, Michigan in 2002 and was first discovered in New York State in Cattaraugus County in June 2009. In New York State, there are over 900 million ash trees (7 percent of all New York trees); all are at risk.

Ash trees provide shade, beauty and food for wildlife. Ash wood is economically valuable – white ash is the wood of choice for baseball bats. If all ash trees are lost to this invasive pest, the nationwide economic loss is estimated to be 20 to 60 billion dollars.

#### **Description and Life Cycle**

Emerald Ash Borer (EAB) is a small beetle with metallic green wing covers and a coppery red or purple abdomen. It is about  ${}^{3}/{}_{8}$  to  ${}^{5}/{}_{8}$  inch long and fits easily on a penny. The life cycle begins in mid-May to mid-August when overwintering adults lay eggs in ash bark, where the eggs will eventually hatch. The inch-long, cream-colored, segmented larvae then tunnel into the tree. Between August and October, larvae cause damage by feeding just below the bark in tunnels (called galleries) in phloem (the tree's plumbing). The immature EABs overwinter under the bark until May or June when they emerge as adults, leaving distinctive  ${}^{1}/{}_{8}$  inch D-Shaped exit holes in the outer bark of the branches and trunk. The adult beetle cannot fly more than a  ${}^{1}/{}_{2}$  mile – people moving infested wood from one place to another contribute to its spread over long distances.

#### Damage

It is the borer's S-shaped galleries that damage the tree by disrupting water and nutrient transport. The canopy of recently infested trees thins as the branches die; heavily infested trees die back from top to bottom. Eventually, the entire tree dies. Other signs include yellowing and browning of leaves and extensive sprouting of small, twiggy branches from the roots and trunk.

## Purple Prism Trap—Let It Be

If you see a purple prism trap, leave it alone. The purple prism trap is a tool used to detect and monitor infestations of EAB – they are not for management of infested trees. To attract adult beetles, the traps are purple and covered with a sticky lure that smells like a stressed ash tree. The traps are inspected throughout the summer and any EABs or similarly looking insects are sent to a lab for identification. In Rockland County as elsewhere in the state, these traps are hung in ash trees along roadways and in parks and campgrounds.

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### Lend a Hand in Slowing the Spread of EAB

New Yorkers can help slow the spread of EAB by taking precautions with firewood. This destructive borer and other invasive tree pests are often, though unintentionally, moved from one area to another in firewood.

- Get firewood for your home from a local source (no more 50 miles away). All vendors of firewood must provide a Certificate of Source including their name, contact information and source of firewood.
- Leave all firewood at home when you go on vacation please do not take firewood to vacation homes, campgrounds or parks. At your destination, get firewood from a local vendor or at the campground. Ask for a receipt or label that has the firewood's source, contact information and name of vendor.
- For firewood cut from your property, you must have a Self-issued Certificate of Source with your name, contact information and source. The firewood must be used within 50 miles of origination.
- Firewood that is labeled to meet New York's heat treatment standards to kill pests (kiln-dried) may be transported more than 50 miles from the source, including from out-of-state.
- Wood chip mulch should be no larger than one inch by one inch by four inches (1"x 1"x 4").
- Trees pruned or removed for tree maintenance or firewood should be carefully inspected for symptoms of EAB; when insects and/or suspicious symptoms are found, samples and/or digital photos should be submitted for diagnosis to Cornell Cooperative Extension of Rockland County at no cost.
- Watch for signs of infestation of ash trees. If damage is consistent with known symptoms of EAB infestation, report suspected damage by calling the DEC's EAB hotline and appropriate action will follow as time and resources allow.

To learn more about emerald ash borer, firewood regulation, or how you can help slow the spread, call the **DEC toll free hotline at 1- 866-640-0652** or visit <u>http://www.dec.ny.gov/animals/7253.html</u> or Horticulture Lab at Cornell Cooperative Extension of Rockland County at 845-429-7085 ext. 3 or by email at <u>rockland@cornell.edu</u>.

#### Sources:

NYS Department of Environmental Conservation, <u>Emerald Ash Borer (EAB)</u> July 2011 <u>http://www.dec.ny.gov/animals/7253.html</u>

The Nature Conservancy, <u>Journey with Nature: Emerald Ash Borer</u> February 22, 2011 <u>http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/indiana/journeywithnature/emerald-ash-borer.xml</u>

Smallidge, Peter et al <u>Emerald Ash Borer: Recommendations for Homeowner and Woodland Owner Action</u> August 4, 2009 <u>http://www.nyis.info/Insects/PDF/EAB\_recommendations\_home\_and\_woodland\_080409.pdf</u>

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The information on pest management for New York State contained in this publication is dated (08/2011). The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or PMEP (http://pmep.cce.cornell.edu/), the Cornell Cooperative Extension pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for reading and following manufacturer's labeling and instructions

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