



Town of Wilbraham
Office of the Tree Warden
240 Springfield Street
Wilbraham, MA 01095
July 2016

INVASIVE SPECIES ALERT: EMERALD ASH BORER



The Emerald Ash Borer (EAB), *Agrilus planipennis*, is a beetle from Asia that was identified in July 2002 as the cause of widespread ash tree death in Southeast Michigan and Windsor, Ontario, Canada.

Since its discovery, this invasive insect has destroyed millions of trees, costing taxpayers tens of millions of dollars to remove dead, damaged trees from communities and homes, possibly endangering our forests.

The Emerald Ash Borer spread primarily because of human transportation of infested firewood. Now, a significant infestation has been discovered in Southern New England and upstate New York. States where infestations exist have instituted an EAB quarantine which restricts the movement of trees and wood products.

*Residents are urged
to report symptoms of
infestation in trees.*

Identification

Adult Beetles are metallic green and about 1/2" long. Males are smaller than females and have fine hairs on the front of their chest. The abdomen is metallic purplish red and can be seen when the wings are spread.

Larvae reach a length of 1" to 1 1/4" and are white or cream-colored. Only the mouthparts of the brown head are visible. The abdomen has 10 segments, the last sporting a pair of brown, pincer-like appendages.

Watch out for and report these symptoms:

- Small, D-shaped exit hole (about 1/8" diameter) on ash trees
- Serpentine (s-shaped) larval galleries under the bark
- Excessive epicormic branching on the tree trunk
- Tree death from the top down
- Small, jagged holes excavated by woodpeckers in their feeding search for larvae

INVASIVE SPECIES ALERT (cont.)

Quarantine and Disposal:

Report suspicious trees immediately to the authorities noted below. Wood cut from infested trees should be left on site or brought to approved disposal yards within the quarantine zone. Infested wood shall not be moved outside of quarantine zones without approval from permitting authorities. For detailed information of quarantine requirements, please see:

massforestalliance.org/eab/

More information and to report infestations:

If you think you have seen this beetle, we encourage you to submit a report and photos by going to

www.massnrc.org/pests/albreport.aspx or calling **617-626-1779**. Images may also be sent directly to pestalert@massnrc.org.

To learn more about this infestation please visit:

www.emeraldashborer.info - The latest information about EAB in the USA

<http://na.fs.fed.us/fhp/eab/> - USDA Forest Service Emerald Ash Borer Homepage

<https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs> - USDA, APHIS, PPQ Pest Detection Emerald Ash Borer Homepage

http://www.na.fs.fed.us/spfo/-pubs/pest_al/eab/eab.pdf - USDA Forest Service Pest Alert Emerald Ash Borer



Actual size



Adult Emerald Ash Beetle



Purplish red abdomen on adult beetle.



(Bottom to top) Second, third, and fourth stage larvae.



Gallery of an Emerald Ash Borer Larva



D-shaped holes where adult EAB beetles emerged



Tree damage from woodpecker trying to reach EAB larvae

INVASIVE SPECIES ALERT (cont.)



Host Trees

In North America, the Emerald Ash Borer is known to infest all species of ash trees. Ash can be recognized by the presence of compound leaves which are arranged opposite of one another on the branches (see above).

Adult beetles nibble on ash foliage, but cause little damage. The larvae feed on the inner bark of ash trees, disrupting the tree's ability to transport nutrients and water, causing the tree to die. Evidence suggests the EAB is generally established in an area for several years before it is detected.

Alert!

Invasive insects like the Emerald Ash Borer can be spread when infested firewood is transported to new areas. You can help stop the movement of these pests and protect our forests and trees by doing the following:

- Do not bring firewood from home
- Use local sources of firewood
- If you have brought firewood from home, DON'T take it with you, DON'T leave it -- BURN IT!



Ash tree killed by Emerald Ash Borers
(note the serpentine galleries)



Epicormic branching



EAB beetles inside their distinctive
D-shaped exit holes

INVASIVE SPECIES ALERT (cont.)

EMERALD ASH BORER LOOK-ALIKES



Emerald
Ash Borer



Sixspotted
Tiger Beetle



Dogbane
Beetle



Japanese
Beetle



Two-Lined
Chestnut Borer



Bronze
Birch Borer



Green June Beetle



All insects
are at the same
size scale

Other Invasive Insect

Asian Long-Horned Beetle (ALB)



The ALB was accidentally introduced into the United States, where it was first discovered in 1996. This insect prefers maple, but it affects of 12 types of trees. Adults are about 1-1/2" long. They are shiny black with about 20 white spots on each wing cover and long black and white antennae. The upper sections of the legs of the adults are whitish-blue. ALB can be distinguished from related species by the markings on the wing covers and the pattern of the antennae. Unlike EAB, the Asian Long-Horned Beetle's exit holes are perfectly round, 3/8" diameter. Besides infested trees, look for adults that may become trapped in swimming pool filters.

More information and to report infestations:

If you think you have seen the Emerald Ash Borer or Asian Long-Horned beetles, we encourage you to submit a report and photos by going to www.massnrc.org/pests/albreport.aspx or calling 617-626-1779. Images may also be sent directly to pestalert@massnrc.org.