

Friday, February 27, 2015

## **Emerald Ash Borer**

### ***Agrilus planipennis***



Emerald ash borer (EAB), *Agrilus planipennis* Fairmaire, is an exotic beetle that was discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia.

Since EAB was discovered 13 years ago in southeastern Michigan, it has quickly spread throughout many northeast and mid-west states. Several spot infestations are very close to Delaware in Maryland, Pennsylvania, and New Jersey, but it hasn't been found within our borders yet. Ash is a common forest tree in many areas with mature infestations – ie. the Great Lakes states – and stands there are easily recognized. Because the trees are all dead. Once established, Emerald ash borer (EAB) will spread quickly and infest all ash trees in a city or community. With no control measures taken, the city can expect all ash trees to die within 6-10 years. For a city or community that is responsible for maintaining street, park or other trees, this presents a huge financial liability. For example, Fort Wayne, IN first discovered EAB in 2006 and had to remove 9,000 trees between 2011 and 2012. Fort Wayne reported not only financial hardship, but the massive tree removal exceeded what local arborists could handle. In addition to the costs, EAB threatens city tree canopy cover which affects the value of property and parks.

Given this reality, cities and communities must plan their response to EAB to limit sudden financial costs by spreading control costs over several years. Two methods are used which work together. Begin removing ash trees early to reduce inventory and apply chemical treatments to some trees to prevent infestation.

Tree replacement and canopy cover is important for many communities. Trees selected for replanting should be diverse to avoid future pest problems that may impact other species. Beginning to replant trees today can help reduce the canopy loss that EAB will cause.

If you have questions, have a declining ash tree, or believe you've seen EAB – contact Jimmy Kroon at the Delaware Department of Agriculture. 302-698-4586 or [jimmy.kroon@state.de.us](mailto:jimmy.kroon@state.de.us)

## Resources:

Most recent Emerald Ash Borer map

[http://www.emeraldashborer.info/files/MultiState\\_EABpos.pdf](http://www.emeraldashborer.info/files/MultiState_EABpos.pdf)

Evaluate management options with the Purdue University Cost Calculator

<http://extension.entm.purdue.edu/treecomputer/>

Learn more at EAB University

[http://www.emeraldashborer.info/eab\\_university.cfm](http://www.emeraldashborer.info/eab_university.cfm)

Insecticide options for protecting trees

[http://www.emeraldashborer.info/files/multistate\\_EAB\\_Insecticide\\_Fact\\_Sheet.pdf](http://www.emeraldashborer.info/files/multistate_EAB_Insecticide_Fact_Sheet.pdf)

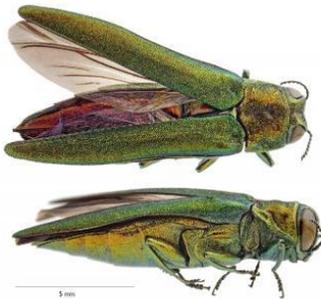
## Protect Delaware Trees and Communities

### *Don't Bring in Wood from the Emerald Ash Borer Quarantine*

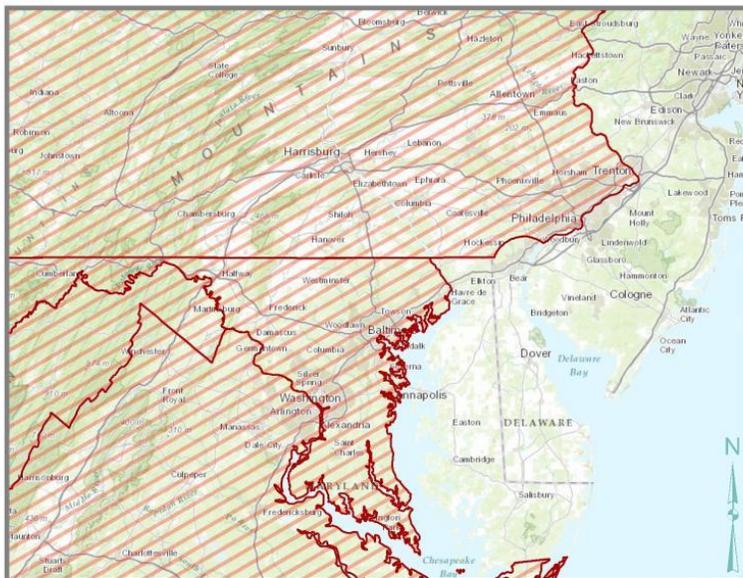
The spread of emerald ash borer has been accelerated by movement of host material by humans. USDA has a quarantine in place to stop movement of host materials out of infested areas. You can help keep emerald ash borer out of Delaware.

### **Do not move these materials from quarantine areas into Delaware.**

- Ash nursery stock.
- Ash logs.
- Any other ash material living, dead, cut, or fallen including stumps, roots, branches, mulch and chips.
- Firewood - Due to the difficulty of distinguishing between species of hardwood firewood, **all hardwood firewood** is quarantined.



 Emerald Ash Borer Quarantine Boundary



Data Credit: ESRI & USDA APHIS / Photo Credit: Kent Loeffler @ Cornell University / Quarantine as of March 2013