

NYBG/125

STRATEGY FOR CONSERVING ASH TREES IN THE NORTHEAST:

COLLECTION, ANALYSIS, AND OUTREACH

FREQUENTLY ASKED QUESTIONS

- What is killing our Ash trees?
- What is the Emerald Ash Borer (EAB)?
- Where is the Emerald Ash Borer found today?
- What species does the Emerald Ash Borer attack?
- How do you identify Ash Trees?
- What are the signs and symptoms of the Emerald Ash Borer?
- What are the impacts of the Emerald Ash Borer?
- Why should I care about the Emerald Ash Borer?
- Is there a way to stop or manage the Emerald Ash Borer?
- What can I do about the Emerald Ash Borer?

What is killing our Ash trees?

- Ash trees worldwide are threatened by a variety of pests and diseases.
- A fungal disease called Anthracnose infects Ash trees and causes leaf blotches and defoliation. Anthracnose is not fatal, but may predispose trees to predation by insects, including the Emerald Ash Borer.
- Verticillium is another fungal disease that infects the water-conducting tissue (xylem) of a wide variety of trees, including Ashes.
- Ash trees are also attacked by....
- The greatest threat to Ash trees in North America is the Emerald Ash Borer (EAB).

What is the Emerald Ash Borer?

- The Emerald Ash Borer (EAB) is a highly destructive invasive insect pest from Asia.
- The species (*Agrilus planipennis*) is related to native North American tree-boring beetles in the ... group.

- Identification..... narrow body about 1/2 inch long and 1/8 inch wide with a flat head, metallic green color.
- Life cycle..... adults feed on leaves and lays eggs from June to August. Larvae are white and flat, have distinctive bell-shaped segments, grow to about 1 long; feed on inner bark.

Where is the Emerald Ash Borer found today?

- The EAB's native range includes China, Korea, Japan, Mongolia and Russia.
- The EAB was first detected in Windsor, Ontario and Detroit, Michigan in 2002 by Dr. David Roberts and entomologist at Michigan State University. The species was probably present several years prior to 2002. Dr. Roberts and his colleague at MSU, Deb McCullough, coined the name "Emerald Ash Borer".
- The EAB probably arrived in ash wood used for packing or pallets several years prior to 2002.
- Canadian distribution (as of 2016).
- US distribution (as of 2016).

What species does the Emerald Ash Borer attack?

- The EAB's preferred host are Ash trees (*Fraxinus* spp.) in the Olive family.
- There are approximately XX Ash species worldwide and XX species native to North and Central America.
- The EAB attacks all Ash trees, whether wild grown or cultivated.
- Mortality is very high (e.g.....).
- A few species show reduced susceptibility (e.g.....).
- The EAB does not attack Mountain Ash (*Sorbus* spp.) which are related to apples not ash trees.

How do you identify Ash trees?

- Ash tree Identification

What are the signs and symptoms of Emerald Ash Borer infestation?

- S-shaped larval gallery under the bark.
- D-shaped exit hole about 1/8 inch in diameter.
- Symptoms include:
 - Dead branches due to disrupted water and nutrient flow.
 - Canopy thinning and die back beginning near the top of the tree.
 - Woodpecker and squirrel feeding.
 - Vigorous growth (epicormic shoots) on main stem and/or major canopy branches.
- Infested trees die within two years, sometimes within the first year of attack.

- Consult an arborist or entomologist for expert diagnosis.

What are the impacts of Emerald Ash Borer?

- The EAB has killed millions of Ash trees since 2002. Billions of trees are threatened, making the EAB one of the most destructive insect pests ever seen.

Why should I care about the Emerald Ash Borer?

- Ash trees are an important component of healthy woodlands in the eastern United States and streamside habitats in the west.
- Ash trees are widely planted throughout North America in rural and urban settings.
- Trees reduce air and noise pollution, increase property value, help reduce stress, provide wildlife habitat and add beauty to a community.
- Ash wood is used to make furniture, hardwood floors, baseball bats, tool handles, electric guitars, hockey sticks and other materials that require high strength and resilience.
- Black ash is a vital and irreplaceable material used by Native Americans to construct baskets for utility, decoration and ceremony.
- Quarantines to protect uninfected areas can restrict the movement of wood products such as firewood.
- Dead and dying trees pose a hazard to life and property.
- Removing dead trees is very expensive.

Is there a way to stop or manage the Emerald Ash Borer?

- The EAB lacks the predators, parasites and diseases that help keep the populations low in its native range of Asia.
- North American Ash trees, unaccustomed to contact with the EAB have not evolved adequate defenses.
- Biocontrols.....
- Pesticides....
- Phylogenetic research and breeding. This project!!