

Managing the Emerald Ash Borer



Hunterdon County Division of Parks and Recreation

Do you have an ash tree on your property?

Opposite Branching



Compound leaves 5-9



Diamond-patterned bark



White Ash trees grow up to 80 feet tall and have a crown spread of about 50 feet.

What is the Emerald Ash Borer?

- ▶ The EAB is an invasive flying beetle.
- ▶ Adult beetles are an emerald green brighter than any other beetle in North America
- ▶ It is the size of a penny
- ▶ The adult beetle nibbles on the leaves of an ash tree.
- ▶ Larvae are cream color and have a 10 segmented abdomen
- ▶ The larvae burrow into tree bark and eat the cambium and phloem of a tree
- ▶ Adult beetles are attracted to the colors purple and green



How the EAB kills the Ash tree

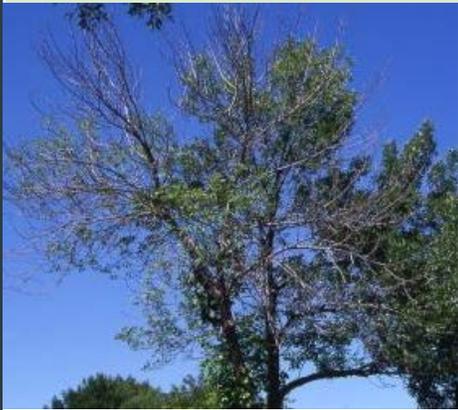
- ▶ Larvae feed on the cambium and phloem of a tree, critical for nutrient and water transport.
- ▶ The tree starves death
- ▶ 99.9% of untreated ash trees are killed once infested with the EAB



Pictured: A sample from the cambium of an ash tree once the bark is removed.

Signs of the EAB

Crown die off



Vertical split in bark



Epicormic sprouting



D shaped holes



Serpentine tracks



Can you save your trees?

Trees can be saved if:

- ▶ Healthy and vigorously growing, with more than half their leaves.
- ▶ They enhance your landscape.
- ▶ Valuable to the owner
- ▶ Showing minimal outward signs of EAB infestation

Treatment:

- ▶ Begin treatment of high value ash trees throughout NJ NOW.
- ▶ Homeowners can treat trees with trunks less than 20 in. at breast height with 1.47% imidacloprid
- ▶ Professionals can treat trees with a diameter at breast height greater than 20 in. with imidacloprid, dinotefuran, or emamectin benzoate

Which trees should not be saved?

Trees should not be saved if:

- ▶ Unhealthy, with more than half of their leaves missing.
- ▶ Planted in poor sites or are not important to the landscape
- ▶ Showing many outward signs of EAB infestation, Such as woodpecker damage, bark splits, and water sprouts at the tree base.

Removal and Recycling

- ▶ Any trees determined to be a high safety risk should be removed immediately.
- ▶ Any actively infested trees should be cut down and chipped as soon as possible and then left on site (in the municipality).
- ▶ For all other ash, it is best to complete removals in the fall and winter. The material must be processed (chipped or de-barked) before emergence (by late April)..
- ▶ Utilize ash wood as completely and as locally as possible. Municipalities can recycle ash for use as firewood or wood chips. Keep ash wood local!



Long term expected outcome

Researchers are optimistic that with our help it may be possible to suppress EAB densities for the long-term survival of ash trees in North America

Click on these links for further information

- ▶ <http://www.emeraldashborer.info/eabu.php>
- ▶ https://www.invasiveinsects.ca/eab/why_m.html
- ▶ <https://extension.entm.purdue.edu/EAB/index.php?page=management/homeowners>
- ▶ <https://www.na.fs.fed.us/>