

Emerald Ash Borer

(EAB)

What is EAB?

The Emerald Ash Borer as the name describes, is a metallic green very destructive wood-boring beetle between 1-1.5 cm in length that only attacks ash trees. The ash trees attacked by EAB usually die within 2- 3 years. All species of ash are prone to its attack, except for the mountain ash, as it not a true ash variety.

Did You Know?

Most damage to ash trees is caused by EAB larva.

How is it spread?

This insect is native to China and was spread to North America through infested wood that was transported commercially. It was first discovered in Windsor Ontario in 2002. Since its discovery, this insect has spread to the provinces of Quebec, Ontario as well as to 15 states in USA. EAB poses to be a major economic and environmental threat to the forests across North America.

What does it do to the ash trees?

EAB is responsible for the death of more than six million ash trees in Michigan and southern Ontario. The EAB attacks both weak and healthy ash trees of all sizes from 1 cm in diameter. The larvae of the EAB bores D shaped holes approximately 3mm in diameter under the bark of the ash trees to feed on the inner bark and this cuts the flow of nutrients and water to the leaves hence killing the tree. Insecticides are helpful in saving the ash trees from EAB attack.



Damage on the Inside!

Galleries formed by the larva under the bark, cut off the flow of nutrients from the roots of the tree (image above).

It is difficult to detect this insect in the early stages of infestation. In fact the EAB may go undetected for 2-3 years after it has attacked an ash tree. The signs of trees affected by the EAB include yellowing of foliage, dead branches and thinning of the crown. Towards the end of a tree's life, heavy seed production is typically seen in the tree in reaction to this stress. The D shaped exit holes are also signs of EAB infestation.

What does it do to the ash trees?

As a responsible citizen, you are in charge for the health of the trees that are present on your property. Therefore, stop planting ash trees. If you do have ash trees on your private property, then make sure that they are properly treated with insecticides registered by the pest Management Regulatory Agency. If you learn that you are in a neighborhood where EAB has been detected, then get in touch with an professional arborist who is knowledgeable about tree biology and physiology. The arborist should be a great resource for you as he/she can determine the health of your ash tree and advice you accordingly.



Treatment

Single healthy trees may benefit from an injection of TreeAzin to protect itself from an EAB attack.

Remember that:

- Even after an infested tree has been cut down, EAB continues to live in the wood. Therefore, do not bring the infested wood into your homes, cottages or campsites.
- Report any outbreaks of this insect to your local municipality.
- You should buy your wood locally and know where it was derived from.
- If you suspect EAB in firewood do not move that wood to other locations as this will increase its chances of spread.



References

1. Ontario Ministry of Natural Resources; Ontario Commercial Arborist Association. City of Toronto, 2012.
2. Emerald Ash Borer Fact Sheet - Lake Simcoe Region Conservation Authority. www.lsrca.on.ca/pdf/eab_facts.pdf.
3. About the Emerald Ash Borer | City of Ottawa. ottawa.ca/en/residents/water-and-environment/.../emerald-ash-borer