

## Emerald Ash Borer – What YOU can do

### Background

The Emerald Ash Borer (EAB) is an invasive, wood-eating beetle that is threatening Ontario's ash trees. The insect was first found in North America in 2002 and was likely imported from Asia through improperly treated wood packaging material. It has spread rapidly, mostly through the movement of firewood or other infested ash wood material. Discovered in Ottawa in 2008, the EAB has had a major impact on street trees and parks. EAB was confirmed in Kanata last summer and, although not yet confirmed here, is moving closer to Renfrew County. The greatest issues facing Renfrew County as a result of EAB are the loss of ash street trees, the potential impact to unique ash forest stands (e.g. black ash swales) and the financial impact on the firewood industry that will result if/when the insect is confirmed within County boundaries. Once presence is confirmed in one location, an entire geographical area (i.e. county) is quarantined under the CFIA, preventing the movement of firewood of ALL species from within the quarantine to non-quarantined areas.

### Identification

Ash trees suffer from a number of other stresses in this area, mostly related to drainage, drought and root disturbance. Early detection of EAB is difficult and usually requires branch sampling in the upper crown of the tree and analysis by a trained professional. By the time the tell-tale D-shaped exit holes of emerging adults are present in the trunk of the tree, severe damage has already occurred. Crown dieback, bark cracks and increased woodpecker activity can be symptoms of EAB presence – but also of general poor health.

Adult Emerald Ash Borers are metallic green, 8.5 to 13.5mm long, and slender. The head is flattened and compound eyes cover most of the side of the head. The upper side of the abdomen is purplish, and is visible when the wings are open. Adults lay eggs in the bark of an ash tree. Larvae hatch from the eggs, then tunnel into the tree and feed on the cambium, a layer of live wood between the bark and the sapwood, carving out an S-shaped pattern or “gallery”. The tree dies from the top down, usually within a few years of initial infestation. Adults also feed on the leaves after emergence, but the main damage is done during the larval stage.



### Five Things YOU Can Do

- 1) **Don't move firewood.** This is a good practice in general, since a number of serious forest pests can be housed in dry or rotting wood. It is especially important not to bring any unused firewood home with you if you have been camping outside of the County.
- 2) **Don't plant ash trees.** Spread into our area is likely and the continued planting of ash trees will result in a loss of investment. Plant another native species such as well-suited to your site.
- 3) **Explore your treatment options.** If you have an ash tree on your property that you can't bear the thought of losing, there is a preventative treatment approved for use in Canada that has proven effective in protecting against EAB ([www.bioforest.ca](http://www.bioforest.ca)).
- 4) **Plant a new tree.** Keep in mind that treatment may not be a long-term solution if you don't plan to continue it over time – retreatment is required every 2 years. Another option is to plant a new tree in the same area as your ash tree to lessen the visual impact if the tree becomes infected with EAB and needs to be removed. Your best bet is to plant now to give the new tree time to grow before the potential removal of your ash, and to choose a native tree species well-suited to your site.
- 5) **Be kind to your ash.** Although the insects are known to attack healthy and unhealthy specimens, there is hope that some trees may be genetically resistant. Keep your ash trees healthy by avoiding damage to the tree above and below ground, being careful to avoid compaction from heavy vehicle traffic or construction within the dripline of the tree. Pre-emptive removal of ash on your property is NOT recommended.

**Want more information?**

[www.bioforest.ca](http://www.bioforest.ca): General and treatment information

<http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/26856.pdf>: Identification and tips on detecting EAB damage

<http://www.inspection.gc.ca/plants/plant-protection/insects/emerald-ash-borer>: Canadian Food Inspection

Agency information site on EAB