
EMERALD ASH BORER UPDATE FOR RENFREW COUNTY

DECEMBER 2016

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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, EAB has had a major impact on street trees and parks. Ash is a common street tree in many towns and cities in Central Ontario, since it was frequently planted as a replacement for elm trees that died as a result of Dutch Elm Disease in the 1970s and 1980s. Ash also exists as a minor component in hardwood and mixedwood forests in Renfrew County, is common along roadsides and farmfields, and is the dominant species in black ash swale ecosystems.

CURRENT STATUS IN RENFREW COUNTY

Emerald Ash Borer was discovered in Arnprior in the spring of 2013. In 2015, EAB was discovered in Horton Township (Lavallee Road) and the Town of Renfrew (O'Brien Road). The Ministry of Natural Resources and Forestry (MNRF) conducted aerial and ground surveys in 2016 and updated maps of infested areas are included in this report, which show significant infested area in the Arnprior and Renfrew areas, and spread up the Highway 417 and 60 corridors. The County of Renfrew received 5 EAB traps, donated by Bioforest Technologies Inc (www.bioforest.ca), which were set and monitored in the Pembroke, Lake Dore and Eganville areas. These tested as negative, but are not a significant enough sample size to determine whether the pest is present in these areas at this time.

It is likely that EAB is present in other locations but not formally discovered or reported. With the regulation of all of central Ontario for EAB by the Canadian Food Inspection Agency, no formal trapping or surveys are being done by the CFIA. The MNRF monitors for EAB through their annual forest health survey program.

IMPACTS OF EAB IN 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.

The whole of Renfrew County is included in the Canadian Food Inspection Agency's (CFIA) regulated area for Emerald Ash Borer through a [ministerial order](#), which means that movement of firewood or other contaminated materials is not prohibited, as long as it stays within the regulated area. However, to slow the spread of this insect that has not yet reached most of Renfrew County, it is recommended to not move firewood and dispose of infested ash in a manner that prohibits further development and spread of larvae that might still be inside (e.g. chipping to <2.5cm in any direction on site, or burning on site). It is prohibited to move specific materials to unregulated areas, including, ash trees, branches, logs, wood, and bark, **firewood of all tree species**, and tree trimmings and yard waste. You can view the latest map of regulated areas from the CFIA [here](#).

If you are a firewood producer, non-ash firewood can be moved out of a regulated area by registering under the Emerald Ash Borer Approved Facility Compliance Program with the CFIA. Click [HERE](#) or contact the CFIA for more information.





Emerald ash borer 2004-2015 and 2016

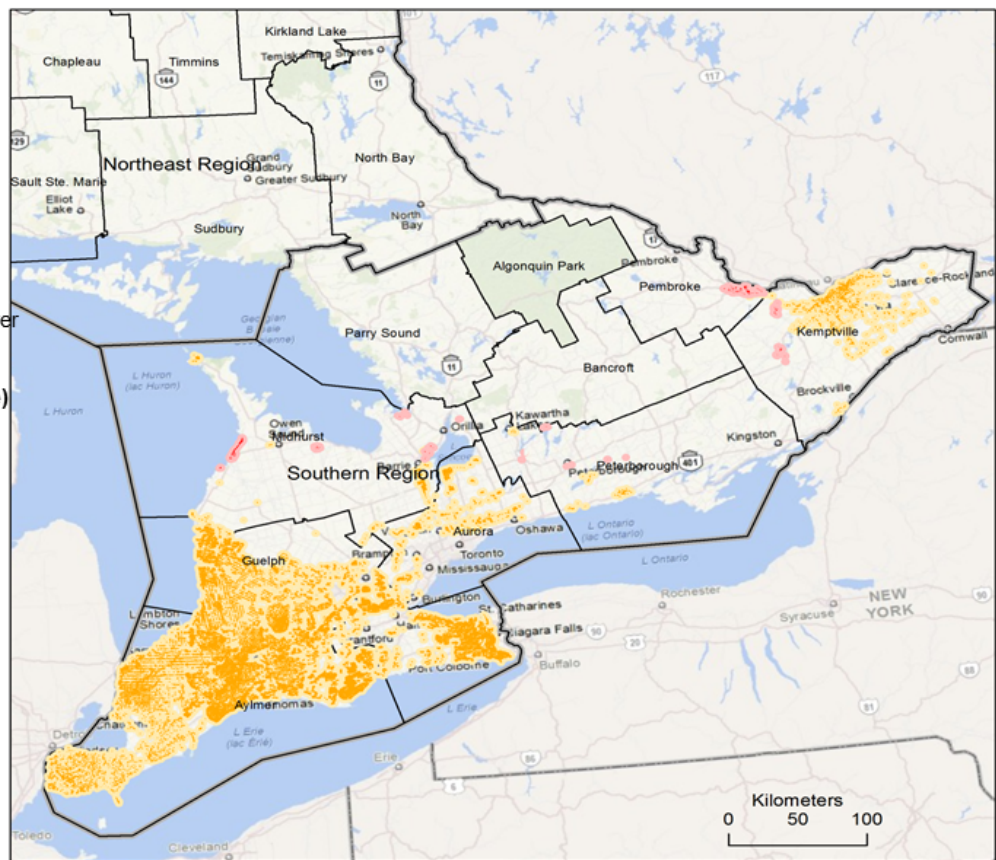
Overview

Areas-within-which emerald ash borer caused decline and mortality to ash species.

**237,595 ha (2004-2015 cumulative)
4,688 ha 2016**

 Area of moderate-to-severe decline and mortality 2004-2015

 Area of moderate-to-severe decline and mortality 2016




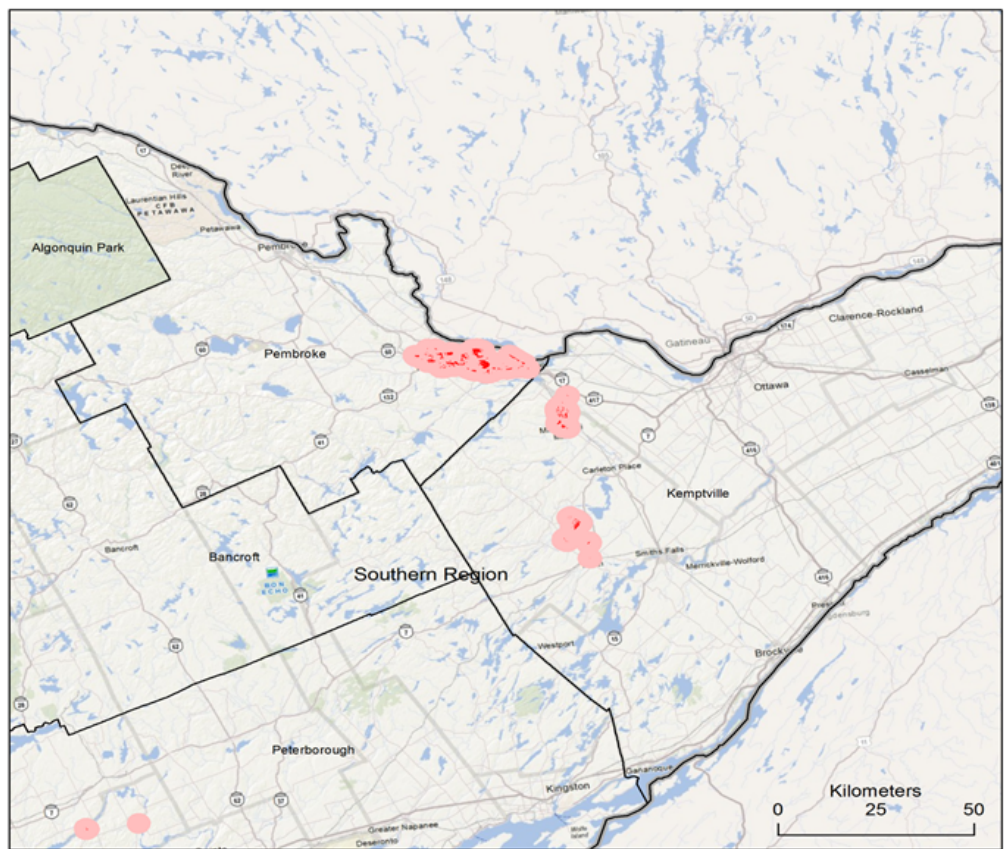
Emerald ash borer 2016

Expansion

Pembroke and Kemptville districts.
Areas-within-which emerald ash borer caused decline and mortality to ash species.

2,499 ha decline and mortality

 Area of Decline and Mortality



IDENTIFYING EMERALD ASH BORER DAMAGE

The emerald ash borer has 4 different life stages that can be identified at different times of the year. Most of the damage is done by the larvae stage of development.

A wide variety of information on the identification of EAB is available online. Some resources include:

- [Ontario's Invading Species Awareness Program](#)
- [Forest Invasives Canada](#)
- [Canadian Forest Service: A Visual Guide to Detecting Emerald Ash Borer Damage](#)

Once infested with EAB, trees typically die within 2-3 years of infestation. Early detection is difficult, and once damage is obvious, the tree is usually heavily infested. **Similar signs and symptoms can be caused by other pests, drought or drainage issues, therefore suspect trees should be assessed by an expert.**

The most evident signs of insect presence include:

- Larval gallery: S-shaped gallery created by larva when feeds between bark and sapwood.
- D-shaped exit hole: 3.5 – 4mm wide. Chewed by adult at time of emergence.
- Leaf notch: New adults feed on ash leaves and cut notched on side of leaf.
- Epicormic branching: Suckers/shoots from trunk and roots when tree is under stress.
- Cracks in bark: Vertical splits on branches and trunk. Young, smooth bark may appear pink over galleries.
- Yellow foliage, dead branches and thinning crowns
- Heavy seed production
- Increased feeding by woodpeckers, attracted to the tree by dying wood to eat larvae.



FIGURE 1. EAB LARVAL GALLERIES



FIGURE 2. EAB EXIT HOLE ON AN ASH IN RENFREW

YOU CAN HELP SLOW THE SPREAD OF EAB. HERE'S HOW.

- 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 your community is likely and the continued planting of ash trees will result in a loss of investment. Plant another native tree species 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).
- 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 or that biological treatments currently in experimental stages may be successful. 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.**

INFORMATION FOR RENFREW COUNTY RESIDENTS

Only ash trees are susceptible to damage by EAB. [Click here](#) for some helpful tips from the City of Ottawa on identifying ash trees species. Note that mountain ash is not a true ash (*Fraxinus*) species and is not affected by EAB.

If you are concerned with the health of your ash tree, and feel its condition may be creating hazards around your home, the publication "[What you need to know about the management of the Emerald Ash Borer](#)" offers guidelines for hiring tree care services to manage urban trees. If you decide to take trees down yourself, please work safely and contact your municipality for disposal sites. If you are able to burn wood on site, do so promptly. Please don't bring the wood to the cottage or share with anyone as moving the wood will also move any EAB that might be inside.

If you have an ash tree on your property, consider planting a new tree of a different, native species now to lessen the impact if your tree does have to be removed. Treatment is available but must be complete every 2 years to be successful. For more information, see www.bioforest.ca.

MANAGING IMPACTS ON WOODLOTS

For woodlot owners, there are steps you can take to improve the health of your woodlot and reduce the impact of an EAB infestation. Check out [this publication](#) by the Eastern Ontario Model Forest, and [this pest alert fact sheet](#). See also this video titled "[Emerald Ash Borer: Facts and Tactics for Woodlot Owners and Forest Managers](#)".

RESOURCES FOR MUNICIPALITIES

Municipalities of all sizes in Ontario now have a suite of tools developed by the Eastern Ontario Model Forest to assist in their current or pending battle against the Emerald Ash Borer (EAB). These can be viewed or downloaded for free below and include:

(1) An informative municipal-oriented overview video entitled "Emerald Ash Borer: Facts & Tactics for Urban Residents & Municipal Officials". [To view or download click HERE](#).

(2) A concise slideshow designed to help municipalities in "Developing a Municipal Emerald Ash Borer Management Strategy: Operational Guidelines and Recommendations for Ontario Municipalities". [To view or download click HERE](#).

In town centres, parks and other areas frequented by the public, municipalities should consider conducting a survey to create a tree inventory, identifying the location and condition of ash trees on municipal property. This would allow easier, frequent assessment of tree health and potential hazards, as well as help budget forecasting for removal costs and replacement planting. A plan should also be in place for disposing of infected ash material. The County of Renfrew's forestry staff are available to provide advice on these matters.

ADDITIONAL RESOURCES

[Canadian Food Inspection Agency](#) : Information on the regulation of wood movement
[Eastern Ontario Model Forest](#): General information, publications and videos on EAB
[Bioforest](#) : Information on preventative treatment
[City of Ottawa](#): How the pest is being managed by our neighbours
[Forest Invasives Canada](#): Information on identification, signs, symptoms and impacts of EAB.
[Natural Resources Canada](#): Status, spread and identification
[Ontario's Invading Species Awareness Program](#): Resources, photos and general information



FIGURE 3. EAB TRAP SETTING AT SHAW WOODS, SPRING 2016.