

Emerald Ash Borer – Frequently Asked Questions

What is EAB?

EAB is a highly destructive insect pest of ash trees that was discovered in Canada for the first time in the summer of 2002. It has killed a large number of ash trees in south western Ontario and poses a major economic and environmental threat to urban and forested areas across Canada and the U.S.

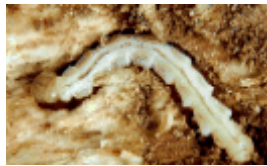
EAB does not pose a risk to human health.

What does EAB look like?

The beetle is metallic green in colour and is 8.5-14.0 mm (about 1/3 to 1/2 inches) long and 3.1-3.4 mm (1/8 inch) wide. While the back of the insect is an iridescent, metallic green, the underside is a bright, emerald green. The body is narrow and elongated, and the head is flat. The eyes are kidney shaped and usually black. EAB larva is white and flat, has distinctive bell shaped segments and can grow up to 30 mm long (about 1 inch long).



How does EAB affect trees?



In its larva form (like a caterpillar), emerald ash borer feeds in an S-shaped pattern just under the bark of ash trees. This feeding disrupts the tree's transportation of water and nutrients. Once larvae finish feeding under the bark, they mature into adult beetles that chew their way out of the tree through D-shaped exit holes. Infested ash trees in North America generally die after two to three years, but heavily infested trees have been observed to die after one year of beetle attack.



The adult beetles chew their way out of the tree through "D" shaped holes.



EAB feeds in an "S"- shaped pattern just under the bark leaving marks like these that can be seen once the bark is removed.

What trees species are susceptible to attack by EAB?

In North America, EAB has been found to attack and kill all **North American species of ash**. The Mountain Ash is not related to ash trees and is not attacked by EAB. Infested ash trees in North America generally die after two to three years, but heavily infested trees have been observed to die after one year of beetle attack.

How serious a threat is EAB?

EAB poses a very serious threat to all species of **ash trees** throughout their range in the U.S. and Canada. During the relatively short time that EAB has been in North America, it has built up its populations to damaging levels and is believed to have killed in excess of 20 million trees in the U.S. and Canada. Billions more trees across North America are at risk of infestation and death.

What is the importance of ash trees?

Ash trees are an important part of Canada's urban and rural landscape. They are commonly found on city streets, in woodlots, in windbreaks and in forests across southern Canada. In many areas of western Canada, ash trees are one of the few genera that are suitable for street-planting in urban areas.

Where did EAB come from? How did it get to Canada? How long has it been here?

EAB is native to China and eastern Asia, and was found in North America in 2002. In May 2002, it was discovered in south eastern Michigan in the U.S. and in July 2002, it was found in Essex County in Ontario. As is the case with some other exotic pests that affect plants and trees, it is believed to have been accidentally introduced to North America on imported wood packaging or crating material.

How is EAB spread?

The human movement of infested materials such as firewood, logs, branches, wood chips, nursery stock, chips or other ash wood is the most common way EAB has been spread. Research on EAB indicates the adult beetle can fly up to 10 km., but generally does not stray from the immediate area when it emerges.

Where has EAB been found in Canada?

The Canadian Food Inspection Agency (CFIA) conducts ongoing surveys to determine the leading edge of EAB infestation in Canada and to detect any new populations that may have resulted through human activities, such as the movement of infested firewood, nursery stock or other forest products. In Canada, EAB has been confirmed in the municipalities of Chatham-Kent and Bluewater; Essex; Lambton; Elgin; Middlesex and Norfolk counties, the United Counties of Leeds and Grenville; Brampton; Brantford, Hamilton, Mississauga, Oakville, Ottawa, Pickering, Sault Ste. Marie, Welland, Toronto and Vaughan; in the municipality of Carignan in Quebec and now in Waterloo Region.

Where has EAB been found in Waterloo Region?

The Emerald Ash Borer (E.A.B.) has been detected in two woodlands on either side of Highway 401 at Homer Watson Boulevard. It is thought that the forest pest arrived at this location along the highway several years ago and since that time has become well established in the woodlands.

Who has the responsibility for regulatory control of EAB?

Under the authority of the Plant Protection Act, the **CFIA** is the agency responsible for preventing pests of quarantine significance from entering or spreading within Canada. When pests of quarantine significance become established a decision must be made, in consultation with other federal, provincial and municipal government departments and stakeholders, whether there is merit in trying to eradicate or contain the pest. Continued efforts and cooperation of all partners are required to protect Canada's valuable forest resources.

What is the Canadian Food Inspection Agency (CFIA) and what is their role?

The Canadian Food Inspection Agency (CFIA) is a science based regulatory agency that is dedicated to the safeguarding of food, animals and plants, which enhance the health and well-being of Canada's people, environment and economy. The agency was created in April 1997 for the purpose of combining

and integrating the related inspection services, of four separate federal government departments Agriculture and Agri-Food Canada, Fisheries and Oceans Canada, Health Canada and Industry Canada. The establishment of the CFIA consolidated the delivery of all federal food safety, animal health, and plant health regulatory programs.

What is the proposed CFIA plan to control EAB?

The CFIA believes there is continued merit in slowing the spread of EAB within Canada and protecting this country's vast ash resource. The mandate is to slow the spread of EAB not eradicate the pest.

Consistent with the position of its federal, provincial and municipal partners, the current emphasis is on continued research, surveillance, effective communications and enforcement activities in regulated areas.

The CFIA continues to consult with the Ontario Critical Pest Council, the EAB Science Committee and its partners (including Natural Resources Canada –Canadian Forest Service, the **Ontario Ministry of Natural Resources**, and Agriculture, Food and Rural Affairs), on science-based strategies for the detection and control of EAB.

Biological control and natural tree resistance may play increasingly important roles in managing EAB populations.

Will the CFIA continue to remove trees in infested areas?

No. The removal of infested host trees is no longer considered to be an effective tool in the management of EAB in areas likely to be generally infested. There will be no further tree removals within the regulated areas except for research purposes.

What do I do if I suspect my ash tree is infested?

If you are not in one of the areas regulated for EAB and suspect signs of infestation on your ash trees, contact the **CFIA** at 1-866-463-6017.

If you are in an EAB-regulated area and have recently trimmed or cut down your ash tree, please call the CFIA for directions on disposal.

How can I save my Ash tree if it's infested?

As research is still ongoing, treatment options to combat EAB are still limited. Researchers in Canada and the United States are actively trying to identify safe and cost-effective treatments to stop the EAB including the use of pesticides and experimenting with potential EAB predators and parasites.

As of today, only one treatment option has been approved in Canada. TreeAzin is a biological insecticide, made from a natural product of neem trees, developed by the Canadian Forest Service and BioForest Technologies Inc. TreeAzin is delivered to a tree through a special tree injection system. These injections may only be administered by licensed professionals and injections every two years would be required. For more information on the product and for local service providers, call **BioForest** at 1-888-236-7378.

Can I use pesticides or other methods to get rid of EAB?

TreeAzin is the only registered pesticide in Canada for use against emerald ash borer. TreeAzin is a biological insecticide, made from a natural product of neem trees, developed by the Canadian Forest Service and BioForest Technologies Inc. TreeAzin is delivered to a tree through a special tree injection

system. For more information on the product and for local service providers, call BioForest at 1-888-236-7378 or visit their [web site](#).

If my Ash tree is infected do I have to cut it down?

The answer at this time is **no**.

If your tree is alive, there is no need to cut it down. A tree only needs to be removed if it poses a hazard to people or property from falling branches. Although research to date indicates that the emerald ash borer will kill most trees it infests, it may be several years after infestation before a tree becomes a hazard.

Large dead limbs and trees on personal property may pose a safety and legal liability to property owners and their neighbours. It is the responsibility of property owners to remove these hazards on their own properties and also cover costs associated with removal and disposal of this material. Ash trees on public property, which are the responsibility of your municipality, will be dealt with in the same manner.

Should you have an infested tree or suspect one, you should consult an arborist or tree maintenance company to look at options. An alternative to removal, depending on the extent of infestation, is to treat the tree with a pesticide called TreeAzin. More information is available at www.bioforest.ca. This treatment can also be used to protect a tree from infestation but must be applied every two years and is expensive.

If I suspect EAB has infected my Ash tree should I call a tree service company?

While choosing a professional tree service to look at and potentially remove your Ash tree is entirely your choice, you should choose a reputable company. Below are some helpful tips:

Tips for finding a reputable Tree Care Professional

Check your business phone directory under “Trees, Tree Service, or Tree Care Service”. Although anyone can list themselves in the yellow pages, a listing at least indicates some degree of permanence.

Ask for local references—other jobs the company or individual has done.

Take a look at some and if possible talk to the former client. Experience, education, and a good reputation are signs of a good arborist.

Get more than one written estimate.

Require full details of the work and costs of any additional work that may be necessary. Two or more opinions and written cost estimates are worth your time and efforts. Usually, estimates are free, but expect to pay a fee and always ask before setting the appointment. **Never be pressured or rushed into accepting work by apparent bargains. Never pay in advance.**

A good arborist or tree care professional will:

Offer a wide range of services, including pruning, removal, fertilizing, cabling/bracing, pest control and others, not just tree removal. **Never** use climbing spikes on a healthy tree unless it is being removed from the landscape. **Never** be eager to remove a healthy, living tree. Removal should be the last resort.

What are the by-laws for removing trees on municipal property? [\[Top\]](#)

Each municipality has its own tree management policy or bylaw. Below are links to those bylaws. Please review them.

The Region of Waterloo - A By-law respecting the Conservation of Trees in Woodlands 08-26

The "Woodland Conservation By-law" regulates the cutting of trees in woodlands one hectare (2.48 acres) or larger in area which are not orchards or Christmas tree farms. Thus, it does not apply to shade trees on lawns or street trees. Municipal parks or public works staff or hydro crews may remove trees in publicly-owned woodlands. Any CFIA order to remove infested trees overrides the by-law. Landowners wishing to cut infested trees in woodlands must apply to the Region for a permit to cut trees.

(For the Township of North Dumfries, Township of Wellesley, Township of Wilmot, Township of Woolwich refer to the Regional bylaw above)

City of Cambridge - Tree By-law

City of Kitchener - Tree Management Policy

City of Waterloo - Street Tree By-Law

What are the Cities, Townships, Region and Grand River Conservation Authority doing to stop the spread of EAB?

The Cities of **Cambridge, Kitchener, Waterloo**, the Townships of **North Dumfries, Wellesley, Wilmot** and **Woolwich**, local hydro utilities, and the **Grand River Conservation Authority** along with the **Canadian Food Inspection Agency** are working in cooperation to implement measures to help slow the spread of the pest as well as keep residents informed about what this means to Waterloo Region.

What can I do to help?

- Do not move ash logs, firewood, branches or woodchips into or out of the Region.
- Drop off infested trees at the designated collection sites
- Buy and burn firewood locally; don't take it up to your cottage or campground or bring it back to your home.
- Report signs of EAB infestation to the CFIA. Toll free: 1-866-463-6017, Monday to Friday, 8 a.m. to 4 p.m.

Help Protect Canada's Trees and Forests. For more information visit www.inspection.gc.ca.

Regulated areas

What are the EAB regulated areas and how are they established? [\[Top\]](#)

Regulated areas are created to slow or prevent the spread of pests (including diseases) that could adversely affect humans, animal or plant life. Generally, restrictions or prohibitions are placed on areas where the pest is present or suspected to occur and where there is merit in trying to slow or prevent the spread of the pest. One way to establish a regulated area is through a Ministerial Order.

Regulated areas allow the CFIA to maintain and enforce restrictive measures for the movement of potentially infested wood items from areas where EAB has been found. This is necessary to slow the spread of EAB, to protect the health of Canada's trees and forests and to prevent economic losses to the nursery, lumber and tourism industries and municipalities. Additionally, the Ministerial Orders that define

the regulated areas officially identify the regions of Canada to be infested with EAB. This allows areas in Canada that are not infested with EAB to continue to export ash nursery stock and forest products to our trading partners.

Another way the CFIA establishes a regulated area is by issuing a notice of Prohibition of Movement or Notice of Quarantine to individual property owners to restrict or prohibit the movement of high-risk materials from properties that are confirmed or suspected to be infested with EAB.

Where are the regulated areas in Canada?

The areas that are designated as regulated areas for the EAB under Ministerial Orders:

Ontario

- **Cities of Hamilton and Toronto and the Regional Municipalities of Durham, York, Peel, Halton and Niagara**
- **City of Sault Ste. Marie**
- **Huron County**
- **Municipality of Chatham-Kent and the Counties of Elgin, Essex, Lambton and Middlesex**
- **Norfolk County**

Ontario - Quebec

- **City of Gatineau, in the Province of Québec and the City of Ottawa, in the Province of Ontario**

Quebec

- **Municipalities of Carignan, Chambly, Richelieu, Saint-Basile-le-Grand and Saint-Mathias-sur-Richelieu**

Regulated materials cannot be moved outside of a regulated area without prior written permission from the CFIA.

Is Waterloo Region a regulated area?

Waterloo Region is not yet regulated. A decision on the regulated area (this is done by Ministerial Order) will be made over the next months. For now, the only movement restrictions are on the actual properties where EAB has been detected.

What items are restricted within these regulated areas?

Regulated articles in these areas include: nursery stock, trees, logs, wood, rough lumber including pallets and other wood packaging materials, bark, wood chips or bark chips from ash trees and firewood of all tree species. This order extends to vehicles that were used to carry any of these items. Movement of these materials from regulated areas is permitted only if the materials have been treated to kill or remove all life stages of EAB and if written permission (Movement Certificate) has been obtained from the CFIA inspector.

What does this mean to those in the regulated areas?

This means those in the regulated areas may not move ash trees, nursery stock, logs, lumber, wood packaging or dunnage, wood or bark, wood chips or bark chips or as well as firewood of all tree species out of the regulated areas without written permission from the CFIA.

How is the CFIA increasing public awareness of the requirements of the Ministerial Orders?

The Agency has been increasing public awareness of EAB and the requirements of the Ministerial Orders by:

- publicizing the regulations on the movement of firewood and ash tree materials in newspapers and on the radio;
- actively seeking opportunities to present information or speak on EAB;
- holding public meetings and keeping the public, stakeholders and affected industries up to date through CFIA website information;
- distributing posters and other printed materials to the public, impacted areas and to affected industries; and
- taking effective enforcement actions when warranted.

Continued cooperation from the public is essential if we are to slow the spread of this pest.