

# Emerald Ash Borer in Manitoba

**NEW** - The city of Winnipeg is now an emerald ash borer (EAB) regulated area. It is prohibited to move firewood of all species, as well as ash trees, ash nursery stock or ash wood (including wood chips, wood packaging or dunnage), out of the regulated area without written permission from the Canadian Food Inspection Agency (CFIA). Moving these materials without permission could lead to fines and/or prosecution.

Businesses that wish to move this kind of material from the city of Winnipeg to another area should contact the CFIA to become part of the [EAB compliance program](#)

For more on emerald ash borer in Manitoba, please see:  
[Manitoba Emerald Ash Borer Response Plan](#)

## History of Emerald Ash Borer in North America

Emerald ash borer (EAB), *Agilus planipennis*, is a highly destructive invasive wood boring beetle that kills ash trees. First detected in North America in 2002, in Ontario and Michigan, it is thought that EAB was unintentionally introduced through ash wood packaging material or pallets. Emerald ash borer has killed millions of ash trees in Canada costing billions of dollars.

Parts of Canada and the United States are under federal quarantines to help slow the spread of EAB across North America.

List of North America Emerald Ash borer regulated areas in Canada and the United States: <http://www.emeraldashborer.info/>

## Biology

EAB has a one to two-year life cycle, depending on infestation levels and climate conditions. In Manitoba, it is thought that EAB will have a two-year life cycle. The larvae bore directly into the bark after hatching and begin feeding in the phloem (food conducting tissue) of the tree creating s-shaped galleries. This is the damaging stage of the insect, as the flow of nutrients in the tree is disrupted by the larval feeding. The larvae overwinter under the bark of ash trees and pupate in early spring.

Adult emergence occurs from late May until the end of June. The average length of an adult emerald ash borer is 7.5 to 13.5 mm long and 4 mm wide.

The adults feed on ash foliage for two to four weeks. Once done feeding, from the end of June until the end of August, the adult female lays an average of 60-90 eggs on the bark of ash trees or in bark crevices.



Adult emerald ash borer  
(Pennsylvania Dept. of Conservation  
and Natural Resources Forestry  
Archive Bugwood.org)



Emerald ash borer Larvae  
(Pennsylvania Dept. of Conservation  
and Natural Resources Forestry  
Archive Bugwood.org)

### Host

Emerald ash borer feeds on all ash trees (*Fraxinus* species). In Manitoba there are two native species of ash; green and black ash, which occur along riverbanks and in natural stands. These native ash trees, including several cultivars of these species, have been planted extensively throughout the province. Non-native Manchurian ash and cultivars of Manchurian ash have also been planted in many Manitoba communities and are also susceptible to EAB.



Click [here](#) for information about identifying ash trees.

Ash Trees  
(David Cappaert, Michigan State University, Bugwood.org)

### Signs and Symptoms:

- Foliage appears less full and tree starts dying from the top
- Adults leave “D” shaped exit holes across the bark on infected trees
- When bark is removed, shallow “S” shaped tunnels are seen
- Epicormic shoots on branches may develop on the trunk
- Woodpecker damage and/or squirrel damage may be visible on the tree
- Bark cracks may develop



D-shaped exit holes, caused by the emergence of the adult stage of EAB.  
(Daniel Herms, The Ohio State University, Bugwood.org)



Larval galleries under bark.  
(James W. Smith, USDA APHIS PPQ, Bugwood.org)



Woodpecker damage

## Learn the signs

### [A Visual Guide to Detecting Emerald Ash Borer Damage](#)

#### Emerald ash borer in Manitoba

##### Prevention

The Canadian Food Inspection Agency (CFIA) is responsible for preventing the movement of EAB into new areas. They have the authority to establish regulated areas to restrict the movement of infested materials to help prevent the movement of any goods that are infested with EAB. In Manitoba, The Forest Health Protection Act contains provisions that can be used to eradicate or contain emerald ash borer detections.

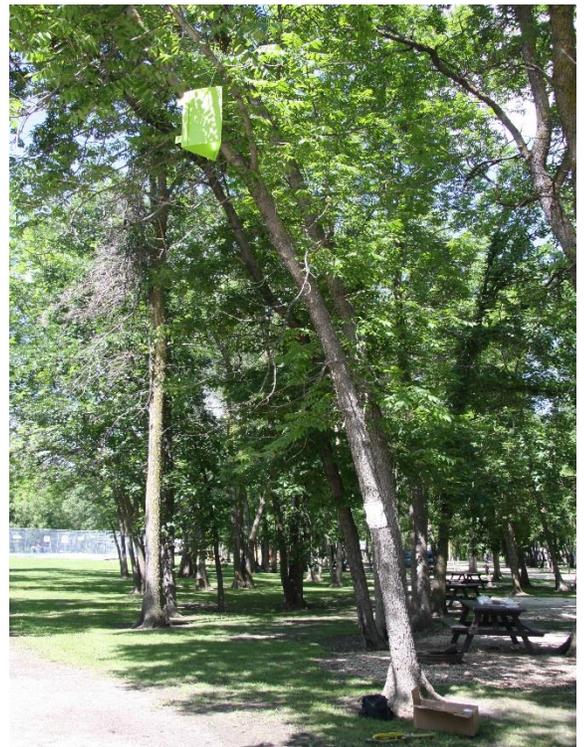
##### Monitoring

The CFIA, Manitoba Sustainable Development and some local communities place and monitor emerald ash borer traps across the province. Traps are set up in areas that have a high risk of infestation.

When EAB is detected in a new area, a more intensive survey can be conducted to determine the extent of the infestation. This survey can include a visual survey to look for systematic trees, additional trap placement, and branch sampling.

##### Management

To slow the spread of EAB the CFIA has placed a regulated area around the city of Winnipeg. Movement of all firewood and all ash products from the regulated area to other areas is not permitted unless written permission has been given by the Canadian Food Inspection Agency.



Sticky trap in ash tree

Currently, emerald ash borer detection surveys are being conducted in the city of Winnipeg. These detection surveys will determine the size of the infestation and will be used to develop management options. Typical EAB management can include: quarantines, tree removal, treatment with insecticide, and replanting with a variety of species.

Treatment options are available for private ash trees. It is best to get quotes from an arborist for possible treatment options. All pesticide treatments must be conducted by a Manitoba licensed pesticide applicator.

## **You Can Help**

Emerald ash borer is often spread by human activities. When people move firewood and material to new areas they can easily move emerald ash borer or other invasive species without knowing it.

Be vigilant. Learn about the signs and symptoms of EAB and report symptomatic ash trees or ash tree products to the Go Wild Manitoba App or Manitoba Sustainable Development's tree line at 204-945-7866.

Tell others. An informed public is the first line of defense against this destructive pest.

## ***Don't Move Firewood***

The movement of firewood and wood products around Manitoba and across Canada is one way that invasive species are introduced into Manitoba. Stop the spread of invasive species by purchasing locally sourced wood products.