

Emerald Ash Borer

The Emerald Ash Borer (EAB) is a non-native invasive insect that has killed millions of ash trees in southwestern Ontario and in the United States, and a confirmed infestation in Niagara Parks was confirmed in 2012. Infested ash trees die off within two to five years, posing a major economic and environmental threat to urban and forested areas.

The EAB feeds on all ash (*fraxinus spp.*) species in Ontario, including green, red, white, black, blue, and non-native species such as European black ash.







Native to Asia, the EAB was first discovered in Ontario, in Windsor, in June 2002 and in the Niagara region in 2009 and is now found across much of southern Ontario east to Ottawa and north to Sault Ste. Marie. Infestation within Niagara Parks was confirmed in 2012.

The Canadian Food Inspection Agency deemed much of southern Ontario as a "regulated area", which prevents the movement of any ash material and firewood of all ash species out of this area into non-regulated areas.

What is Niagara Parks Doing?

Niagara Parks has:

- planted over 150,000 native trees since 2012 and continues to plant thousands of trees each year;
- modified tree planting strategy to include 20+ species to increase species diversity;
- removed hazardous dead ash trees throughout Niagara Parks, including high traffic areas along the Niagara Parkway, Niagara River Recreational Trail, and parklands. Approximately 2-3 thousand ash trees are removed annually;
- recycled ash trees for fish habitat within the Niagara River and mulch to use in garden beds throughout Niagara Parks;
- increased investment into Niagara Parks' forestry operations, including the addition of certified arborists, continuous training, and upgrading of equipment;

- developed an Urban Forestry Management Plan to ensure Niagara Parks' forest canopy remains resilient to future threats; and
- continues to collaborate with the Canadian Food Inspection Agency and Ministry of Natural Resources and Forestry to monitor for new invasive species.

Species Identification & Life Cycle

- Shiny metallic-green adults emerge in June/July and are
 8.5 to 13.5 mm long
- Adults have a flattened head, with large black compound eyes on the sides of the head, and short antennae
- Eggs are laid one at a time in bark crevices on ash trees
- Cream-coloured larvae, 26 to 32 mm long, flattened with a brown head and pincers
- Larvae overwinter under the bark and pupate in April or May

Symptoms & Damage

- Larvae feed by chewing "S" shaped galleries under the bark. This tunneling girdles the tree, cutting off the flow of food and water; branch mortality leads to whole tree mortality and eventually tree death
- Adults leave "D" shaped exit holes 4 to 5mm across on the bark of infected trees
- Sawdust will be evident in tunnels
- New shoots growing on branches and trunk