

Niagara College Greenhouse & Nursery Success Sheet No. 111



# **Emerald Ash Borer**

#### History

The emerald ash borer (EAB), or in Latin, Agrilus planipennis, is an invading species of beetle from Asia. Information about the EAB has been tough to find since these beetles became an issue.

Since the first North American discovery in Michigan in May 2002, the EAB has spread to parts of southern Ontario and continues to threaten surrounding areas. Surveys were conducted to learn the seriousness of the infestation. Entomologists have concluded that the beetle has been here for about eight to ten years.

## Identification

Its name describes the beetle: "emerald" for its metallic coppery-green colour; "ash" for the genus of tree, Fraxinus, in which the beetle feeds and lays eggs; and "borer" for its digging of holes in the wood. Adult EABs can be 7.5 to 15 mm long, slender and somewhat elongated. The larvae are flat, thin, and white, with a pair of brown, pincer-like appendages.

Adult borers feed on the new leaves growing on the top of the trees and rest on the foliage at night. EAB larvae are found feeding and growing in the sapwood (living tissue).

## Symptoms

The beetles attack the ash trees along the upper trunk and lower main branches. In time, the damage will recede to the lower part of

First-year infestations are hard to detect because the eggs are laid deeply in cracks on the bark. Larvae then dig their way through the tree under the bark. In the spring of the second year, the mature EABs exit the tree, leaving a D-shaped hole about 3-4 mm wide.

They then start feeding. Shoots and bark splits may develop as the tree tries to repair the damage. In the third year, very few branches are living, leaving the tree unhealthy looking.

## Prevention

When scientists identified the EAB, quarantines were placed on six counties in southeast Michigan and Essex County, Ontario. That number has since increased.

Preventive measures have been taken. such as restricting the movement of ash trees as firewood and nursery stock in or out of the area. Removal of infested trees and burning of the wood kills the larvae and helps control spreading.

The loss of these trees could damage the environment and increase the greenhouse effect and dirty air. If you encounter the emerald ash borer, report the sighting to the federal government at www.inspection.gc.ca, or call 1-800-442-2342.

Allan Troup, Class of 2007

the trunk, killing the tree usually within three years.

#### Niagara College Greenhouse & Nursery

Niagara-on-the-Lake Campus, 135 Taylor Road, Niagara-on-the-Lake, ON LOS 1J0 phone: (905) 641-2252, ext. 4082; fax: (905) 988-4307 e-mail: mnewell@niagaracollege.ca Website: http://greenhousenursery.niagaracollege.ca