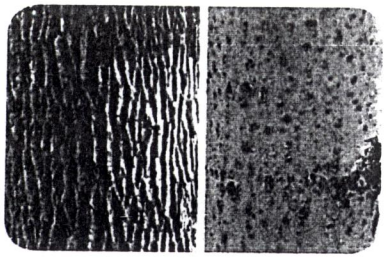
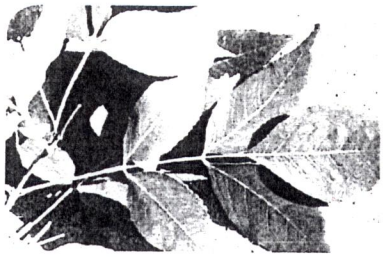
PE2.1 (c)

IDENTIFYING ASH TREES

Take this guide to each tree on your property to identify ash



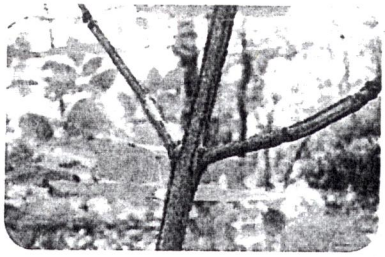
Ridged Bark:
On mature trees (left), bark is tight and displays patterns of diamond shaped ridges. On young trees (right), bark is relatively smooth.



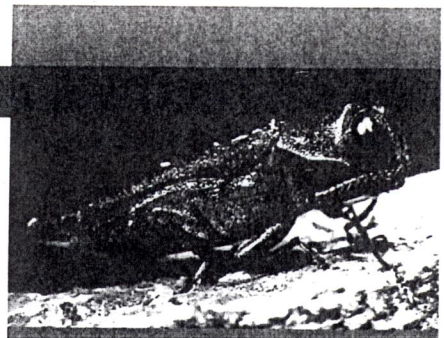
Compound 'Opposite' Leaves:
Leaves contain 5 to 11 leaflets with smooth or toothed margins (tips). Leaflets are positioned opposite with one at the top.



Seeds:
When present, seeds usually hang in clusters and are dry and oar-shaped.



'Opposite' Branches:
Branches and buds are directly across from each other rather than staggered. However, due to the death and grooming of individual branches, it is possible that not every branch will be opposite.



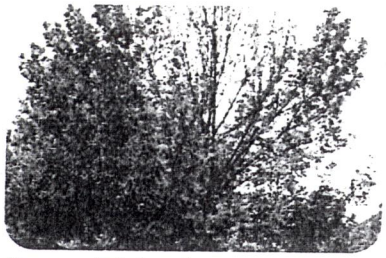
WHAT IS THE EMERALD ASH BORER?

The Emerald Ash Borer is a metallic green wood-boring beetle of about 1 to 1.5 cm in length that attacks all native species of ash trees, typically killing them in 2 to 3 years. Its larva bore tunnels inside the tree, feeding off the inner bark until the tree dies.

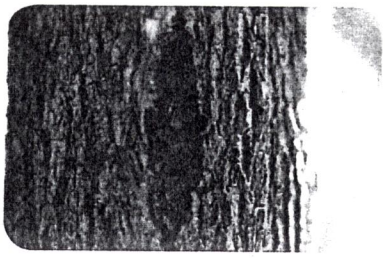
Native to northeastern Asia, the pest was first discovered in Ontario in the Windsor area in 2002. Since then, infested ash trees have been discovered in Essex, Lambton, Elgin and Middlesex Counties, and in the Municipality of Chatham-Kent.

RECOGNIZING INFESTED ASH TREES

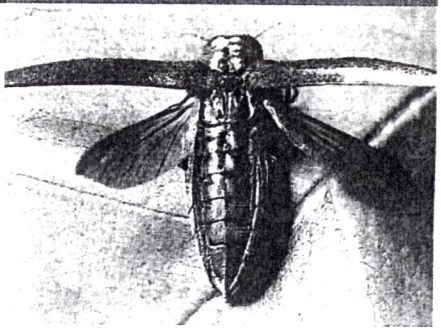
Infested ash trees often exhibit the following symptoms



Crown Dieback:
Severely attacked trees may exhibit crown dieback as the canopy dies from the top down. Leaves may wilt or turn yellow during the growing season.



Bark Cracks:
Vertical splits of 7 - 10 cm are often present over larval galleries. These are often more noticeable on young trees that do not already have splits from growth-related expansion.

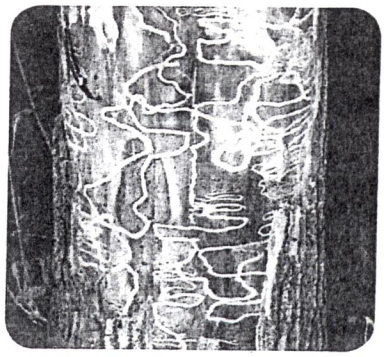




Woodpeckers:
Woodpeckers feed on the larvae under the bark. Look for increased Woodpecker feedings or signs of their probing in the bark.



Exit Holes:
Once fully mature, the adult beetles emerge through exit holes they chew through the bark. These holes are distinctly D-shaped and are 3.5 to 4 mm across.



Tunnels:
Winding S-shaped larval tunnels snake under the bark where larvae bore channels. Removing the bark exposes larvae and sawdust-filled galleries.

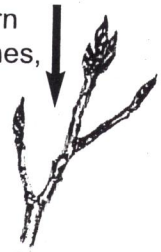
Photos courtesy of Michigan State University, Forestry Images (www.forestryimages.org)

How to Identify Ash Trees, Infested Trees and the Emerald Ash Borer

TREE IDENTIFICATION TERMS

BRANCHING

ALTERNATE BRANCHING: A branching pattern where side branches, leaves, and leaf scars do not grow directly across from each other.



OPPOSITE BRANCHING: A branching pattern where side branches, leaves, and leaf scars grow directly across the stem from each other.



CONIFERS

BUNDLES: Groups of needles held together at the base by a small papery wrap called a fascicle.



CONIFEROUS: A tree that bears cones and has needles. Also called evergreens.

EVERGREEN: A tree that bears cones and has needles. Also called coniferous.

SCALY: Conifer needles that are flat and overlapping, like fish scales.



DECIDUOUS

BROAD-LEAFED: A tree that sheds all of its leaves annually. They have leaves as opposed to needles. These trees are also called deciduous.

DECIDUOUS: A tree that sheds all of its leaves annually. These trees are also called broad-leafed.

LEAFLETS: Smaller parts of leaves that often resemble leaves themselves. They join together along the petiole. The leaf petiole attaches to the twig.

COMPOUND LEAF: A type of leaf that has one stem and many smaller leaflets. A leaf begins where the leaf petiole attaches to the twig.



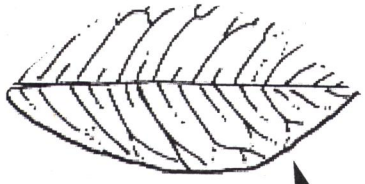
PETIOLE: The stalk that supports a leaf and attaches the leaf to the twig. They can be round, flat, or square.



SIMPLE LEAF: A type of leaf that has one blade attached to a twig by a petiole.

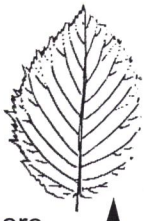
VEINS: Distinct lines of tissue that form the framework of a leaf. Used for food and water transport.

LEAF MARGINS



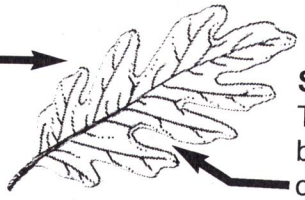
ENTIRE: A type of leaf edge that is smooth and has no wavy or rough edges.

TOOTHED: A type of leaf edge that has small points or bumps along it (teeth). Single-toothed means that all the teeth are about the same size. Double-toothed means that on each tooth there is a smaller tooth.



LOBED: A type of leaf edge that has large rounded parts.

MARGIN: The outer edge of the leaf.



SINUSES: The spaces in between lobes on a leaf.

PETIOLE AND NEEDLE SHAPE CROSS-SECTIONS

