



## Arrest That Pest!

### EMERALD ASH BORER in Indiana

## **Emerald Ash Borer (EAB) Background Information**

**Teachers:** After determining your cooperative learning groups, photocopy the following pages. Then cut out each section along the dotted line. Make sure each student has a copy of her/his assigned section. Note: Vocabulary words are highlighted in **bold**.

### **Section Four**

*What kind of trees does EAB attack, and how can the trees be identified?*

In North America, the beetle has only been found in ash trees. These trees are called a **host species**. When feeding, the beetles **bore**, or chew tunnels, into the wood. The larvae feed on the living tissue of the tree, which prevents the flow of nutrients and water throughout the tree from the roots to the branches and leaves of the tree.

It will attack any size or species of ash in any location – large or small, urban or forest, healthy or stressed; among ash, the borer does not **discriminate** (EAB *does not* attack Mountain Ash because it is not a true ash tree.)

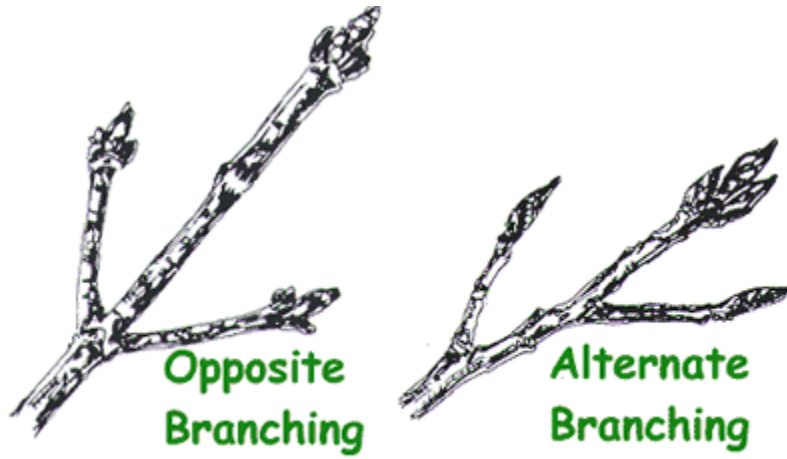
In addition, ash trees have little or no **resistance** to EAB. Scientists have found that EAB adults are more attracted to **stressed** trees and that the larvae develop more rapidly in these trees. Even the healthiest trees have been killed when EAB population densities are high. Up until now, **natural enemies** have had little impact on EAB.

To identify an ash tree, first look at the branch and bud arrangement. Ash trees have branches and buds that are arranged opposite one another. Ash trees have a **pinnately compound** leaf with usually seven or more leaflets. Look for seeds on the trees. Ash trees have prominently winged seeds called **samaras**. The bark of an older ash has a rough, diamond shaped appearance.

<<http://www.entm.purdue.edu/EAB>>



Leaves of an Ash tree



Opposite  
Branching

Alternate  
Branching