### **Understanding & Managing Emerald Ash Borer**



# Emerald Ash Borer Ash Trees



Photo, top right: The emerald ash borer adult. Above: The emerald ash borer injures and kills the tree by consuming the trees vascular tissue. **Below, top:** D-shaped exit hole caused by emerald ash borer emerging from an ash. **Below, bottom:** Neighborhood decimated by emerald ash borer in Ohio.



### What is the Emerald Ash Borer?

Emerald ash borer (EAB), *Agrilus planipennis*, is an invasive wood boring beetle from Asia that is predicted to infest all unprotected ash trees in the United States and Canada over the next 20 years. It spreads very quickly and has already killed 10's of millions of ash trees since it was discovered in 2002. EAB has been found throughout the upper Midwest as far east as Maryland and New York and as far west as Minnesota and Iowa.



### **Biology of the Beetle and Ash Tree**

EAB lays its eggs on the bark of an ash tree and the larvae tunnel through the bark and begin consuming the sapwood of the tree. This feeding disrupts water flow to the canopy, dehydrating and killing that portion of the tree. Eventually, the whole tree will die.

## Signs and Symptoms of Emerald Ash Borer?

Early infestations of emerald ash borer are nearly impossible to detect ; the tree does not show outward symptoms; however, as the infestation grows, the tree will decline and then die.

What you will see as the infestation progresses:

- Early fall coloration.
- Dieback of branches with sparse foliage.
- New branches sprouting from the lower trunk.
- Woodpeckers feeding on infested trees.
- D-shaped exit holes.
- Decline in groups of ash all at the same time.

#### **Emerald Ash Borer Treatment Strategies**



**Photo, above:** Xytect<sup>™</sup> is applied as a soil drench around the base of your tree.



### **DIY Shopping List**

#### **Option 1:**

Application Type – Soil drench, Soil injection DIY Product/Equipment Needed

- □ Transtect<sup>™</sup> or Xytect<sup>™</sup>
- □ Measuring or diameter tape
- □ Gloves
- □ Soil Drench: Bucket or watering can
- □ Soil Injection: HTI Soil Injection Kit

Your treatment for emerald ash borer depends on whether your tree is showing symptoms or is still healthy. Regardless of the treatment strategy, watering after treatment is important.

### **Treatment Strategy for Healthy Trees**

If your tree is important and valuable, and does not have a visible infestation, protecting from emerald ash borer is both affordable and effective. **Xytect™** is a professional strength insecticide that can be mixed with water and poured at the base of the tree. Annual treatments are required to maintain protection. This product can be applied from March through June or September through November, but the optimal treatment time is March through May. Start treatment when you are in a quarantined county and before symptoms appear.

### **Treatment Strategy for Infested Trees**

If your tree is showing symptoms of infestation, but there is less than 30% dieback, it is still possible to save your tree; however, it will be more expensive and there is a risk that treatment may not work. Two products are recommended for treating infested trees. If your tree is under 20 inches DBH, use **Transtect**<sup>™</sup>. Transtect<sup>™</sup> is a fast moving insecticide that is applied to the soil at the base of the tree. To maintain protection, apply annual treatments of Xytect<sup>™</sup> in subsequent years. If your tree is over 20 inches DBH, use **Tree-äge<sup>™</sup>**. Tree-äge<sup>™</sup> is injected directly into the trunk, and is effective for 2 years. Please note, the likelihood of success goes down on infected trees. You must have a pesticide applicators license to apply Tree-äge<sup>™</sup> because of its toxicity.

