

## What is Emerald Ash Borer?



### **Name**

Emerald ash borer (*Agrilus planipennis*)

### **Problem**

Insect larvae effectively girdle affected tree

### **Affected tree species**

Ash (*Fraxinus*) species, commonly green ash and white ash, also white fringetree

### **# of ash trees in NJ**

24.7 million trees (mostly in the north), 24% of NJ forests have ash

### **Lifespan of Infested Tree**

3-4 years

### **Protection Treatments**

Soil treatment or trunk injection, bark spray

### **Precaution**

Dying ash endangers people and property—ash is a commonly planted street tree

## **EAB IN THE UNITED STATES**

Emerald ash borer (EAB) is a non-native insect pest that infests and kills all species of ash trees in North America. It was first discovered in southeastern Michigan in 2002 and EAB has since been found in 27 additional states and 2 Canadian provinces. The EAB has killed tens of millions of ash trees in Michigan alone, as well as hundreds of millions of additional trees in the other infested states and provinces.

## **THE INSECT**

The adult EAB is approximately 1/2" long and 1/8" wide, metallic green in color, with a metallic copper red abdomen. The larvae are white or cream colored, measure approximately 1 to 1 1/4" long and have 10 abdominal segments that are bell shaped. The EAB has a 1-year lifecycle.

EAB adults emerge in May or early June creating D-shaped exit holes, 3-4 mm in size on the branches and trunks of infested trees. The female adult EAB feeds on the margins of the ash leaf. After feeding, the female EAB deposits eggs in bark crevices or under bark flaps on the trunk or bark. The adult beetle stays active until August. After the egg matures, larvae burrow under the bark and feed on the cambium - the water and nutrient transporting layer of the tree. The larvae become adult beetles in April or May.

# What is Emerald Ash Borer?

## SYMPTOMS

EAB first infest the top of the tree's crown, which makes spotting adult beetles or exit holes nearly impossible from the ground. Woodpecker activity and damage on live trees is often an initial symptom of an EAB infestation. As EAB populations increase, crown dieback, epicormic branching, bark splits, and exit holes lower on the bole become more prevalent. Trees will only live an average of 3-4 years after infestation and 99% of ash trees will die.

