



# TEXAS A&M FOREST SERVICE

## Forest Health: Emerald Ash Borer

The emerald ash borer (*Agrilus planipennis*) is a destructive non-native wood-boring pest of ash trees (*Fraxinus* spp.). Native to Asia, the emerald ash borer beetle (EAB) was unknown in North America until its discovery in southeast Michigan in 2002. Since then, the invasive pest has spread to 26 states including Texas where the beetle was detected in Harrison County located in Northeast Texas. EAB has been responsible for killing millions of ash trees across much of the country.

Ash trees are widespread in the United States and all 16 native ash species are susceptible to attack. Ash trees with low population densities of EAB often have few or no external symptoms of infestation. Symptoms of an infestation may include any or all of the following: dead branches near the top of a tree, leafy shoots sprouting from the trunk, bark splits exposing larval galleries, extensive woodpecker activity, and D-shaped exit holes (Please see photo gallery for images).

EAB is a significant threat to urban, suburban, and rural forests as it kills both stressed and healthy ash trees. EAB is very aggressive and ash trees may die within two or three years after they become infested.

### What to Look For

**Host:** Ash (all species)

**Signs/Symptoms:** ash trees with dying or dead branches in upper crown, shoots or suckering along the trunk, bark splits with winding galleries and white larvae beneath the bark; heavy feeding by woodpeckers and "D"-shaped exit holes in bark.

**Range:** Detected in 26 states including Texas (Harrison County located in Northeast Texas).

### Management:

**Preventative:** If EAB activity is confirmed within the area, treatment of high value ash trees with systemic insecticide is recommended to prevent an attack

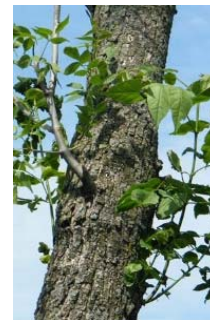
**Therapeutic:** If more than 50% of crown remains, treat with systemic insecticide (may slow attack) or remove tree; If less than 50% of crown remains remove tree



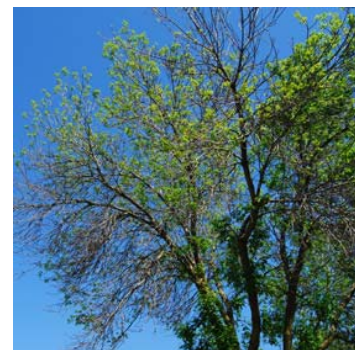
Green ash



Howard Rouse  
Michigan State  
University Department



Sprouts on Trunk



Dying Branches



EAB larval galleries



D-shaped exit hole