

EMERALD ASH BORER

It is believed that emerald ash borer (EAB) had been in the United States for up to 12 years before it was officially identified in Detroit during the summer of 2002. EAB may have been transported here through wood packing materials that arrived from Asia (where EAB is native). Emerald ash borer is responsible for the loss or decline of tens of millions ash trees throughout the U.S. and is continuing to work its way across the country.



IDENTIFICATION

Emerald ash borers are small but powerful insects that specifically attack ash trees. The adults live outside of ash tree and feed on the leaves; this does not typically affect the tree. However, the issues arise when females lay their eggs in bark crevices. About 10 days later, the eggs hatch and the larvae (immature stage) burrow underneath the bark where they remain for 1-2 years. The larvae are the most destructive as they feed on the living plant tissue below the bark and are ultimately responsible for the death of the tree. Once they pupate and become adults, the emerald ash borers exit the tree through a telltale D-shaped exit hole. They then fly to seek out new ash trees, and the process begins again.

IDENTIFYING AN INFESTED TREE

- Canopy decline
 - As the larvae feed, nutrients and water are not able to reach the top of the tree thus casing the canopy to thin.
- Suckers at base of tree
 - As nutrients and water are blocked from moving up the tree, the tree begins to send out shoots at the base of the tree.
- D-shaped exit holes
 - As EAB pupate and exit ash trees, they will leave distinct D-shaped exit holes.

- S-shaped patterns under bark
 - Larvae feed under the bark on the living plant tissue. If there is an EAB infestation, there will be S-shaped feeding patterns left by the larvae.
- Heavy woodpecker damage
 - Woodpeckers enjoy feeding on EAB larvae, so heavy woodpecker damage is a sign that there may be a larvae presence under the bark.









CONTROL

Typically, an ash tree can be saved if 70% or more of the canopy still exists. Once EAB is detected within about 5 miles of your home, it may be beneficial to start a preventative care program. Most females lay their eggs on trees within 100 yards of the tree they emerged from. However, some females may be able to travel up to 3 miles to locate a new host tree. It may be futile to begin preventative care prior to a detection within 5-10 miles of your home.

- Systemic Insect Drench (Available at Greenworld & can be used as a preventative measure)
 - o Systemic Insect Drench is applied to the base of the tree and is taken up by the roots to kill larvae
- If you believe EAB is present on your tree, contact a professional to determine the appropriate course of action
- For questions or further information contact the Iowa EAB Hotline: 515-725-1470 or visit www.emeraldashborer.info