

## Emerald Ash Borer

The Emerald Ash Borer (EAB) was first detected in North America ten years ago in the Detroit, Michigan area. Since that time it has been found in fifteen states and two Canadian provinces - with Wisconsin being one of the states. It was found in Wisconsin in August 2008 near a community of Newberg several miles northeast of West Bend. Since then it has been found in Brown, Crawford, Kenosha, La Crosse, Milwaukee, Racine, and Vernon counties, and most recently in Dane and Walworth counties as well.

The Emerald Ash Borer is native to Asia and is suspected to have arrived in this country in pallet wood. In its native land EAB attacks and kills only weakened or stressed Ash trees, but here in North America, it also attacks and kills healthy Ash trees. North American Ash trees have no defense against this insect and are all at the risk of being killed. Trees may die within two to four years of being infected. It is estimated that 50 million Ash trees are dead or dying in the Midwest because of this insect.

The Emerald Ash Borer is a metallic green, wood boring beetle. The adult is not very big and can fit on top of a penny with room to spare. The adult only feeds on a few leaves and does not do much damage to the trees. It is the larvae that does all the damage. It spends its time inside the Ash tree where we cannot see it. It feeds on the spongy layer of tissue below the bark. By its tunneling through the tissue it stops the trees ability to move water and nutrients back and forth from the roots to the rest of the tree. As more larvae infest the Ash and cause more tunneling, the faster the tree declines.

The symptoms that will be seen are as follows:

- **Crown die-back:** The tree starts to die from the top down showing more and larger branches as the process goes on.
- **Epicormic sprouting along large branches and trunk:** Infected trees will attempt to grow new branches and leaves where they still can.
- **Bark splits:** The bark will crack and open up where the larvae have killed all the tissue behind that area. Old tunneling will be visible.
- **Wood pecker feeding:** They will feed on the larvae below the bark. This usually will be seen in the top of the tree where the larvae first start. The wood pecker damage will look like strips of bark have been pulled off of the tree.

This all sounds so simple to tell if your tree has EAB but the symptoms are nearly identical to those often seen on Ash infested or infected by other pests and diseases commonly found in Wisconsin. For example, crown die-back can result from multiple stressors including drought stress, soil compaction, or verticillium wilt. Epicormic sprouting can occur from verticillium wilt, nectria canker, or a tree coming out of construction damage.

When trying to decide if the Ash is infected with Emerald Ash Borer you should have at least two of the symptoms showing, and even then the likelihood at this time is low that you have EAB on your Ash.

If you are unsure whether you have EAB or not, it is time to call an Arborist. Due to the invasion of the Emerald Ash Borer in Wisconsin, homeowners are searching for methods to save their Ash trees and reputable tree care professionals to apply them.

“Hiring a tree care company should not be left to chance, or done in a rush.” Says Robert Bricault, Michigan State University Extension Horticulturist. Look for Arborists with experience, educational background in Arboriculture, certification from professional arborist associations, and current pesticide applicator licenses. “Companies that belong to professional arborist organizations show a desire to keep knowledge up to date.” Bricault notes.

A lack of understanding about EAB can lead to improper treatments or even needless applications of pesticides. Certified Arborists are able to identify an Ash tree - a Mountain Ash is of the genus Sorbus, not Fraxinus, and is not a true Ash tree so therefore cannot be infected with EAB. An Arborist should also be able to explain management techniques available for EAB and research on product efficacy. They should also clarify that treatments are needed annually to protect the trees.

Homeowners should avoid companies with high-pressure sales or promises of a cure. Qualified Arborists are well educated and experienced professionals who need to be able to answer your questions, provide information based on research, and help clients make decisions on when the damaged tree has EAB or not, and if it is when the damaged tree is beyond the ability to be saved.

Emerald Ash Borer is coming. Keep your eyes open and find a certified Arborist to help you with your tree care decisions.

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Sources:

- 1.) Emerald Ash Borer. 24 May 2012. <http://www.emeraldashborer.info/>
- 2.) Wisconsin's Emerald Ash Borer Information Source. June 2012. <http://datcpservices.wisconsin.gov/eab/index.jsp>
- 3.) Forest Health Protection – Emerald Ash Borer. September 2008. U.S. Forest Service. <http://na.fs.fed.us/fhp/eab/>