

EAB FREQUENTLY ASKED QUESTIONS

What is Emerald Ash Borer?

Emerald ash borer (EAB) is an invasive, non-native insect that attacks and kills all species of North American ash trees, including white, green and black ash. EAB is native to Asia and was first detected in the U.S. in the summer 2002 feeding on ash trees in the Detroit, Michigan area. This pest has now spread into Ohio (2003), Indiana (2004), Illinois, Maryland (2006), Pennsylvania, West Virginia (2007), Missouri, Virginia, Wisconsin (2008), Kentucky, Minnesota, New York (2009), Iowa, Tennessee (2010), Connecticut, Kansas, Massachusetts (2012), Colorado, Georgia, New Hampshire, North Carolina (2013), Arkansas, New Jersey (2014), Louisiana (2015), Delaware, Nebraska, Oklahoma, Texas (2016).

How do I recognize Emerald Ash Borer?



Adult have 1/2 –inch long, slender, emerald green bodies. Emerald Ash Borer larvae can grow up to 1 ¼ inch long. They are white or cream colored. They have brown heads and a 10-segmented body with a pair of brown, pincer-like appendages on the last segment.

Why should I be concerned about Emerald Ash Borer?

Emerald Ash Borer larvae feed on the tissues just below the bark. As they feed, larvae create serpentine tunnels, also called galleries, that disrupt the tree's ability to transport water and nutrients and eventually kills the tree.

Emerald Ash Borer adults typically emerge during June and July, leaving D-shaped exit holes in the bark. After emerging, the adults feed on ash foliage and can live for approximately three weeks.

What are the symptoms of Emerald Ash Borer?



Symptoms of Emerald Ash Borer include canopy dieback, beginning in the top one-third of the canopy, sprouting from the base of the tree and trunk, bark splitting, serpentine galleries below the bark, D-shaped exit holes and increased woodpecker activity.

What species of trees does Emerald Ash Borer attack?

EAB attacks and kills all species of North American ash, including white, green and black ash. Mountain-ash is not a true ash, so it is not threatened by Emerald Ash Borer.

How do I identify an ash tree?



Ash trees exhibit an opposite leaf pattern, meaning that leaves and buds are located directly across from each other. Ash leaves are compound and typically consist of 5 to 11 leaflets. The edges of the leaflets may be smooth or toothed. On mature ash trees, the bark has a distinct pattern of diamond-shaped ridges. Younger trees have smoother bark. When seeds are present, they appear in paddle-shaped clusters that stay on the tree until late fall or early winter.

Where is Emerald Ash Borer from originally?

Emerald Ash Borer is native to Asia.

When did Emerald Ash Borer get to the United States?

Emerald Ash Borer was first detected in the U.S. in the summer 2002, feeding on ash trees in the Detroit area.

How does Emerald Ash Borer spread?

Emerald Ash Borer is spread primarily by moving infested firewood, untreated ash wood products and nursery stock. Moving firewood and other untreated ash wood products within areas infested by Emerald Ash Borer and out of infested areas is regulated by state and federal agencies. You can help prevent the spread of Emerald Ash Borer, and other wood-dwelling invasive pests, by collecting or purchasing local firewood at your destination. For more information, visit www.dontmovefirewood.org and www.stopthebeetle.info.

Where has Emerald Ash Borer been found?

As of July 24, 2012, Emerald Ash Borer has been detected in (2003), Indiana (2004), Illinois (2006), Maryland (2006), Pennsylvania (2007), West Virginia (2007), Virginia (2008), Wisconsin (2008), Missouri (2008), Minnesota (2009), Kentucky (2009) New York (2009), Iowa (2010), Tennessee (2010) and Connecticut (2012).

Can anything be done to prevent Emerald Ash Borer from killing ash trees?

Unfortunately, nothing can be done to stop Emerald Ash Borer from spreading into new areas and killing ash trees. In the next several years we may have new methods for slowing the Emerald Ash Borer's spread, but they will only *slow* its spread, not *stop* it. In areas where Emerald Ash Borer is present, insecticide treatments can be used to protect high-value trees, such as large shade trees, historic trees and trees highly valued by homeowners. Researchers are continually working to develop new treatments for Emerald Ash Borer.

Is there a treatment for Emerald Ash Borer?¹

Insecticide treatments can be effective in protecting trees from Emerald Ash Borer. The treatment available for homeowner use is a soil application of imidacloprid (such as Bayer Advanced Garden™ Tree and Shrub Insect Control). The application should be made in May and is most effective on small trees. Tree care professionals are able to use trunk injections. More information about available treatment methods can be found online at: www.emeraldashborer.info

Should I treat my ash tree before it gets Emerald Ash Borer?

No treatment is needed until Emerald Ash Borer has been found within a county adjacent to where your county is. If your tree has symptoms like those of an Emerald Ash Borer infestation, such as canopy dieback, wood pecker damage or borer exit holes, you may want to have a tree care professional examine the tree. To locate a certified arborist in your area visit:

www.treesaregood.org/findanarborist/arboristsearch.aspx

Should I remove my ash tree before it gets Emerald Ash Borer?

If your tree is healthy, there is no reason to cut it down. If it is dying or diseased, it may be best to hire a certified arborist to look at your tree and determine whether it has Emerald Ash Borer or another insect or disease problem. There are a number of native insects that attack ash trees, so if your tree is displaying symptoms, it may be that you have one of these other pests. With highly destructive invasive insects like the Emerald Ash Borer, it is best to err on the side of caution by seeking professional guidance if you suspect your tree is infested.

Should I continue planting ash trees?

Given the threat of Emerald Ash Borer and the abundance of ash, we do not recommend planting more ash. Ash has been popular in landscape, agro forestry and conservation plantings for decades. This popularity has led to many ash trees being planted in communities throughout Kansas and the northern Plains. Diversity is an important measure of a community forest's overall health, it is important to plant a variety of trees. There are a number of trees that grow well in Kansas that are under utilized. To learn which trees are best for your landscape, we recommend you contact:

Kansas Forest Service
2610 Claflin Road
Manhattan, KS 66502
785-532-3300

Or visit: www.kansasforests.org/resources/

Are there any ash varieties that are resistant to EAB?

Early research has not revealed a variety native to the U.S. that is not susceptible to the Emerald Ash Borer but research is continuing.

What are alternatives to ash?

Box Elder, Birch, Hornbeam, Catalpa, Locust, Kentucky Coffeetree, Oak, Sweet Gum, Buckeye, Hickory, and Hackberry are all good alternatives.

¹ Specific product information does not constitute an endorsement for that product.

What other insects attack ash trees?



Banded Ash Borer



Eastern Ash Bark Beetle



Red Headed Ash Borer



Ash/Lilac Borer



Clearwing Moth



Carpenterworm Moth

There are several species of native ash borers that attack ash trees. The banded ash borer, clearwing moth, carpenterworm moth and ash/lilac borer attack healthy ash trees. The redheaded ash borer, banded ash borer and eastern ash bark beetle all attack stressed or dying ash trees. For more information about these insects, see Michigan State University Extension Bulletin E-2939, *Native Borers and Emerald Ash Borer Look-alikes*.

What other insects look like Emerald Ash Borer?



Bronze Birch Borer



Six-spotted Tiger Beetle



Caterpillar Hunter

There are many species of insects that are frequently mistaken for Emerald Ash Borer. The bronze birch borer looks very similar to Emerald Ash Borer and even presents similar symptoms. However, this borer attacks stressed birch trees. The six-spotted tiger beetle, two-lined chestnut borer, and caterpillar hunter are all similar in color to Emerald Ash Borer. The Japanese beetle is also frequently mistaken for Emerald Ash Borer. For more information about these insects, see Michigan State University Extension Bulletin E-2944, *Don't be Fooled By Look-Alikes*.

Who should I call if I think I have EAB on my tree?

Kansas Department of Agriculture
Plant Protection and Weed Control Program
785-564-6698

Kansas Forest Service
785-532-3300

What can be done with wood from trees killed by the Emerald Ash Borer?

As long as the untreated ash is not moved out of a quarantine county, it can be used for anything.

Moving ash out of a quarantine county?

APHIS (Animal and Plant Health Inspection Service) must have signed Compliance Agreement on file before ash can be moved out of a quarantine area unless it moves to a contingent quarantine area. Options for compliance agreements are:

Ash can be mulched and wood chipped to a size of less than 1" in two dimensions.

Ash logs and firewood must be heat treated to a minimum core temperature of 60.0 degrees Centigrade (140 F) for 60 minutes.

What is Kansas doing to slow the spread of Emerald Ash Borer?

The Kansas Department of Agriculture (KDA) and USDA's Animal and Plant Health Inspection Service have been helping with a national survey for emerald ash borer since 2008 by putting out emerald ash borer traps in Kansas. Each agency hung purple prism traps at locations across the state. As of 2016, USDA has contracted out the trapping and KDA no longer does the purple prism trapping. Traps remain in place from March/April to August/September.

KDA has been girdling trees since the find in 2013 in Wyandotte County. The trees are girdled in the spring and removed in the fall and peeled to look for larva in non-quarantine counties.



We also respond to citizen inquiries if they suspect they might have emerald ash borer. We will continue our effort to keep surveillance of areas of concern and other high risk areas in Kansas.

When and where was EAB found in Kansas?

Wyandotte County EAB Find Background - On July 20, 2012, emerald ash borer was found in Parkville, Missouri, four miles from the Wyandotte County line. Then on August 29, 2012, the first-ever presence of emerald ash borer in Kansas was confirmed in Wyandotte County at Wyandotte County Lake. The discovery was made by Kansas Department of Agriculture and USDA staff during a survey being conducted as a result of the July 2012 confirmation of emerald ash borer in Platte County, Missouri. The staff identified a tree during the visual survey that showed symptoms of the emerald ash borer. They removed a portion of the tree and sent it to a USDA lab in Michigan for further analysis. Regulatory officials at USDA's Animal and Plant Health Inspection Service's Plant Protection Quarantine (USDA-APHIS-PPQ) division removed larva from the sample and confirmed the presence of emerald ash borer. The initial emergency quarantine was effective August 29, 2012, for Wyandotte County and became permanent November 9, 2012, and will be in effect until it is rescinded or modified by the order of the Kansas Secretary of Agriculture.

Johnson County EAB Find Background - On July 5, 2013, an adult specimen was removed from an emerald ash borer survey trap located near the Johnson County landfill, during routine monitoring by USDA-APHIS-PPQ. Immediately after confirmation by USDA, Kansas enacted an emergency intrastate quarantine for Johnson County, effective July 15, which became permanent September 24, 2013, and will be in effect until it is rescinded or modified by the order of the Kansas Secretary of Agriculture.

Leavenworth County EAB Find Background - On July 16, 2014, an adult emerald ash borer was caught on a girdled tree trap placed on K-5 southeast of Lansing by the Kansas Department of Agriculture in cooperation with the Kansas Department of Transportation and the Kansas Forest Service. A second emerald ash borer was also caught on a second girdled trap tree at Kenneth W. Bernard Community Park by KDA in cooperation with the City of Lansing and the KFS. Regulatory officials with the USDA's Animal and Plant Health Inspection Service's Plant Protection and Quarantine (USDA-APHIS-PPQ) confirmed the presence of emerald ash borer on July 17, 2014.

Douglas County EAB Find Background - On September 30, 2015, six emerald ash borer larva were found when a girdled trap tree was peeled at the old elementary school at Elm Street and 14th St. in Eudora by the Kansas Department of Agriculture in cooperation with the city of Eudora. Regulatory officials with the USDA's Animal and Plant Health Inspection Service's Plant Protection and Quarantine (USDA-APHIS-PPQ) confirmed the presence of emerald ash borer on October 8, 2015.

Jefferson County EAB Find Background - On October 21, 2015, seven emerald ash borer larva were found when a girdled trap tree was peeled at Perry Lake below the dam by the Kansas Department of Agriculture in cooperation with the Corp of Engineers and the Kansas Forest Service. Regulatory officials with the USDA's Animal and Plant Health Inspection Service's Plant Protection and Quarantine (USDA-APHIS-PPQ) confirmed the presence of emerald ash borer on October 27, 2015.

Atchison County EAB Find Background - USDA is contracting out trapping. On September 19, 2016 a suspect EAB specimen was removed from a trap in the Cummings township area in Atchison County. USDA positively identified EAB on September 23.

Kansas will be expanding the emergency intrastate quarantine, to include Atchison County. Currently, Douglas, Jefferson, Johnson, Leavenworth and Wyandotte counties are included to slow the spread of EAB in Kansas.

Check out these websites for more information:

www.emeraldashborer.info

www.dontmovefirewood.org

www.agriculture.ks.gov/divisions-programs/plant-protect-weed-control/emerald-ash-borer

www.kansasforests.org/

www.kansasarborist.com

www.isa-arbor.com/findArborist/verifyArbByLoc.aspx