

1. What is the emerald ash borer (EAB)?

EAB is an exotic, invasive, wood-boring insect that infests and kills native North American ash trees, both in forests and landscape plantings.

2. Where did EAB come from?

The native range of EAB is eastern Russia, northern China, Japan and Korea.

3. What does EAB look like?

The adult beetle is dark metallic green, bullet-shaped and about 1/2 inch long and 1/8 inch wide. The body is narrow and elongated, and the head is flat with black eyes. EAB larvae are white and flat, have distinctive bell shaped segments and can grow up to 1 1/4 inches long. There are many other green insects that look similar to the adult EAB.

4. Where is EAB now?

As of December 2012, EAB had been found in 18 states, including Missouri, and in two Canadian Provinces.

5. Where and when was EAB found in Missouri?

EAB was first discovered near Wappapello Lake in the U.S. Army Corps of Engineers' Greenville Recreation Area in Wayne County, Mo. in July of 2008. As of December 2012, EAB has been found in Reynolds, Madison and Platte counties.



General Information

Help slow the spread of EAB. Know the signs and symptoms of EAB and most importantly, burn firewood where you get it.

6. When was EAB first discovered in North America? EAB was first identified in southeast Michigan in 2002.

7. How did it get to North America?

It most likely traveled in ash wood used for stabilizing cargo in ships or for packing consumer products.

8. What is being done about EAB at the Greenville Recreational Area?

More than 2,000 acres of ash have been removed from federal lands surrounding the campground by USACE since EAB was discovered in 2008. A pilot program called SLAM (Slow Ash Mortality) has also been established at the Greenville Recreation Area.

9. What is Missouri doing to monitor the EAB situation in the state?

Annual surveys to detect the arrival of EAB are conducted by the Missouri Department of Agriculture and the U.S. Department of Agriculture at selected sites throughout the state which may include state parks, public and commercial campgrounds, nurseries and high-risk urban sites. These efforts include visual surveys as well as purple prism shaped traps and detection trees. The agencies, as well as the Missouri Department of Conservation, also rely on reports from concerned citizens of possible EAB infestations.

10. How does EAB harm ash trees?

Adult females lay their eggs on the bark of ash trees. When the eggs hatch, the larvae burrow under the bark and eat the living tissue, cutting off the life-giving channels that carry nutrients, like water and sugars, to the tree. After 2 to 4 years, enough of the channels are cut off that the tree starves to death.

11. Which trees are susceptible?

All ash species found naturally in Missouri, green, white, pumpkin and blue ash, as well as horticultural cultivars (e.g. Autumn Purple white ash or Marshall Seedless green ash) have been killed by EAB, which can infest trees ranging in size from saplings to fully mature trees. While most native borers kill only severely weakened trees, EAB can also kill healthy trees, making it especially devastating.

12. How important are ash trees to Missouri?

Ash trees account for three percent of the native forest. The fast-growing shade trees are popular for landscaping, though, and about 14 percent of trees lining streets in urban settings are ash. In some neighborhoods and parks the figure reaches as high as 30 or 40 percent.

13. How does EAB spread?

Although EAB can fly short distances on its own, much of its spread is due to humans transporting it as larvae burrowed under the bark of firewood, landscape trees and ash tree debris.

14. What is being done to stop EAB from spreading?

There is a national effort to limit the spread and impact of EAB. Infested areas are quarantined to prevent movement of EAB in firewood and other ash products that can carry it. Many states are educating the public on the dangers of moving firewood, the primary way EAB and many other invasive pests and diseases of trees spread. Ongoing research and development of safe and effective pesticides, traps and other management strategies is taking place at state and national levels.

15. What is being done in Missouri?

State, federal, local agencies and groups are working together to educate the public and slow the spread of EAB. Alerting the public to the risk of moving firewood and spreading EAB is key to prevention. This is a slow moving insect, except when people allow it to hitchhike on firewood.

16. Are there any areas in Missouri under quarantine?

Yes. Wayne, Madison, Reynolds, Iron, Carter, Shannon, Clay and Platte counties are quarantined to prevent the accidental spread of the beetle. This means the interstate (between states) movement of EAB host wood and wood products – nursery stock, green lumber, waste, compost, chips of ash species and firewood of all hardwood species – from these counties is regulated. Likewise, the Missouri Department of Agriculture has enacted a state interior quarantine, which prohibits the intrastate (within state) movement of EAB regulated articles from quarantined counties.

17. What is prohibited from moving out of quarantined counties?

Regulated articles for both the federal and state quarantines are: EAB in any living state, nursery stock, green lumber, firewood of any non-coniferous (hardwood) species and other material living, dead, cut or fallen – including logs, stump roots, branches and composted and uncomposted chips – of the genus Fraxinus.



Emerald Ash Borer

FAQs

General Information

18. Are there any natural enemies of EAB?

Yes, scientists have observed parasitic wasps attacking egg or larval stages of EAB. These wasps have been released at EAB-infested sites in multiple states for several years, and were released in Wayne County in 2012. Unfortunately, establishment of the organisms is a slow process and it will be several years before these beneficial wasps are likely to have a significant impact on EAB containment efforts. Other studies are testing various fungi and bacteria for possible use as "natural insecticides."

19. Are dying ash trees always an indication of an EAB infestation?

No, ash trees are affected by several diseases and insects. Ash trees throughout the state may exhibit dying branches and/or decline and some may show signs of heavy woodpecker damage. This may or may not be due to EAB.

20. What signs are the best evidence that EAB may be attacking my tree?

Look for 1/8 inch diameter D-shaped holes in the bark where the beetles have exited and short (3-5 inches) vertical splits in the bark that reveal S-shaped "trails" (tunnels) under the bark.

21. What if I discover EAB in my trees, what should I do? If you suspect your ash is infested, please call (866) 716-9974.

22. How can I help stop the spread of EAB?

Don't spread pests. Burn firewood where you get it. Avoid planting ash trees. Instead, choose other large shade trees for landscaping. Stay vigilant and be on the lookout for potential EAB infestations.





