

Emerald Ash Borer — Next Steps

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As of last June, Nebraska became the 27th state with a positive confirmation of emerald ash borer (EAB). EAB has been confirmed in southeast Omaha, in Greenwood, Cass County and in western Douglas County. EAB has not been found in Lancaster County yet, but it will inevitably make its way into other parts of Nebraska within the next few years. All true ash species are potential hosts.

Treatment Consideration

Now that it's here, EAB will be with us forever. Insecticide treatments against EAB are available, but can cause cumulative damage to trees. Trees must be treated regularly for the rest of their lives. Many homeowners will decide to let some trees die, particularly low-vigor trees, those in poor locations or with existing problems.

The Nebraska Forest Service (NFS) recommends homeowners wait to begin protective treatments until EAB has been confirmed within 15 miles of their location. To view NFS's EAB Treatment Consideration Zone map, go to <http://go.unl.edu/eabmap>

Why 15 miles? This recommendation strikes a balance between protecting valuable trees and limiting the negative effects of unnecessary treatments. Treating trees outside this zone provides little or no benefit to trees, yet exposes humans and the environment to pesticides, wastes money and, in the case of trunk injections, causes unjustified tree damage.

Keep in mind, EAB does not kill trees immediately. It takes a few years of continued infestation before the tree begins to decline. Insects have usually been in a tree for 2–3 years before signs of decline are noticed. Trees with 30 percent or less canopy dieback can successfully be treated and fully recover. Trees with over 50 percent canopy dieback, are less likely to recover.

Replacement Trees

Spring is a great time to plant new trees, establishing the next generation to take over as ash trees die. Emerald ash borer is again teaching us a basic lesson — species diversity is critical. So look at what your neighbor has planted in their yard and plant something different. The Nebraska Statewide Arboretum has put together two lists of recommended trees based on your location in the state. Use these ideas to help in your tree selection.

- Trees for Eastern Nebraska, <http://go.unl.edu/easttrees>
- Trees for Western Nebraska, <http://go.unl.edu/westtrees>

Slowing the Spread

Even though EAB is in Nebraska, slowing its spread is still important. Moving infested plant material, firewood, lumber and other ash materials is one of the main ways EAB has spread through other states.

Last year, Nebraska Department of Agriculture implemented a quarantine for Cass, Dodge, Sarpy, Douglas and Washington counties. Positive EAB confirmations have occurred for Cass, Douglas and Sarpy counties. Dodge and Washington counties are included in the quarantine due to an EAB confirmation in Missouri Valley, Iowa and the amount of traffic into these counties from Omaha and Douglas county.

Additional counties will fall under quarantine guidelines as EAB is confirmed in new locations throughout the state.

Nebraska's Quarantine

What does the quarantine mean for homeowners? It prohibits the movement of regulated materials from other states and Nebraska counties under quarantine, into non-quarantined parts of our state.

What materials are regulated? Any item made from or containing ash wood. First and foremost, ash nursery stock cannot be sold or otherwise distributed within or moved outside quarantine areas. Additional regulated materials

include ash logs and lumber, hardwood mulch and firewood, pallets and any other ash materials. Due to the difficulty of identifying a wood source for bark chips, mulch and firewood once a tree has been cut down, all hardwood (non-conifer) species are included in the quarantine.

Don't Move Firewood

A key point to remember is EAB can move long distances via firewood. EAB larvae live inside the wood of infested trees for about a year, from spring when they hatch until they emerge as adults the following summer. So wood from infested trees will contain immature insects. Adult beetles are also frequent hitchhikers on ash wood.

Homeowners can use wood from ash trees removed on their property in their own home fireplace. But when camping, always buy firewood locally and don't take leftover firewood home. Leave it at the campsite.

Learn More

Two seminars are scheduled this summer to help homeowners learn more. Both programs will be held at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln.

- Tuesday, April 4, 6:30–8:30 p.m.
- Saturday, May 6, 9–11 a.m.

Pre-registration is requested by calling 402-441-7180. Cost is \$15 per person/couple for one set of educational materials. Pay at the door, making checks payable to Nebraska Extension in Lancaster County.

MORE INFORMATION

The Nebraska Forest Service has many resources available at <http://nfs.unl.edu/nebraska-eab>, including:

- Frequently Asked Questions
- How to Select Trees for Treatment
- How to Select an Arborist or Tree Service
- Homeowner Guidelines

Information is also available at www.emeraldashborer.info

If you suspect your ash tree has EAB, contact the Nebraska Department of Agriculture at 402-471-2394

EAB Identification



Emerald ash borer — fully developed adult before emergence (shown approximate size)



After the adults emerge, they leave D-shaped exit holes in the bark (shown enlarged)

Emerald Ash Borer adult beetles are small, only about 1/2-inch long and slender, metallic green in color. They emerge from infested trees in early summer, June and July. Adult females lay eggs in the bark of branches or the main trunk.

Larvae are borers and tunnel just under the bark after hatching. They are flat, cream-colored and legless. They have a brown head, and their bodies are divided into

10 bell-shaped segments. At maturity, they reach 1-1/2 inches in length. After pupating into adults, the beetles chew their way out of the tree, leaving behind a D-shaped hole.

It's amazing when you start to look for them, how many green insects can be found in Nebraska. Check out "Emerald Ash Borer Look-Alikes" at <http://go.unl.edu/eablookalikes> to see insects commonly mistaken for EAB.

Ash Tree Identification



Ash trees have compound leaves with 5–11 leaflets.



Young ash trees have smooth bark that thickens into a diamond-shaped pattern as the trees age. Color is usually gray.



Ash seeds (called samara) are paddle-shaped — but not all ash trees produce seeds.

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