

Emerald Ash Borer – Should I Treat this Year?

By: Sarah Browning

I heard a radio spot last week stating the city of Lincoln is recommending homeowners begin treating trees for Emerald Ash Borer control. Well, you definitely don't want to believe everything you hear in commercials.

Here are five important things you need to understand about Emerald Ash Borer (EAB) to help you make an informed decision about when, and if, to treat your ash trees.



15-Mile Treatment Consideration Zone

The Nebraska Forest Service recommends not beginning to treat your trees until your property is within 15 miles of an EAB confirmed site. The 15-mile recommendation strikes a balance between protecting valuable trees and limiting the negative effects of unnecessary treatments.

Injection and implant insecticide applications provide the best control in large trees, those 45-inch circumference and over (measured at 4 feet above the ground), but they do have drawbacks - specifically they cause damage to the tree. Most are applied by drilling holes into the tree's trunk, which opens up the trunk to insect pests and decay fungi. Drilling may also break through internal barriers, created by the tree within the trunk, to wall off internal decay. Breaking this barrier allows decay to spread into healthy wood. In addition, the pesticide itself can cause internal damage that may accumulate over years of repeated injections and potentially kill the tree, even if the pest is controlled.

Treating trees outside of the 15-mile 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.

Where is EAB Now?

In 2016, EAB was confirmed in three Nebraska locations – Pulaski Park in southeastern Omaha, Zorinsky Lake in western Omaha, and Greenwood, NE in Cass County.

The northeast corner of Lancaster county and the northwest corner of Otoe county fall inside the 15-mile recommended treatment zone, so homeowners in those areas may want to consider treating trees this spring. But the majority of homeowners in Lancaster county are still better off waiting until the insect has been confirmed closer to their locations.

Nebraska EAB Detection Map - <https://nfs.unl.edu/graphics/EABmap%28State%20Level%29.png>

There's Plenty of Time to Treat

EAB does not kill trees quickly; it takes a few years of continued infestation before trees begin to decline. Often insects have been in a tree for 2-3 years before signs of decline are noticed and 1-2 more years before the tree dies completely.

If homeowners begin to treat their trees when 30% or less canopy dieback has occurred, an otherwise healthy vigorous tree can usually be expected to fully recover. Trees with over 50% canopy dieback, however, are less likely to recover.

So even if, in the worst-case scenario, your tree is found to have EAB this summer there is plenty of time to begin treating and have the tree make a good recovery.

What is the Best Time of Year to Treat?

Trees take in the systemic insecticides used against EAB best from April through early June. Research has shown that fall applications, although discussed on some product labels and promoted by some tree care companies, require double the amount of product be used to provide the same level of control as spring applications.

Considering the slow-moving nature of EAB, waiting until spring is the best choice – offering a balance between protecting the tree and preventing the introduction of extra insecticide in the environment.

So stay calm and take your time. Don't be in a hurry to treat your trees.

For more information, take a look at these publications.

- EAB: Guidelines for Nebraska Homeowners, <http://nfs.unl.edu/documents/EAB/EABhomeownerfullsheet2012Oct.pdf>
- Selecting Trees for Emerald Ash Borer Treatments, <http://nfs.unl.edu/Selecting%20ash%20for%20EAB%20trt%20full%20sheet.pdf>
- Emerald Ash Borer Treatment Options, <https://nfs.unl.edu/documents/EAB/EABTrunkInjectionTmtOptions.pdf>
- Nebraska Forest Service EAB website, <http://nfs.unl.edu/eab>.

When Can I Stop Treating?

Never. You'll need to continue to protect trees you want to save indefinitely. In 20-25 years, once the majority of ash trees are dead, the population of EAB will fall but it will never be completely gone. The best long term solution for most trees is to let them go and replace with trees not affected by this insect.

Your Suggestions are Welcome!

Is there a lawn and gardening topic you would like to learn more about? Sarah Browning is an Extension Educator with Nebraska Extension and can be contacted by phone 402 441-7180, by mail at 444 Cherrycreek Road, Lincoln, NE 68528: or by e-mail sarah.browning@unl.edu.

Image credit - Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org



Sarah Browning

Extension Educator

Nebraska Extension

In Lancaster County

444 Cherrycreek Rd, Ste A, Lincoln, 68528-1591

402 441 7180