



Emerald Ash Borer has been confirmed again in the state of Nebraska. Confirmation doesn't necessarily mean that treatments are in your near future. Find out what treatments entail and what makes trees good candidates for those treatments.

A quick review of what Emerald Ash Borer is and what it does. Emerald Ash Borer (EAB) is an invasive beetle that attacks and kills all species of ash (*Fraxinus spp*). It is a small, metallic-green beetle that is about 1/2 inch long. The larvae of this wood-boring insect tunnel under the bark of ash trees, disrupting the flow of water and nutrients, ultimately causing the tree to die. EAB infested ash trees will exhibit thinning or dying branches in the top of the tree, S-shaped larval galleries under bark, D-shaped exit holes and suckers or advantageous growth along the trunk and main branches. Trees can be preventatively treated or removed prior to infection.

If treatments are selected, they need to be made at the right time, to the right tree, and the right proximity to your location. Once EAB has been confirmed within the 15 mile radius of your location, then you can begin the proper treatment applications on healthy trees. Treatments are not always recommended for all trees; they must be good candidates for treatment. A tree that isn't a good candidate for treatment is one with a stem girdling root, a tree without a trunk flare, trunk damage or missing bark on the trunk, a tree with over 50% canopy decline, trees with obvious signs of internal rot (holes with soft or squishy rotted wood) or trees with fungi growing directly out of the trunk (another sign of internal rot). A tree with some of these symptoms won't be able to take up the treatments properly and won't be protected the same way a healthy tree would be. This can lead to wasted applications and ineffective treatments. Trees that aren't good candidates for treatment are best removed prior to infestation.

Treatment methods can vary depending on the size of the tree. There are some products that can be applied by homeowners, while others required a certified professional. The most available method for homeowners is a soil drench where the product is poured around the base of the tree. The drench can be applied successfully to trees with under a 20" diameter trunk and will need to be made yearly throughout the lifespan of that tree. If a tree is larger than 20" diameter, tree care professionals are able to use additional products like trunk injections on those larger trees. Contact a certified professional for these treatments as they are not something you can do yourself. Time of year also plays a role in effectiveness of treatments. Most products are best applied in the spring, while others can still done throughout the summer. Right now, we are out of the control window for this year and it is best to wait until next year.

Injections are not a no harm, no foul option and still cause harm to the tree. Most injections are applied by drilling holes in the trunk of the tree. These holes can open the tree up to insects and diseases, not to mention the open wounds can also become infected with decay fungi. The drilling may break through internal barriers within the tree that have been made to wall off internal decay, leaving the tree more susceptible to internal rot. Additionally, the pesticide itself can cause internal damage that can accumulate over years of repeated injections that can also potentially kill the tree, even if the pest is controlled.

Treatments are not a one-time occurrence. They do not immunize the tree for the rest of its life. In order to save an ash tree using treatments, they would need to be made regularly every one to two years throughout the lifespan of the tree. Treatments can buy you some time as a new tree is getting started or allow you to delay removal of the ash, but don't count on them as a long-term fix to the situation.

Want to find out more about Emerald Ash Borer? Nebraska Extension and the Nebraska Forest service are teaming up to offer a free Emerald Ash Borer Online Workshop September 2, 2020 at 6:30 pm. Pre-registration required at <https://go.unl.edu/eab2020>. Workshop will cover: EAB Biology, Tree Symptoms, Treatments, Tree Diversity, FAQ's and more.

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