

Pesticide Treatment (cont)

- Who is performing the treatment? If your tree is large or if you do not want to handle pesticides, consider hiring a certified arborist to treat the tree for you.
- Weather: Many pesticides should not be applied before a rain event or when the soil is too dry or too wet. Follow the label carefully.

Common Types of Pesticide Treatment

- Injection: Due to the complexity of treatment and equipment needed this is best completed by a certified arborist. Tree injections using the active ingredient Emamectin Benzoate are generally recommended as the most effective option to manage EAB; however, they do wound the tree in the process and are the most expensive. This method is often used for larger trees.
- Soil Drench: A mixture is poured on the soil around the base of the tree and is absorbed by the root system.
- Basal Spray: A pump spray bottle is used to spray the bark of the tree where the pesticide enters the tree through the bark.

When using pesticides

- Follow the label: Always follow the pesticide's label instructions. This is required by law.
- Be aware of wildlife: Certain pesticides cannot be applied around pollinators, flowering plants or water due to toxicity risks.



Additional Resources

Emeraldashborer.info

Additional information about EAB

Treesaregood.org

Find a Certified Arborist and tree care information

Dontmovefirewood.org

Information about wood movement risks

Questions

Contact Mosquito and Forest Pest Management or visit www.pwcgov.org/eab

The parasitoids were produced and supplied from, the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) EAB Parasitoid Rearing Facility in Brighton, MI. For parasitoid information please call 866-322-4512.



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A Property Owner's Guide to Ash Trees and the Emerald Ash Borer

Steps you can take in response to the invasion





Emerald Ash Borer (EAB) Background

Emerald Ash Borers are small (1/2") metallic green wood-boring beetles from Eurasia. They have been causing issues in the U.S. since the 1990s and are now established in Prince William County. Their population is expected to continue to spread and kill almost all native Ash trees across the country. The immature beetles bore into the tree as larvae and disrupt the flow of water and nutrients, ultimately killing the tree. The adult beetles emerge from the interior of the tree in early summer.

Prince William County Response

EAB was discovered in the county in 2010. We used purple sticky traps to track the spread during 2011-2014 and confirmed that EAB is present throughout the county. In response to EAB, the County coordinated with The Animal and Plant Health Inspection Service (APHIS) to release wasps that target EAB in several areas. This biological control method requires forests of a certain size and Ash density to be effective. Due to the biology of the EAB and the nature of available pesticides, the county is unable to perform pesticide treatments for property owners or remove infected trees.

What Can We Do?

It is not possible to try to save every Ash tree in the county. However, it is useful for individuals to have a management plan in place to determine how to respond to EAB. Large shade trees or trees that hold sentimental value may be good candidates for pesticide treatments. Trees that are unsuitable for treatment may need to be removed or left in place to decline. This brochure outlines a few things to consider when determining your EAB response and lists some resources available for help.

Property Owner Actions

First determine if you have Ash trees on your property: Look for opposite branching, compound leaves, and diamond shaped bark. Many trees are currently showing damage in the county. If you do have Ash trees, there are a few things you can do:



- *Consult Prince William County and/or a Certified Arborist*

- *Allow trees to decline*

- *Remove/Harvest trees*

- *Apply pesticides*

Consulting

A MFPM Certified Arborist is available to visit your property to identify Ash trees and provide general recommendations about management options. Certified Arborists can be hired to determine what trees may pose a safety risk by performing a risk assessment, and they can tell you which Ash should be removed and which Ash might benefit from treatment.

Allow Trees to Decline

Sometimes it's not feasible or desired to remove, harvest, or apply pesticides to Ash trees on your property. If you take no action, the trees will continue to decline and die but can offer shelter and food for wildlife during this process.

Harvesting

- Ash wood can be harvested for lumber even when damaged by EAB, but trees must be taken down a certain way for processing. Ask your arborist if they can perform this type of work.

- Contact the Virginia Department of Forestry or see treesvirginia.org/outreach/virginia-urban-wood-group for more information on using your trees for woodcrafting.

Tree Removal

- If possible, remove trees before they are heavily damaged/dead for easiest removal.
- Chipping or mulching to 1" pieces or less can help to reduce the number of EAB, but is not required and does not significantly reduce overall EAB. Mulch or firewood generated from tree removal can be used on your property.
- Make sure quarantines are followed if wood is removed off site. Ash wood is allowed to be moved freely within the county. Contact the Virginia Department of Agriculture and Consumer Services for the most up to date information. 804.786.3515
- Consider eventually replanting a different tree species after your Ash is removed.

Pesticide Treatment

If you are thinking about applying chemicals to protect your Ash trees, there's a few things to consider:

- Does your tree have almost all of its leaves left? If your tree leaf canopy has more than 70% of its leaves remaining your tree may be healthy enough to treat.
- Does your tree have good form and is it in a good spot? Make sure the tree will not be a maintenance problem later where you might have to severely prune it back or remove it. Environments with soil compaction, too little or too much moisture can also be problems.
- Can you commit to a pesticide schedule? Depending on the pesticide, you may need to apply it annually or every few years.
- What time of year is it? Researchers have found pesticides applied in the spring typically provide the best protection, although they can be applied at other times as well.
- How old and large is the tree? It is considered to be more cost effective to replace a young tree less than 4" diameter rather than applying pesticides. Often pesticide treatments require you to measure the diameter of the trunk, this is usually done by measuring around the tree at 4.5 feet above the ground; dividing this number by 3.14 will give you the diameter.