



Emerald Ash Borer

and options for managing ash trees

Ash trees are a common urban landscaping tree – there are more than 1 million ash trees in yards, parks and streets in Hennepin County. That’s about 15 percent of the tree canopy. All ash trees in the county are threatened by emerald ash borer, an invasive tree pest from Asia that kills ash trees.

Most residents of Hennepin County live within 15 miles of an infested ash tree. If you have ash trees on your property, it’s time to start thinking about what you’re going to do with those trees.



Where has the emerald ash borer been found?

Trees infested with emerald ash borer have been found in several locations throughout Hennepin County. Because it can take several years to detect an emerald ash borer infestation, the impact is probably more widespread than we are currently aware.

It is likely that the number of ash trees infested and dying from the emerald ash borer will increase greatly in the next five years.



How do I identify an ash tree?

The first step in preparing for emerald ash borer is determining if you have any ash trees on your property. There are several varieties of ash trees in Hennepin County – green, white and black. Look for the following characteristics to determine if your tree is an ash tree:

- Branches that grow directly opposite from one another.
- Compound leaves, or multiple leaves on one stalk joined to a branch. Leaves commonly have 5 to 9 leaflets.
- Bark with diamond-shaped pattern.
- Seeds are oar-shaped samaras that typically hang in clusters

To learn more about identifying an ash tree, download the ash tree identification factsheet at mda.state.mn.us/news/publications/ext/ashtreeid.pdf.



What are the signs of an emerald ash borer infestation?

The following signs may indicate that an ash tree is infested with emerald ash borer:

- **Canopy dieback:** Leaves on the top or on one part of the tree will start dying, eventually impacting the rest of the tree.
- **Shoots growing from base of tree:** Sprouts growing from the roots or base of tree indicate that it is stressed.
- **Increased woodpecker activity:** Woodpeckers feed on larvae within the tree's bark.
- **Blonding of the tree bark:** Caused by woodpeckers stripping the bark when going after emerald ash borer larvae, the blonding appearance can be patch or encompass nearly the entire tree.
- **Cracks in the bark:** Larvae tunneling beneath the bark can cause the bark to split open.
- **Serpentine patterns underneath bark and D-shaped exit holes:** Larvae feeding on the tree's tissue leaves a serpentine pattern underneath the outer bark, and adult beetles leaving the tree create D-shaped holes.

For more information, see the Minnesota Department of Natural Resources signs and symptoms of emerald ash borer slideshow at dnr.state.mn.us/invasives/terrestrialanimals/eab/slideshow.html

If you think you have an infested ash tree, contact your city forester or parks department to determine your next steps.



Options for managing ash trees

There are two options for managing ash trees on your property: preserve them by using an insecticide treatment or remove and dispose of them.

Preserving ash trees

Treatment with an insecticide is an option to preserve ash trees of high value. A mature ash tree that is healthy, at least 30 inches in circumference (or 10 inches in diameter) at chest height, and of value to the property owner may be worth saving.

If you decide to treat your ash trees, treatment should be done if you are within five miles of an emerald ash borer infestation. Preservation treatments must be administered by a certified arborist about every two years in late spring. Cost will vary depending on the size of your tree but typically costs about \$200 per tree.



Hennepin County is using a trunk injection of emamectin benzoate to treat high quality ash trees on county properties. This is an effective treatment option that is not a neonicotinoid, which have been shown to negatively impact pollinators.

Removal and disposal

Any ash tree that is not being treated will eventually need to be removed and disposed. Trees should be removed by a reliable, insured, ISA-certified arborist.

A dead tree should be removed before it becomes a hazard. If you decide to proactively remove ash trees, remove trees between October 1 and April 30 to avoid the season that emerald ash borer is active and in flight.

Working with your neighbors to hire a company to remove trees on multiple properties can help reduce your individual costs.

Ash tree waste should be disposed of at yard waste sites within the county. Ash tree waste cannot be transported outside of the quarantine area. Find yard waste disposal sites at hennepin.us/yardwaste.

Replanting



Trees provide numerous benefits, including improving air and water quality, reducing soil erosion and stormwater runoff, increasing wildlife habitat, providing savings in heating and cooling, improving health, and increasing property values. So planting new trees in place of any you remove is a great idea.

When planting trees, select a variety of trees that are well-suited to your growing conditions. Make sure to plant the right tree in the right place to ensure trees will stay healthy and provide maximum benefits.

Contact your city forester for information about selecting trees that work well in your area.

For more information on tree planting and tree care, visit the Minnesota Department of Natural Resources at dnr.state.mn.us/treecare/residential_plant.html or the U.S. Forest Service Tree Owner's Manual at na.fs.fed.us/pubs/uf/tom/090202_tom_lr.pdf.

Additional ways to prevent the spread of emerald ash borer



Only prune ash trees during the season when emerald ash borer is not active, which is from October 1 to April 30. Dispose of ash tree waste at yard waste sites within the quarantined area.

Do not transport firewood. Emerald ash borer spreads slowly on its own, but can spread more rapidly when infested wood is transported. Buy or get fire wood from close to where you plan to burn it.

Photo credits

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Inside left: U.S. Department of Agriculture (EAB on leaf), Hennepin County Master Gardeners (tree damage), U.S. Forest Service Region 5 (EAB in firewood), David Wright (ash tree), Lindy Buckley (ash leaves), Eli Sagor (Black ash bark), a200/a77Wells (ash seeds); all images found on flickr.com and used with permission via Creative Commons license 2.0

Inside middle: Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org (canopy); Minnesota Department of Agriculture (tree damage, exit holes and blanding); Joseph O'Brien, USDA Forest Service, Bugwood.org (sprouts)

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