HENNEPIN COUNTY
MINNESOTA

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 that aren't being treated are likely infested with emerald ash borer, an invasive tree pest from Asia that kills ash trees.

If you have ash trees on your property, it's time to start thinking about what you're going to do to treat or remove them.

Hennepin

Where has the emerald ash borer been found?

The emerald ash borer has been discovered in most cities and is presumed to be in all cities in Hennepin County. It's likely that every non-treated ash tree in the county will be infested soon. It can take several years for an ash tree to show symptoms from emerald ash borer, so even a tree that appears healthy may be in the early stages of being infested.

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:

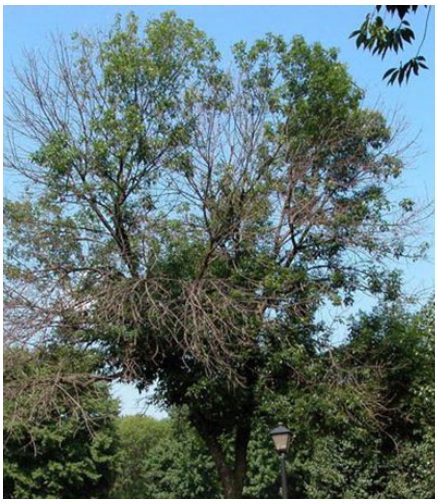



- Branches that grow directly opposite from one another.
- Compounds leaves, or multiple leaves on one stalk joined to a branch. Leaves commonly have 5 to 9 leaflets.
- Bark with diamond-shaped pattern.
- Seeds are oar-shaped samaras that typically hang in clusters

To learn more about identifying an ash tree, download the ash tree identification factsheet at **hennepin.us/ashtrees**.

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.

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 begin immediately. 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 from $200 - $300 per tree per treatment.

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. Emamectin benzoate is specifically formulated to impact emerald ash borer and as such, has few if any impacts to other insects. Furthermore, ash trees are wind pollinated and don't rely on insects for reproduction.

In some circumstances, ash trees may not be good candidates for treatment. If 30% or more of the leaves and branches have died or if there are blond patches on the bark, these are signs of heavy infestation levels, and the tree may not be a suitable candidate for treatment. Studies have shown that treating after this level of infestation may not work, and if it does, that tree will need intensive pruning to remove dead or dying wood.

Removal and disposal

Any ash tree that is not being treated will eventually need to be removed. Trees should be removed by a reliable, insured, ISA-certified arborist. Dead trees should be removed before they become hazards. 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 and shouldn't be transported outside of the Twin Cities metro area to avoid spread of emerald ash borer. Find yard waste disposal sites at **hennepin.us/yardwaste**.

Funding for removal

In early 2024 Hennepin County was awarded 10 million dollars in funding from the U.S. Forest Service to remove diseased trees, plant trees, educate residents, and support businesses and workforce development. Work on this project will begin in spring 2024 and continue through January 31, 2029. Hennepin County will help homeowners with low incomes get trees removed and replaced on their properties. Applications will be accepted from residents beginning in June 2024.

Visit **beheardhennepin.org/urban-community-forestry** to stay up to date, subscribe for updates, and find application materials.

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 **usfs-public.app.box.com/v/TreeOwnersManual**.

Photo credits

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Page 3: 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

Page 4 Eric R. Day, Virginia Polytechnic Instutute and State University, Bugwood.org (canopy); Minnesota Department of Agriculture (tree damage, exit holes and blonding); Josheph O Brien, USDA Forest Service, Bugwood.org (sprouts)

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