

# Homeowner's Guide to Emerald Ash Borer

The emerald ash borer (EAB) is a 1/2-inch long, metallic green beetle originally from Asia that feeds on and burrows in all species of North American ash trees. It was first identified in the Midwest in 2002 and has since killed millions of ash trees in over 35 US states and 5 Canadian provinces.

EAB was discovered in Vermont in 2018 and poses a serious threat to Vermont's ash trees, both in forests and in urban and residential areas.



Adult Beetle



Larvae

## ▶ STEP 1: ARE THERE ASH TREES ON MY PROPERTY?

Since EAB only attacks ash trees (genus *Fraxinus*), first determine if you have ash trees on your property. The most commonly planted species are green and white ash. **Look for these features to determine if you have ash trees.**

### Bud and Branch Arrangement

Branches and buds grow directly opposite each other -- they are not staggered. When looking for opposite branching in trees, consider that buds or limbs may die. Not every branch will have an opposite mate.



### Leaves

Leaves are compound and composed of 5-11 leaflets. Leaflet edges may be smooth or toothed. The only other oppositely branched tree with compound leaves is boxelder (*Acer negundo*), which usually exhibits three to five leaflets.

### Bark

On mature green and white ash trees (left), the bark is tight and features a distinct pattern of diamond-shaped ridges. Black ash trees have a flakey bark as they age. On young trees, the bark is relatively smooth.

### Seeds

When present, seeds are dry, paddle-shaped samaras. They usually occur in clusters and typically hang on the tree until late fall or early winter.



## STEP 2: I HAVE AN ASH TREE - IS IT INFESTED WITH EAB?

Learn the signs and symptoms of EAB to determine if your tree is infested. But be careful: infestations of other pests on ash trees can sometimes create symptoms similar to those caused by EAB infestations. [Learn more at VTinvasives.org/eab](http://VTinvasives.org/eab).

### Signs and Symptoms of EAB



Dieback of foliage



Woodpecker Activity



Insect Galleries



Sprouting



D-shaped Exit Holes

## STEP 3: WHAT ARE MY OPTIONS?

Effective management of EAB takes several factors into consideration, including the distance to the nearest infestation or the extent of the current infestation. Once EAB arrives in an area, it will remain a constant threat to ash trees for many years to come. ***If you desire to keep your tree, it is likely that protective treatments with an insecticide will be needed for the rest of the tree's life.*** Trees should be evaluated for potential insecticide treatment by a professional arborist. Applications of insecticides should be done by certified pesticide applicators that hold an active commercial license with the [Agency of Agriculture in Ornamentals & Shade Tree](http://Agency of Agriculture in Ornamentals & Shade Tree) pest control. Although there are homeowner products available, they vary in efficacy and can pose problems to pollinators and are therefore ***not recommended***. For professional help, find an International Society of Arboriculture (ISA) Certified Arborist at [TreesAreGood.org](http://TreesAreGood.org).

### Is your tree infested with EAB?

YES

Is the infestation in its early stages? Does the tree exhibit less than 30% canopy thinning? And is the tree worth saving?

YES

Consider treatment options or remove and replant a tree of a different species.

NO

Remove and replant a tree of a different species.

YES

If the tree is healthy and important to preserve, consider treatment options. If not, consider removing the tree and replanting a tree of a different species.

NO

Has EAB been detected in or near your town?

NO

Keep an eye on your tree(s) for signs of EAB and stay informed about the spread of the beetle.

***If you choose to remove your tree, the wood does not have to go to waste. There are several ways that you can recover some of the value and put the wood to good use around your home, such as firewood, lumber, or landscaping materials. Whatever you choose to do with your removed ash trees, be sure that no ash wood leaves the area to SLOW THE SPREAD.***

Report suspicious findings and learn more at [VTinvasives.org](http://VTinvasives.org)



Vermont Urban & Community Forestry Program

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