Options for Protecting Ash Trees from Emerald Ash Borer with Insecticide Treatments

Ash mortality from emerald ash borer (EAB) can be prevented by treating ash trees with insecticides, but it is a long-term commitment. Insecticide treatments can help protect healthy, high-value ash trees planted along streets or in yards or parks. Professional arborists can help you determine which trees can be effectively treated. It is not practical or cost effective to treat woodland trees.

**STEP 1: Determine if it is time to treat**

Locate where your property is in relation to the identified EAB Infested Area in Vermont. Trees that are in the infested area can be considered for treatment. For trees that are outside this area, treatment is not recommended. Continue to monitor ash trees, for signs of EAB, and the extent of the infested area.

**STEP 2: Decide if your tree is worth treating**

Ash trees can be a valuable part of the landscape. A healthy ash tree can increase property value, improve air and water quality, and provide shade. Determine if an ash tree is valuable enough to warrant long-term protection by considering its health, shape, and location. Healthy trees have full crowns, elongating branches, and bark held tightly to the trunk and branches. If the tree is damaged, exhibits more than 30% canopy dieback, or is growing in a poor site, replace the tree with an alternate species. See our tree selection tool.

**STEP 3: Treatment**

If your tree is in the infested area and warrants long-term protection, a professional arborist and certified pesticide applicator can evaluate the tree for potential insecticide treatment. The efficacy of a specific insecticide depends on factors such as tree health, tree age, pest population, site conditions, and frequency of application. Insecticide applications must be performed by a certified pesticide applicator holding an active commercial license with the Agency of Agriculture, Food and Markets in Ornamentals & Shade Tree pest control. Although there are products for sale for homeowners, they can harm pollinators, the tree, or the homeowner and are not recommended. Find an International Society of Arboriculture (ISA) Certified Arborist at TreesAreGood.org.

If an ash tree is in the infested area, warrants long-term protection, and a is good candidate for treatment, follow these guidelines:

- Contact a certified pesticide applicator to inject a systemic insecticide directly into the tree’s trunk. Systemic chemicals are transported within the vascular system of the tree from the roots or trunk to the branches and leaves. Insecticides applied to the soil, bark surface, or foliage are not recommended. Trunk injections reduce hazards due to insecticide drift away from the site, and are less likely to impact beneficial organisms.

- Products that contain emamectin benzoate and azadirachtin are recommended. Emamectin benzoate lasts longer, and is generally more effective for large ash trees, than other products. It controls EAB for at least two years. Azadirachtin is effective for two years when EAB populations are low but must be injected yearly when EAB populations are high.

- See Frequently Asked Questions Regarding Potential Side Effects of Systemic Insecticides Used To Control Emerald Ash Borer for more information.

Learn more at VTcommunityforestry.org/EAB