

SAVING YOUR HIGH-VALUE ASH

A simple guide for homeowners and municipalities with true ash (*Fraxinus*) trees

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Emerald ash borer adult
Photo credit: N.W. Siegert

The problem: Emerald ash borer is an introduced and destructive pest of all North American true ash (*Fraxinus*), such as white, green, and black/brown ash. Trees infested with emerald ash borer will die from the infestation within 3-5 years. Management strategies to slow the spread of ash mortality can reduce *overall* emerald ash borer populations, but they may not save the ash tree in front of *your* house or in *your* park. Potential costs associated with emerald ash borer for municipalities and homeowners include:

- Costs to remove/replace/treat infested trees
- Loss of landscaping and community character
- Increased heating/cooling costs
- Reduction in property value
- Potential property damage/personal injury suits



Branch sampling of an ash tree



Maine peeled ash tree showing emerald ash borer damage

Although you cannot control the arrival of emerald ash borer on your property, you can decide what impact emerald ash borer will have by developing an emerald ash borer plan. This should be done regardless of proximity to known emerald ash borer populations. The first step is to stay informed about known emerald ash borer populations in the state (www.maine.gov/eab). Next, determine if you have ash trees, their size, location, and if they add value to your property or community. Determine if your trees are on personal or public property. If public, contact your local municipal office to see if an EAB management plan is in effect. To estimate the costs associated with tree removal, replacement or treatment of private trees, use local foresters and arborists, smartphone apps (ARBOR-mobile for iPhone and iPad and others) or online calculators (<https://int.entm.purdue.edu/ext/treecomputer/> and other sites). Once you have determined your investment in ash and considered your budget, you can develop a plan for which trees will be removed, replaced or treated with insecticides when emerald ash borer arrives. A plan empowers you to make informed decisions about your property or community.

Don't let the beetle decide what to do with your trees!

More information about using insecticides for emerald ash borer on the reverse

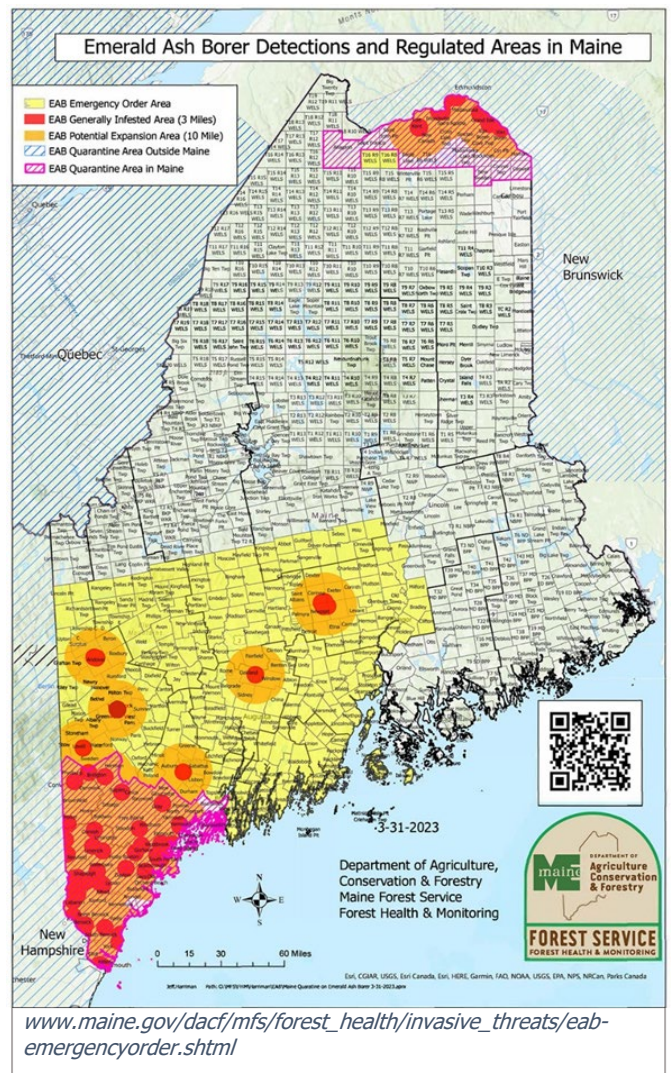
WARNING: Insecticides can have health or environmental impacts. If you use insecticides always follow all label instructions or hire a licensed pesticide applicator. Restricted use pesticides necessitate the application by a licensed applicator. **Pollinator impact note:** Some studies have linked systemic insecticides to declines in pollinator populations and productivity. Potential impacts to pollinators should be considered when initiating an insecticide regime. For information on insecticides used for EAB see:

emeraldashborer.info/documents/Potential_Side_Effects_of_EAB_Insecticides_FAQ.pdf

Pesticides can be a useful tool for protecting valued ash trees. There are important considerations to keep in mind, however, when selecting an insecticide regime:

- How close are your trees to the EAB-infested area? Insecticide treatment is only recommended in the generally infested (red) and potential expansion (orange) areas (see map left, scan QR code or visit maine.gov/eab for current information)
- How big around is/are the tree(s)? Measure the diameter (in inches) at 4.5 feet above the ground with a caliper or tape measure to get the Diameter at Breast Height (DBH)
- Is the tree healthy enough to respond to treatment? Systemic insecticides are less effective in trees that are already in decline. Treatment is not recommended if more than 50 percent of the fine branches are dead.
- Where is the tree in relation to socially or environmentally sensitive habitats (like school properties, wells, or wetland areas)?
- What method will be used to apply the insecticide?
- How effective is the treatment, and how often does it need to be applied?
- How much does the treatment cost? How does that compare to tree removal and replacement?

Not all emerald ash borer-approved insecticides are equally effective, nor are they all appropriate in every circumstance. Choosing an ineffective treatment for your conditions may result in product failure and is not cost-effective. Less effective treatments may prolong the life of an ash tree when emerald ash borer first arrives, but as neighboring untreated ash trees start showing signs of decline, indicating increasing local emerald ash borer populations, a more effective pesticide treatment may be necessary. Resources are available to help you assess the management options and products that are right for you. The table below shows the recommended active ingredients for ash treatment. Most formulations can only be purchased and applied by a licensed pesticide applicator. **Additionally, neonicotinoids like imidacloprid and dinotefuran may only be applied outdoors by licensed pesticide applicators under certain exemptions, such as treating emerging invasive invertebrate pests like EAB.** Maine Board of Pesticides control policy governing the pests exempted for the use of neonicotinoids may be updated at any time, so if you are considering using these products, be sure to view the most recent information at thinkfirstspraylast.org and npirs.org/state/. More resources are available through maine.gov/eab, [emeraldashborer.info/documents/Multistate EAB Insecticide Fact Sheet.pdf](http://emeraldashborer.info/documents/Multistate_EAB_Insecticide_Fact_Sheet.pdf), and by contacting an experienced Maine licensed pesticide applicator.



| <i>See the map above to determine your management zone.</i> | | Ash is less than 18" DBH | Ash is greater than 18" DBH |
|-------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|-----------------------------|
| Generally infested | Ash appears healthy | Imidacloprid, dinotefuran, or emamectin benzoate | Emamectin benzoate |
| | Ash is in decline | Emamectin benzoate | |
| | Ash is dead or with greater than 50% crown dieback | Tree removal. Insecticides unlikely to be effective. | |
| | Expansion management zone | Imidacloprid, dinotefuran, or emamectin benzoate | Emamectin benzoate |
| | Elsewhere in Maine | Treatment is not yet warranted. Develop a plan. | |

For assistance in developing a municipal emerald ash borer plan, and to find out how your management goals coincide with state management of emerald ash borer, please contact the Maine Forest Service.