SAVING YOUR HIGH-VALUE ASH

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

Piera Siegert, NH State Entomologist, adapted for Maine.

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

Ash-lined neighborhood in Lebanon, NH.
Photo credit: P.Y. Siegert

Emerald ash borer killed tree in Concord, NH.
Photo credit: P.Y. Siegert

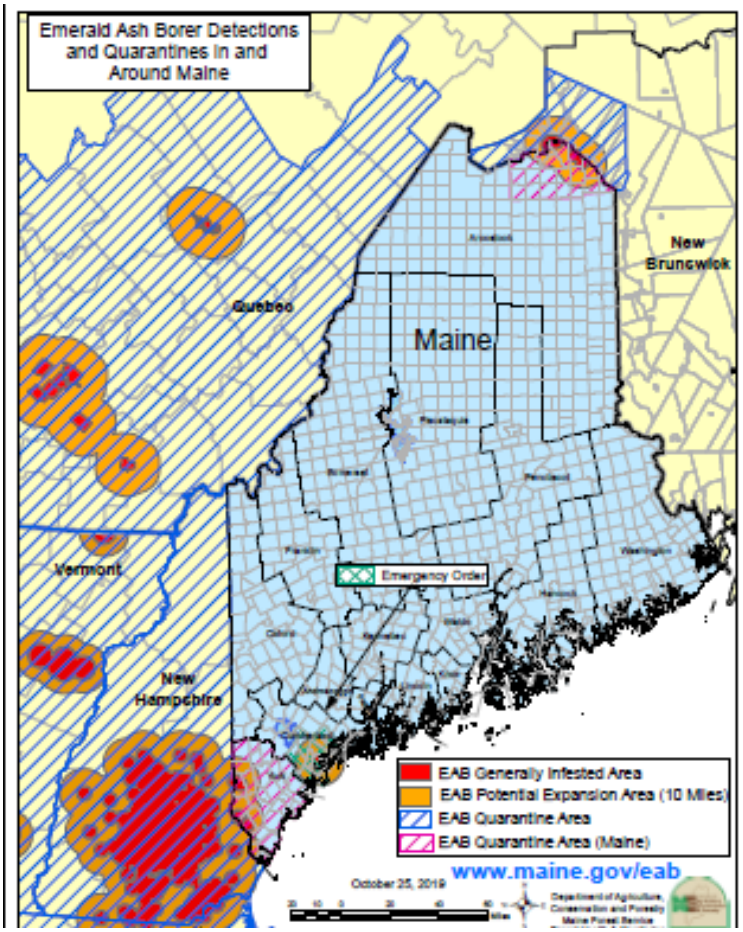
Although you cannot control the arrival of emerald ash borer on your property, you can decide what impact emerald ash borer will have by developing an emerald ash borer plan. This should be done regardless of proximity to known emerald ash borer populations. The first step is to stay informed about known emerald ash borer populations in the state (www.maine.gov/eab). Next, determine if you have ash trees, what size they are, where they are located, 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. For private trees, use local foresters and arborists, on-line calculators (www.extension.entm.purdue.edu/treecomputer/ and other sites) or smart phone apps (ARBOR-mobile for iphone and ipad and others) to estimate the costs associated with tree removal, replacement or treatment. 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. Having 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!**

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.* **Pollinator impact note:** *Some studies have linked systemic insecticides to declines in honeybee populations. The body of evidence is inconclusive, but potential impacts to pollinators should be considered when initiating an insecticide regime. For information on insecticides used for EAB see* www.emeraldashborer.info/files/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:

- Proximity to generally infested area—insecticide treatment is only recommended in the red and orange areas (see map left or visit www.maine.gov/eab for the most current information)
- Size of tree—measure the diameter (in inches) at 4.5 feet above the ground with a caliper or tape measure to get Diameter at Breast Height (DBH)
- Health of tree—systemic insecticides are less effective in trees that are already in decline
- Proximity to socially or environmentally sensitive habitats (like school properties, wells, or wetland areas)
- Mode of application of insecticide
- Effectiveness of treatment
- Cost of treatment
- Frequency of treatment



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 early in the invasion process 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. There are resources available to help you assess the management options and products that are right for you. The table below shows the recommended active ingredients available for use. Most formulations are only available for use by a licensed pesticide applicator. For detailed information about products registered for use in Maine, visit: http://npirspublic.ceris.purdue.edu/state/state_menu.aspx?state=ME.

More resources are also available through www.maine.gov/eab, www.emeraldashborer.info/files/Multistate_EAB_Insecticide_Fact_Sheet.pdf and www.emeraldashborer.info, as well as by contacting an experienced Maine licensed pesticide applicator.

See map above to determine your management zone.		**Ash is less than 18" DBH**	**Ash is greater than 18" DBH**
Generally infested	Ash appear healthy	Imidacloprid, dinotefuran, or emamectin benzoate	Emamectin benzoate
	Ash are in decline	Emamectin benzoate	
	Ash are 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
Alert management zone		Treatment 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.