

Biological Control of Emerald Ash Borer



General Information: The Maine Forest Service (MFS) cooperates with USDA Animal and Plant Health Inspection Service (APHIS) in a biological control effort to manage emerald ash borer (EAB). USDA rearing labs provide three types of non-stinging wasps, or

parasitoids, that will attack either EAB larva or eggs. Like EAB, these insects are native to Asia. They specialize in attacking EAB and help reduce its numbers. They are not expected to negatively impact native species and may give ash a chance at better survival.

MFS is looking for more sites to release these biological controls agents.

Species	Type of parasitoid
Tetrastichus planipennisi	Larval endoparasitoid
Spathius galinae	Larval ectoparasitoid
Oobius agrili	Egg parasitoid

What makes a good site?

Ц	Sites must have EAB present or be within a couple of miles of a known infestation, since these parasitoids will not it	survive
	without EAB.	

- ☐ A wooded area with at least 25 percent ash composition.
- ☐ Ideal sites will have at least 40 acres of ash. Stands of this size are often not found in Maine. In areas where ash trees are not present in large stands, smaller stands connected through scattered ash trees to other areas with significant ash are acceptable. In some cases linear areas of ash, such as along streams or rivers, have been used.
- ☐ Ideal sites will have ash trees of multiple sizes (from seedlings to large trees).
- ☐ Wooded area that will remain forested for at least 5 years after releases.

What should potential cooperators know?

- ☐ MFS does not expect this effort will keep the current ash trees alive, but it should help protect the next generation of trees.
- ☐ If a site is chosen, MFS would need permission to visit that site for 1-2 years to perform releases and for several years after the final release to monitor for parasitoid establishment.
- ☐ Some sampling for parasitoids is destructive. Trees may need to be felled and/or bark may be peeled from standing trees to look for evidence of establishment.
- ☐ Parasitoids are only available for release on a limited number of sites. MFS will suggest the best sites for release; USDA APHIS may only be able to supply parasitoids for some of the sites identified by MFS.

If you have a site in Maine that fits these guidelines and are interested in participating in this project, please contact us. If the site is in an area of known EAB, and the site is approved by USDA APHIS, releases may be able to start in the next growing season. If you are in an area where EAB is not known to exist, consider participating in our trap tree network. This is one of the best methods of determining when EAB arrives in an area. The majority of our approved 2020 biocontrol release sites were discovered with the use of girdled trap trees.

Contact information:

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For more information on emerald ash borer in Maine visit www.maine.gov/eab.



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