

# **Emerald Ash Borer Information for Maine Landowners**

#### Maine Forest Service, DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

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## What is emerald ash borer?

Emerald ash borer (EAB) is an invasive beetle that attacks and kills ash trees. Native to China, eastern Russia, Japan, and Korea, it was first detected in North America near Detroit, Michigan in 2002.

# Has EAB been found in Maine?

Yes, EAB was first discovered in Frenchville, Grand Isle, Madawaska, Acton, and Lebanon, Maine in 2018 and is expected to establish in other parts of Maine. For the up-to-date list of towns impacted by EAB please refer to the map located at <a href="www.maine.gov/eab">www.maine.gov/eab</a>. With over 100 million native ash trees located throughout Maine, EAB will have significant economic and ecological impacts.



EAB damages ash trees by feeding on the inner bark



EAB-infested ash trees often die in 3-5 years.

# What kind of damage does EAB do?

**EAB feeds on all species of ash.** All of Maine's native ash trees (*Fraxinus* spp.) are susceptible to EAB. Mountain-ash (*Sorbus* spp.), however, is not a true ash species and is not a host.

It takes 3-5 years for infested trees to die. Research suggests that a low level of tree resistance may occur, though less than 1% of ash trees are expected to survive the EAB invasion. Ash mortality is widespread in areas where EAB is established.

**EAB damages ash trees by feeding on the inner bark.** Feeding by high densities of EAB larvae score the sapwood and disrupt the movement of water and nutrients within infested trees.

Branches less than 1" in diameter can be infested. EAB infestations often begin in the canopy.

#### For more information, please contact:



# How can I tell if I have EAB?

Woodpecker damage to live ash trees may be the first sign that a tree is infested. When feeding on EAB, woodpeckers scrape off outer bark, leaving smooth, light colored patches. If the bark is removed, S-shaped galleries weaving back and forth on the surface of the wood may be visible. The D-shaped exit holes are good EAB indicators, but are small and can be difficult to see.



Other health problems can kill ash trees in Maine. Damage from ice storms, drought and disease and poor site quality are among the things that have led to declining health of ash in Maine. Not all declining ash trees are necessarily infested with EAB.

Adult beetles are ½" long and metallic green. Under the wing covers, their abdomen is purple. Adult EAB may be present between June and August. Information about lookalike insects is available at <a href="https://www.maine.gov/eab">www.maine.gov/eab</a>.

If you think you might have EAB, report it. Collect and/or photograph any suspect insects. You can report your concerns through our website <a href="https://www.maine.gov\eab">www.maine.gov\eab</a>, the contact numbers below, or the national EAB hotline at 1-866-322-4512.



Woodpecker damage may be the first sign that a tree is infested with EAB.

## Should I cut my ash trees now?

Actions landowners can take now:

**Determine how close you are to the current EAB infestation in Maine or other known infestations in nearby New Hampshire and Quebec.** You can find the most up-to-date information and maps on Maine's and nearby infestations at <a href="www.maine.gov/eab">www.maine.gov/eab</a>. The distance your woods are located from a known infestation will influence actions you take now.

#### 1) Within 10 miles of a known infestation

Plan for EAB now if you have ash trees in your woods. You need to act if you expect to salvage ash in your woodlot. **The Maine Forest Service recommends** that woodland owners work with a licensed consulting forester when making decisions or undertaking management activities in their woods. Your <u>Maine Forest Service District Forester</u> can help you locate licensed consulting foresters in your area. Additionally, District Foresters can answer questions on actions to take in managing your woodlot, provide publications, and tell you about upcoming EAB workshops or events.

To find the latest information about EAB in Maine visit www.maine.gov/eab

Sign up for the Maine Forest Service's "Forest & Shade Tree Insect & Disease Conditions" report: <a href="http://www.maine.gov/dacf/mfs/publications/condition\_reports.html">http://www.maine.gov/dacf/mfs/publications/condition\_reports.html</a>

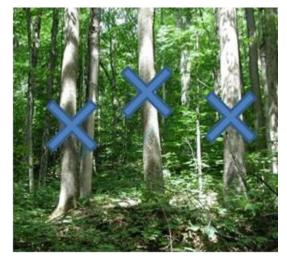
#### For more information, please contact:



## 2) Beyond 10 miles of a known infestation

It could be many years before EAB shows up in your woods. Consider the ecological, aesthetic, and economic value of your ash, your tolerance of risk, and your objectives for ownership. Stay abreast of new information to avoid short-sighted decisions. Visit <a href="https://www.maine.gov/eab">www.maine.gov/eab</a> for the latest news on EAB.

The Maine Forest Service recommends that woodland owners work with a licensed consulting forester when making decisions or undertaking management activities in their woods. Your Maine Forest Service District Forester can answer questions on a range of forestry topics, provide publications, or tell you about upcoming EAB workshops or events. Additionally, District Foresters can help you locate licensed consulting foresters in your area.



Management practices that eliminate ash could be a greater threat to ash than EAB itself.

Plan for EAB now if you have ash trees in your woods. Know what's at risk: how much ash you have, its size and quality, and where the ash is located. Your potential losses may be minimal and require little to no additional management.

Growing ash sawlogs is a riskier long-term investment than it used to be. During scheduled harvests, take steps to limit your exposure to EAB loss, including reducing the percentage of large ash trees.

If you're growing trees for timber income, don't cut immature ash too early. If the trees are too small to yield high-value sawlogs, you may get a better return if you allow them to grow. They will increase in volume and may improve in grade, which will lead to a better financial return. If the trees are attacked by EAB, harvest quickly for highest quality veneer and sawtimber. Once EAB feeding causes 50% crown dieback, the high-value sapwood can be discolored.

If you decide to cut, consider leaving scattered and small diameter ash trees in the woods. Ash left behind may help slow dispersal of EAB, helps manage spread, and provides genetic diversity in cases of tolerance/resistance to EAB. The last trees standing will be the last to produce seed.

**Reassess your plan if EAB is detected in or near your town.** Keep abreast of news about the insect. The threat of imminent tree mortality increases when EAB is detected within 10 miles of your property.

Sign up for the Maine Forest Service's "Forest & Shade Tree Insect & Disease Conditions" report: <a href="http://www.maine.gov/dacf/mfs/publications/condition\_reports.html">http://www.maine.gov/dacf/mfs/publications/condition\_reports.html</a>

## What else can I do?

**Spread the "Don't Move Firewood" message in your town.** Visitors who bring infested firewood to second homes or campgrounds near you put your trees at risk. Talk with neighbors and campground owners. Post leaflets, available through the contacts below, in your community.

### For more information, please contact:



Know when EAB arrives near you by supporting detection efforts. Help spread the word in your community; a variety of outreach materials are available. Participate in more formal monitoring efforts through <a href="https://www.maine.gov/eab">www.maine.gov/eab</a>.

Think big. Act. Encourage your town to plan for EAB. By addressing issues before EAB arrives, the loss associated with an infestation can be spread over a longer period. Neighboring communities can coordinate to share resources and reduce costs. See <a href="https://www.maine.gov/eab">www.maine.gov/eab</a> for more information.

# Is there any hope?

Yes. Many ash trees are still growing in every infested state. Even where mortality has been severe, the occasional "lingering" ash has survived. Partial resistance has been found in North American blue ash (*Fraxinus quadrangulata*). White ash is thought to be genetically diverse, providing hope that some genetic resistance may occur in that species as well.

**Scientists are investigating natural enemies of EAB**. Parasitoid wasps and predators may help reduce EAB populations. Several Asian parasitoids have been approved and released, and are becoming established in the US. As these efforts continue, the impact of EAB may be reduced, making it more manageable in the future.



#### For additional information:

Maine Emerald Ash Borer Information www.maine.gov/eab

#### **Emerald Ash Borer Information Network**

http://emeraldashborer.info/

#### Facebook - Maine Bug Watch

https://www.facebook.com/Maine-Bug-Watch-286814954695063/?hc\_ref=PAGES\_TIMELINE

#### Twitter - Maine Bug Watch

https://twitter.com/mainebugwatch?lang=en

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