



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 a non-native 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 the early to mid-1990's.

What kind of damage does it do?

EAB feeds on all species of ash. None of Maine's native ash trees (*Fraxinus* spp.) are resistant to the insect. Mountain-ash is not a host because it's not a true ash species.

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

EAB damages trees by boring through the inner bark. Heavy feeding by the larvae disrupts the movement of water and nutrients.

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



*EAB-infested trees die in
3-5 years*



Will it spread to Maine?

EAB is expected to spread to Maine. With over 100 million ash trees in Maine, it will have a significant impact.

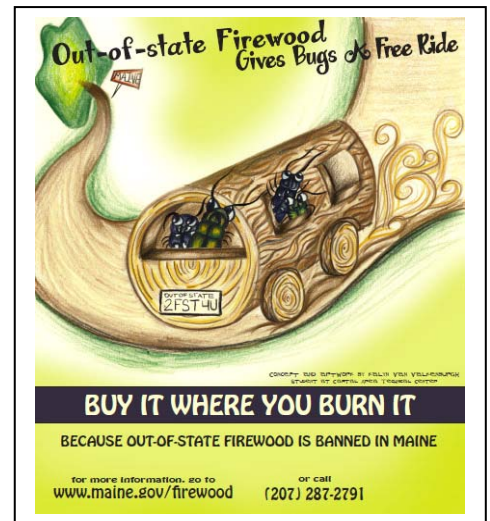
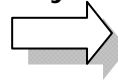
EAB has NOT been detected in Maine yet. No EAB adult beetles have been caught on the hundreds of purple panel traps that have been deployed throughout Maine or by any other detection methods, such as visual surveys, girdled trap trees, and monitoring predatory wasp colonies.

There are several known EAB infestations, however, within 50 miles of Maine's border. Examples include the greater Montreal area, south-central NH, Massachusetts, Connecticut and New York. People spread EAB much farther and faster than it spreads on its own.

Moving firewood is the #1 cause of EAB spread. Other new infestations have been traced to shipments of nursery trees and logs. But all stages of the insect can travel 65 mph down the interstate inside infested wood!

EAB will easily survive Maine's winters. It is a cold-hardy insect, native to northern China, Mongolia, and the Russian Far East. It has already become established in Quebec, Ontario and northern Michigan.

Avoid spreading EAB to non-infested areas by using only locally-sourced firewood.



How can I tell if I have EAB?

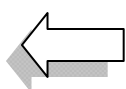
Woodpecker damage to live trees may be the first sign that a tree is infested. When feeding on EAB, woodpeckers scrape off outer bark, leaving smooth, light colored patches. If the bark is removed, S-shaped galleries weaving back and forth on the surface of the wood may be visible. The D-shaped exit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



Other health problems can kill ash trees in Maine. Ash trees are susceptible to drought. An infectious disease called ash yellows is common in parts of the state. Not all declining ash trees are necessarily infested with EAB.

Adult beetles are 1/2" long and metallic green. Under the wing covers, their abdomen is purple. Adult beetles may be present between June and August. Information about lookalike insects is available at <http://www.maine.gov/DACF/php/caps/EAB/EABid.shtml>

If you think you might have EAB, report it. Collect and/or photograph any suspect insects. If you can't reach someone at the contact numbers below, call the EAB hotline at 1-866-322-4512



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

What will happen when EAB is found in Maine?

The first step will be to determine the size of the infested area. Most state and federal management decisions will depend on the results of this on-the-ground delineation survey.

We won't get rid of EAB by removing ash trees. Early eradication attempts have been costly and unsuccessful. While some ash tree removal may be a component of a broader, integrated EAB management approach, Maine will not implement widespread tree removal to try to eradicate EAB.

In forest stands, most ash trees die in 3-5 years. Once the trees die, additional sunlight reaches the forest floor, stimulating growth of young trees and other plants, including non-native invasive species if they are present. While they're standing, dead ash trees fall apart fairly quickly. They are more likely to become coarse woody debris than long-term snags, but still provide some benefits for wildlife. Landowners should look out for hazardous situation caused by dying ash trees for recreational users, loggers and firewood cutters.

Landowners will be able to sell ash logs, but there will be restrictions. When a new EAB infestation is detected, a quarantine zone will be established. Under current rules, ash logs can be transported out of the quarantine zone, but only to a sawmill with a “compliance agreement” to follow shipping restrictions. No restrictions apply if your woodlot is outside the quarantine zone, or if both your woodlot and the destination sawmill are within it.

In other states, log prices have been minimally affected. Researchers have tracked log prices before, during and after EAB, and have found prices remained steady or increased slightly. This may be due to a larger quarantine area, resulting in additional markets available to landowners, a spike in demand by mills stockpiling logs, and or a combination of factors.



Should I cut my ash trees now?

It could be many years before EAB shows up in your woodlot. 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 <http://www.maine.gov/DACF/php/caps/EAB/index.shtml> for the latest news on EAB.

Work with a consulting forester to protect your interests and your forest. Studies have shown that woodland owners who use professional forestry services before they cut make more money and are more satisfied with the results than owners who sell timber on their own.

Plan for EAB now if you have ash trees in your woods. It may take a while to carry out your plan, especially on large ownerships. Know what’s at risk: how much ash you have, its size and quality, and where it’s 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 loss. Reduce the percentage of large ash

trees.. Review your diameter target (how big to grow trees before cutting them) with your forester, discussing site quality, tree condition, and markets. To keep from degrading your woodlot, retain good quality trees of a variety of species.

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 return.

If you decide to cut, consider leaving scattered ash trees in the woods. The last trees standing will be the last to produce seed.

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



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.

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 <http://www.maine.gov/DACF/php/caps/EAB/index.shtml>

Think big. Take action. Encourage your town to plan ahead for EAB. By addressing issues before EAB arrives, the loss associated with an infestation can be spread over a longer period of time. Neighboring communities can coordinate to share resources and reduce costs. Please visit <http://www.maine.gov/DACF/php/caps/EAB/index.shtml> for more information.

Is there any hope?

We've only known about EAB since 2002. Our knowledge about the insect is rapidly expanding. A substantial research effort is underway to improve insect management and tree survival.

Scientists are investigating natural enemies of EAB. Parasites and predators significantly reduce EAB populations. Several parasites from China have been released, and are now becoming established in the US. As these efforts continue, the impact of EAB may be reduced, making it more manageable in the future.

Many healthy 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. White ash is thought to be genetically diverse, providing hope that some genetic resistance may occur in that species as well.

For additional information:

Maine Forest Service:

<http://www.maine.gov/DACF/php/caps/EAB/index.shtml>

Emerald Ash Borer Information Network

<http://emeraldashborer.info/>

US Forest Service, Northeastern Area

<https://www.na.fs.fed.us/fhp/eab/>

State of Maine – Invasive Species

http://www.maine.gov/portal/about_me/invasives.html

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>

Credits:

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