

Emerald Ash Borer

Scouting Guide

What is emerald ash borer?

Emerald ash borer (EAB) is an invasive insect that attacks all North American ash trees and white fringetree. Native to Asia, EAB was first detected in the U.S. in 2002. In 2013, EAB was detected in North Carolina for the first time and has since spread throughout the majority of the state. EAB larvae bore into and feed on the tissue under the tree bark that transports water and nutrients throughout the tree. Multiple years of feeding can completely sever the transport of water and nutrients, ultimately killing the tree.



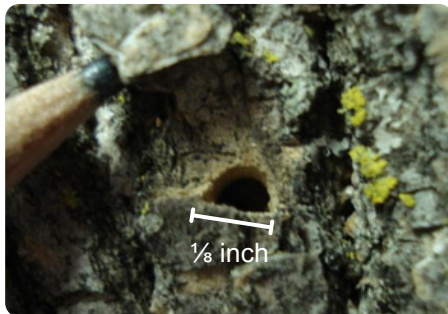
Emerald ash borer adult.
Photo Source: Debbie Miller, USDA Forest Service, Bugwood.com



Emerald ash borer galleries
Photo Source: James W. Smith, USDA APHIS PPQ, Bugwood.com



Ash tree with a thinning canopy
Photo Source: Eric Day, Virginia Tech, Bugwood.com



Emerald ash borer exit hole
Photo Source: Kenneth R. Law, USDA APHIS PPQ, Bugwood.com



Blonding from woodpeckers
Photo Source: Kelly Oten, NC State University

What to look for:

EAB is an iridescent green beetle, but you are more likely to spot the damage from the insect than the insect itself. EAB signs to look for include:

- D-shaped hole approximately $\frac{1}{8}$ of an inch wide
- Outer bark splitting to reveal curving trails left behind by larvae, called galleries
- Thinning canopies and sprouts at tree base
- Yellow to white patches of bark from woodpeckers scraping off the outer surface, called 'blonding'

White ash leaves with 5-11 leaflets
Photo Source: T. Davis Sydnor, The Ohio State University, Bugwood.com



When and where to look:

EAB adults are present from April through June, but its damage can be found all year. To identify an ash tree, look for trees with leaves composed of five to eleven leaflets. Leaflets are oval shaped, coming to a slightly pointed tip. The leaves stem from the branch opposite of another leaf.

What to do if you find emerald ash borer:

- If you're in a county where EAB has not been reported before: report to your [NC Forest County Ranger](#)
- To protect your trees: find management recommendations at [NC State Extension Forestry](#).
- If you find surviving ash trees surrounded by dead ash trees: report it using [the Tree Snap app](#) on your device

For current North Carolina range information: https://www.ncagr.gov/divisions/nc-forest-service/EAB_Tracking/download?attachment

To find your NC Forest Service County Ranger: <https://www.ncagr.gov/divisions/nc-forest-service/contacts>

For more information, including management recommendations: <https://content.ces.ncsu.edu/emerald-ash-borer>

To find your county's NC State Extension Agent: <https://www.ces.ncsu.edu/directory/>

To learn more about Tree Snap: <https://treesnap.org/>