

Ash in Colorado



Planted ash trees.¹⁰

Ash in Colorado

While ash trees are not native to most of Colorado, ash has naturalized in several riparian areas. Several species of ash, including green and white ash, are very popular landscaping trees and represent 15 to 20 percent of the urban and community forests of Colorado. The loss of these trees would significantly impact many communities.

Preventive Treatments

Chemical treatments are available for the prevention of EAB. These treatments are required annually. None of these are currently recommended for use on ash trees in Colorado as EAB has not been detected.

Promoting Diversity in Tree Planting

To reduce the impact of EAB in Colorado's urban and community forests diversity in tree planting is encouraged. A single genus of tree should not make up more than 10 percent of a planted landscape. Diversity in planting would lead to fewer tree losses to EAB.

EAB in Colorado

EAB has **NOT** been found in Colorado

The Colorado State Forest Service, Colorado Department of Agriculture and the USDA-Animal and Plant Health Inspection Service conduct an annual detection trapping program for EAB. This cooperative trapping program is designed to monitor Colorado for the presence of EAB. Early detection of a pest like EAB will help protect ash trees in Colorado. EAB could be present in communities for three or more years before tree decline is apparent.



An EAB detection trap in an ash tree.¹¹



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^{1,8}Penn. Dept. Conservation and Natural Resources; ²Mich. Dept. of Agriculture; ^{5,7,9,10}David Cappaert, Michigan State University; ³Howard Russell, Michigan State University; ⁶James W. Smith, USDA-APHIS-PPQ; ⁴Jared Spokowsky, New York State Dept. of Agriculture and Markets; ¹¹Sky Stephens, Colorado State Forest Service, image not available through Bugwood.org.

Map credit: USDA-APHIS, www.emeraldashborer.info.

Emerald Ash Borer



What You Need to Know About the Threat to Ash Trees in Colorado



www.emeraldashborer.info

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What is EAB?



*Emerald ash borer.*³

Emerald ash borer (EAB) is an exotic beetle that was first discovered in the U.S. in southeastern Michigan during the summer of 2002. EAB probably

arrived on solid wood packing material carried in cargo ships or airplanes that traveled from its native Asia. The adult beetles nibble on ash foliage, but cause little damage. The larvae feed on the inner bark of ash trees, girdling the tree and disrupting the transportation of water and nutrients, much like the mountain pine beetle affects pines.

Since its discovery, EAB has spread throughout 19 northeastern and north-central states and provinces (see map). EAB has caused the death of tens of millions of ash trees throughout the impacted area. It has been estimated that the cost of treatment, removal and replacement of impacted ash trees in communities alone will exceed \$10.7 billion.

Preventing the introduction of EAB in Colorado is heavily reliant on restricting the movement of infested ash products including firewood, logs and nursery stock. EAB has caused mortality in all North American varieties of ash and has very few predators and parasites in North America.

Identifying EAB

Identifying Tree Symptoms

Monitor ash trees for:

- Sparse foliage or thinning of the canopy
- Presence of epicormic shoots, sprouting from the trunk and roots or suckers
- Bark splitting
- D-shaped emergence holes on trunk
- Increased woodpecker activity
- Serpentine galleries from larvae feeding under the bark



Left: Serpentine larval galleries⁴ **Center:** D-shaped emergence hole⁵ **Right:** Epicormic shoots⁶

Identifying EAB

- Adults are approximately 1/2 inch long
- Metallic emerald green head and back
- Coppery reddish-purple abdomen
- Larvae are cream colored and have bell-shaped segments



Left: larva⁷ **Center:** adult⁸ **Right:** abdomen color⁹

Responding to EAB

Taking Action

If you think you have spotted EAB, contact your local Colorado State Forest Service office, city forester or Colorado State University Extension office for identification. There are numerous native species that look similar to EAB and cause similar damage including the bronze birch borer and other metallic green insects.

Quarantines

Fourteen states have quarantines that restrict and/or prohibit the movement of ash nursery stock, wood and related products. These state quarantines are in addition to federal quarantines. For ash material to be legally moved out of a quarantined area, it must meet defined treatments as required by the federal quarantine. These quarantines are in place to help prevent the introduction of EAB into new areas and to reduce the impacts of EAB on native and planted ash.



Map showing known locations of EAB in red. White areas are state quarantine areas; blue outlines denote federal quarantine.