





**E1634**

## Emerald Ash Borer

**Biology and Integrated Pest Management in North Dakota**

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The Emerald ash borer (EAB), *Agrilus planipennis*, is an invasive, metallic, wood-boring beetle (Coleoptera: Buprestidae) that is a major cause of ash tree decline and mortality in the Midwest. This highly destructive pest attacks only species of ash (*Fraxinus* spp.).

Emerald ash borer was introduced to North America accidentally in the mid-1990s and was detected first in southeastern Michigan in 2002. Unlike native borer insects, which typically only attack trees already in decline, EAB attacks both stressed and healthy trees. Emerald ash borer has been responsible for killing hundreds of millions of ash trees since its arrival in the U.S.

Although EAB has not been detected in North Dakota, a find was observed in Moorhead, Clay County, Minnesota (across the Red River from Fargo) in February 2023. North Dakota residents living close to Clay County should routinely inspect their ash trees for any symptoms of EAB infestation.

**Figure 1. New county detections of emerald ash borer as of March 3, 2023** (USDA APHIS PPQ) (Earl, HERE, Garmin, FAO, NOAA, USGS, EPA, Esri, USGS).

## EAB – who’s doing what?

- State-level
- City-level

Removals

Replacements

Treatments

NDSU | EXTENSION

## EAB chemical control measures

- **Emamectin benzoate**

Stem injection only

(Specialized equipment)

99+% effective

2-3 years

\$6-10/inch DBH