Decline in Ash Trees: Borers and Bark Beetles
An Identification Guide

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Many borers and bark beetles contribute to the decline of ash trees in Nebraska. This publication describes the common characteristics of these insects.

- Emerald ash borer
- Lilac borer
- Chrysobothris borers (flatheaded appletree borer)
- Carpenterworm
- Roundheaded borers (longhorned beetles)
- Ash bark beetles

General symptoms of declining ash trees with borers or bark beetles: sparse foliage, dying branches, broken branches or trunks, and woodpecker activity such as bark stripping.

Emerald Ash Borer

Adult: Metallic green beetle, 1/2 inch long.¹

Exit holes: Small, D-shaped, 1/8 inch across. Some holes may be oval in shape.

Larva: Flattened with bell-shaped segments. Resembles a small tapeworm. Up to 1 1/4 inches long.²

Tunnels: S-shaped tunnels are found in the inner bark and on the surface of the wood. Heavily infested trees have meandering tunnels. Larvae pupate just under the bark (at most 1/2 inch into wood).
**Lilac Borer**

**Adult:** Clearwing moth that mimics a wasp.³

**Larva:** Cylindrical, whitish with amber-colored head. Up to 1 1/4 inches long.⁴

**Exit holes:** Round, 1/4 inch diameter.

**Tunnels:** 1/4 inch wide and extend deep into the wood.

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**Chrysobothris Borers**

(Flatheaded Appletree Borer and others)

**Adult:** Dark metallic beetle, 1/2 inch long.⁵

**Larva:** Flattened, cream-colored. Appears to have a round, flat head. Up to 1 inch long.⁶

**Exit holes:** Oval, 3/16 inch long and half as wide.

**Tunnels:** Irregular winding tunnels are found in the inner bark and on the surface of the wood. Larvae tunnel deep into the wood to pupate.
Carpenterworm

**Adult:** Large black and grey moth.  
**Larva:** Pink to greenish white. Large and robust, up to 3 inches long.  
**Tunnels:** Large, 1/2 inch wide. Extend deep into the wood.

Roundheaded Borers (Longhorned Beetles)

**Redheaded ash borer**  
**Adult:** reddish brown with yellow stripes.  
1/4 - 3/4 inch long.

**Banded ash borer**  
**Adult:** nearly black with yellow stripes.  

**Ash and privet borer**  
**Adult:** Brown with amber spots.  

**Larva:** Cylindrical and cream-colored, with a rounded head. Generally up to 1 inch long.
Ash Bark Beetles

**Adult:** Tiny dark mottled beetle.  

**Exit holes:** Tiny, round, 1/16 inch.

**Tunnels:** Narrow horizontal tunnels and narrower vertical tunnels are found in the inner bark and on the surface of the wood. Tunnels do not go deep into the wood.

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For control of borers in ash, see:


FH13-2012: “Emerald Ash Borer Treatment Options.”

For other problems in ash trees, see:

FH21-2014: “Decline in Ash Trees: Diseases and Environmental Stresses.”

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