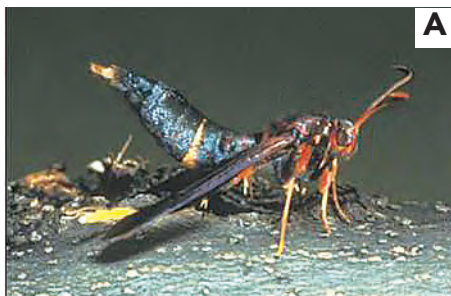


Native Borers and Emerald Ash Borer Look-alikes

Native Ash Borers



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Native ash borers are North American insects that tunnel under the bark of ash trees, sometimes causing enough damage to seriously weaken trees.

These two borers attack healthy ash trees:

Banded ash clearwing, *Podosesia aureocincta*; adult (Fig. A), larva (Fig. B).

Ash/lilac borer, *Podosesia syringae*; adult (Fig. C).

- Wasp-mimicking moths that feed on xylem of ash trees.
- Larvae are round with legs and expel frass from tree (Fig. D).
- Round exit hole (1/4 inch); pupal case exposed in exit hole upon emergence (Fig. E).

These three borers attack stressed or dying ash trees:

Redheaded ash borer, *Neoclytus acuminatus*; adult (Fig. F), larva (Fig. G).

Banded ash borer, *Neoclytus caprea*; adult (Fig. H).

- Longhorned beetles (roundheaded borers) that attack stressed ash trees, but also colonize elm, hickory, oak, linden and others.
- Larvae tunnel deep into xylem (Fig. I) and adults emerge from round-oval exit holes measuring 1/4 inch (Fig. J).



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Emerald Ash Borer

MICHIGAN STATE UNIVERSITY EXTENSION

Native Borers (continued)

Eastern ash bark beetle, *Hylesinus aculeatus*; adult (Fig. K).

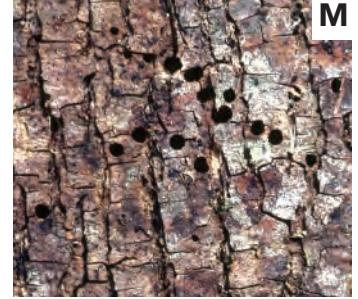
- Cylindrical bark beetle that forms galleries beneath the bark of ash trees (Fig. L).
- Infested trees peppered with tiny, round exit holes measuring approximately 1/16 inch (Fig. M).



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Emerald Ash Borer Look-alikes

The following insects are common to Michigan and could possibly be confused with emerald ash borer.



Michigan State University



University of Arkansas

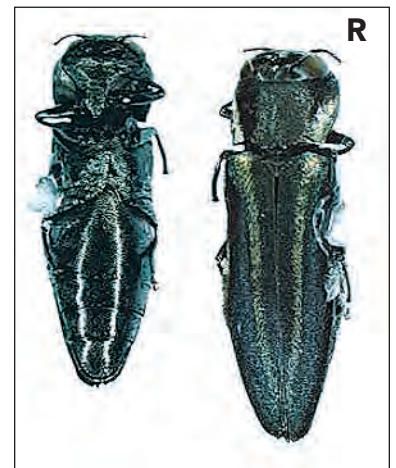


Michigan State University

- **Six-spotted tiger beetle,** *Cicindela sexguttata*; adult measures 1/2 inch long (Fig. N).
- **Caterpillar hunter,** *Calosoma scrutator*; adult measures 1 inch long (Fig. O).
- **Japanese beetle,** *Popillia japonica*; adult measures slightly less than 1/2 inch long (Fig. P).
- **Bronze birch borer,** *Agrilus anxius*; adult measures approximately 1/2 inch long (Fig. Q).
- **Two-lined chestnut borer,** *Agrilus bilineatus*; adult measures approximately 1/2 inch long (Fig. R).
- Several other uncommon metallic wood-boring beetles.



J. Zablotny, USDA APHIS PPQ



J. Zablotny, USDA APHIS PPQ