

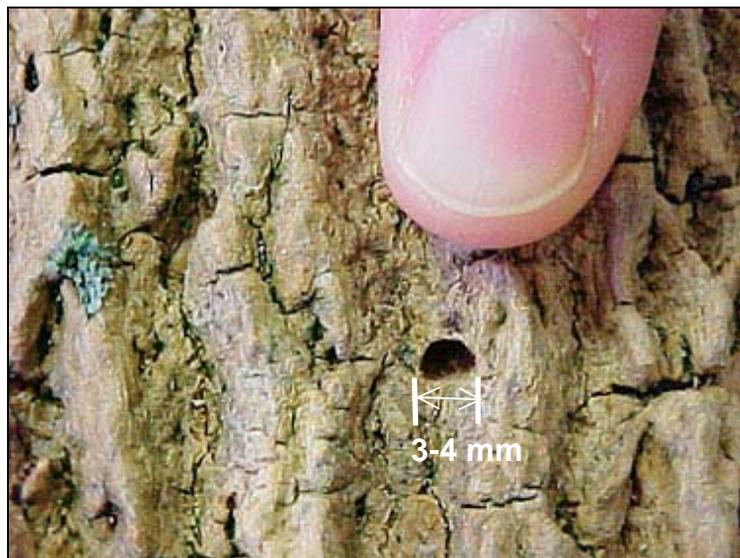
Emerald Ash Borer Field Guide



EAB larvae
Agrilus planipennis



EAB gallery
and exit hole
(1/8 inch)



Signs of EAB attack in bark
1/8 inch exit hole



EAB adult
(1/2 inch) and
gallery
Look for adults –
May through July



Adult EAB, 1/2 inch



NOT an emerald ash borer





D-shaped exit holes, 1/8 inch



Look closely for the
d-shaped exit hole,
1/8 inch



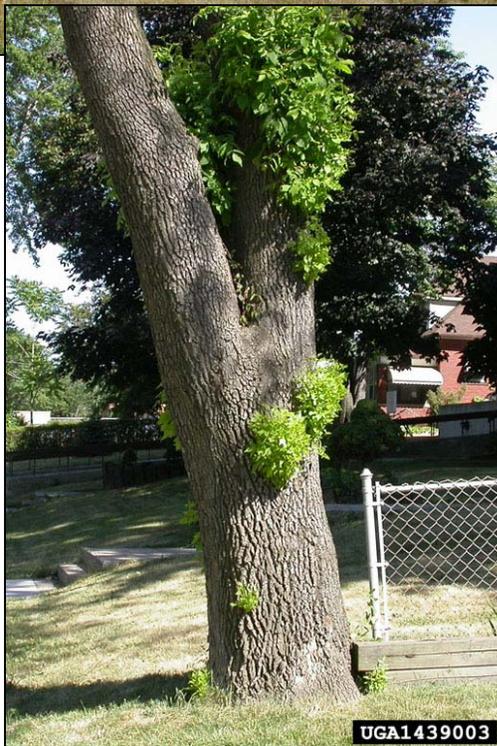
Canker formed from EAB infestation.
Note WINDING galleries



Typical crack at
infested region of
bole



Epicormic branching
associated with
infested tree



Sprouts beneath
infested area of bole



Dying branches possibly associated with infested ash



Possible early symptoms of EAB attack



Possible EAB symptoms -later stage of infestation



Woodpeckers may be a sign of EAB
or other borer or bark beetle
infestation

Ash leaves, compound and opposite



Healthy ash trees





White ash
Fraxinus americana



Compound and
opposite





Green ash
Fraxinus pennsylvanica
Compound
and opposite



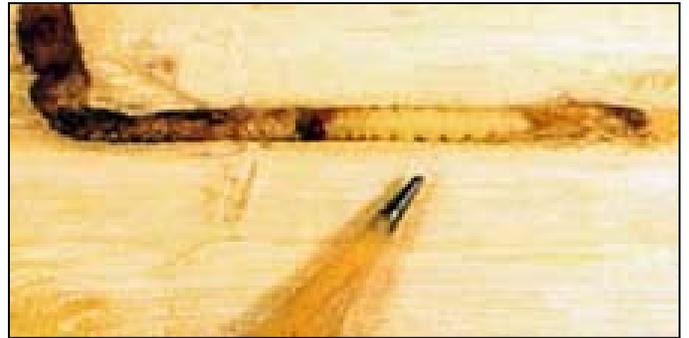


Stem canker caused by *Cytospora pruinosa*

Ash yellows



Banded Ash Clearwing
Podosesia aureocincta



Larvae exude strands of woody frass from 1/8 inch holes in the trunk. Frass can often be found piled at the base of infested trees.

Banded ash borer
Neoclytus caprea



Round exit holes. Larval galleries packed with frass.

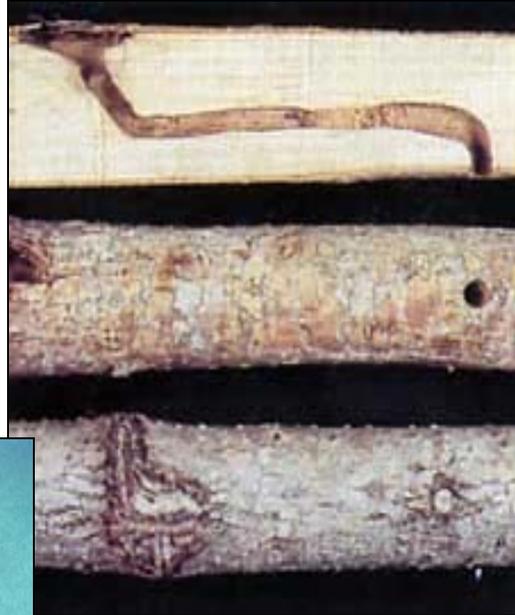
Redheaded
Ash Borer,
Neoclytus
acuminatus



Look for sap spots with fine boring dust –early attack
Later, frass is discharged from entrance holes,
Exit holes are round

Ash/Lilac Borer (trunk borer),
Podosesia syringae

Adults are
clearwing moths
that mimic paper
wasps in
appearance and
flight



Circular exit holes often with pupal skins
protruding



Eastern ash bark beetle
Hylesinus aculeatus



Ash cambium miner
Phytobia spp.

Mining can only be
seen under the
bark



Photos obtained from the following sources:

Michigan State University

<http://www.forestryimages.org>

Michigan Department of Agriculture

University of Georgia

University of Illinois

University of Nebraska