Pest Alert

United States
Department of Agriculture

Forest Service

**Animal and Plant
Health Inspection Service**

NA-PR-01-99MA
Revised August 2008

Asian Longhorned Beetle *(Anoplophora glabripennis)*:
A New Introduction

The Asian longhorned beetle (ALB) has been discovered attacking trees in the United States. Tunneling by beetle larvae girdles tree stems and branches. Repeated attacks lead to dieback of the tree crown and, eventually, death of the tree. ALB probably travelled to the United States inside solid wood packing material from China. The beetle has been intercepted at ports and found in warehouses throughout the United States.

This beetle is a serious pest in China, where it kills hardwood trees in roadside plantings, shelterbelts, and plantations. In the United States the beetle prefers maple species (*Acer* spp.), including ***boxelder, Norway, red, silver,*** and ***sugar maples***. Other preferred hosts are ***birches, Ohio buckeye, elms, horsechestnut,*** and ***willows***. Occasional to rare hosts include ***ashes, European mountain ash, London planetree, mimosa,*** and ***poplars***. A complete list of host trees in the United States has not been determined.

Currently, the only effective means to eliminate ALB is to remove infested trees and destroy them by chipping or burning. To prevent further spread of the insect, quarantines are established to avoid transporting infested trees and branches from the area. Early detection of infestations and rapid treatment response are crucial to successful eradication of the beetle.

The ALB has one generation per year. Adult beetles are usually present from July to October, but can be found later in the fall if temperatures are warm. Adults usually stay on the trees from which they emerged or they may disperse short distances to a new host to feed and reproduce. Each female usually lays 35-90 eggs during her lifetime. Some are capable of laying more than that. The eggs hatch in 10-15 days. The larvae feed under the bark in the living tissue of the tree for a period of time and then bore deep into the wood where they pupate. The adults emerge from pupation sites by boring a tunnel in the wood and creating a round exit hole in the tree.

For more information about Asian longhorned beetle in the United States, visit these U.S. Department of Agriculture Web sites:

www.na.fs.fed.us/fhp/alb/

www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml

If you suspect an Asian longhorned beetle infestation, please collect an adult beetle in a jar, place the jar in the freezer, and immediately notify any of these officials or offices in your State:

State Department of Agriculture:
- State Plant Regulatory Official
- State Entomologist

U.S. Department of Agriculture:
- Animal and Plant Health Inspection Service, Plant Protection and Quarantine
- Forest Service

County Cooperative Extension Office

State Forester or Department of Natural Resources

**In Massachusetts call:
866-702-9938 toll free.**

Asian Longhorned Beetle
WHAT TO LOOK FOR:

1. Adult beetles. Individuals are ¾ to 1¼ inches long, with jet black body and mottled white spots on the back. The long antennae are 1½ to 2½ times the body length with distinctive black and white bands on each segment. The feet have a bluish tinge.

2. Oval to round pits in the bark. These egg-laying sites or niches are chewed out by the female beetle, and a single egg is deposited in each niche.

3. Oozing sap. In the summer, sap may flow from egg niches, especially on maple trees, as the larvae feed inside the tree.

4. Accumulation of coarse sawdust around the base of infested trees, where branches meet the main stem, and where branches meet other branches. This sawdust is created by the beetle larvae as they bore into the main tree stem and branches.

5. Round holes, 3/8 inch in diameter or larger, on the trunk and on branches. These exit holes are made by adult beetles as they emerge from the tree.

Photo Sources:

USDA Forest Service

USDA Animal and Plant Health Inspection Service

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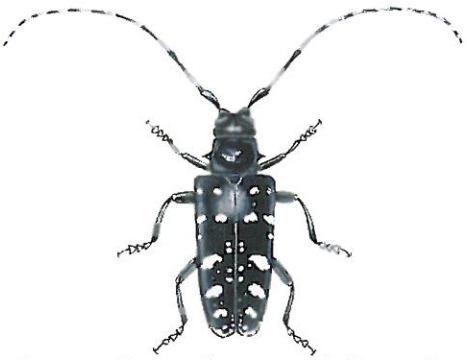
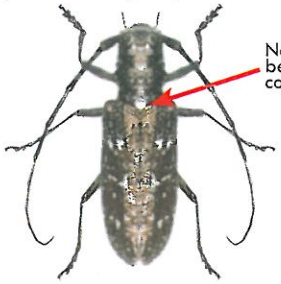
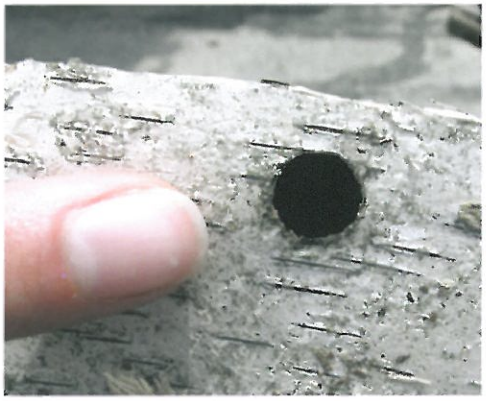
MDAR Asian Longhorned Beetle Tree Survey Guide



Asian Longhorned Beetle
(*Anoplophora glabripennis*, "ALB")

Native Species (Do Not Report):
White-spotted Sawyer (*Monochamus scutellatus*)





Exit Holes:

- perfectly round
- 3/8"-1/2" diameter
- eraser end of a pencil goes in at least 1 inch

Egg-laying Sites:

- divot in bark about 1/2" wide
- fresh sites brightly colored, often oozing sap
- color fades with age

Host Trees of Asian Longhorned Beetle

[Note: All trees in the genera below are potential hosts, species displayed are examples. See flip side for more.]

Sugar Maple (*Acer saccharum*)

Silver Maple (*Acer saccharinum*)

Red Maple (*Acer rubrum*)

Norway Maple (*Acer platanoides*)

Box Elder (*Acer negundo*)

Sycamore Maple
(*Acer pseudoplatanus*)

Other Host Trees of the Asian Longhorned Beetle

[Note: All trees in the genera below are potential hosts, species displayed are examples. See flip side for more.]

Gray Birch
(*Betula populifolia*)

Paper Birch
(*Betula papyrifera*)

Siberian Elm
(*Ulmus pumila*)

American Elm
(*Ulmus americana*)

Weeping Willow
(*Salix babylonica*)

Black Willow
(*Salix nigra*)

European Mountain Ash
(*Sorbus aucuparia*)

Common Hackberry
(*Celtis occidentalis*)

Green Ash
(*Fraxinus pennsylvanica*)

American Sycamore
(*Platanus occidentalis*)

London Plane Tree
(*Platanus x acerifolia*)

Horse Chestnut
(*Aesculus hippocastanum*)

Golden Rain Tree
(*Koelreuteria paniculata*)

Poplar
(*Populus alba*)

Katsura
(*Cercidiphyllum japonicum*)

Silktree
(*Albizia julibrissin*)

NOT Host Trees:

- oak
- apple, crabapple
- cherry, other stone fruit trees
- pine, fir, spruce and other softwoods (conifers)

To report ALB or ALB tree damage, visit mass.gov/agr/alb or call toll-free: 1-866-702-9938

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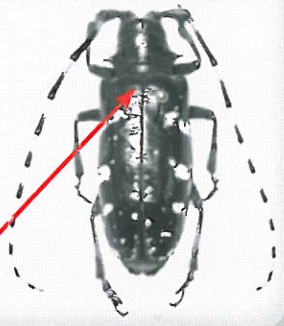
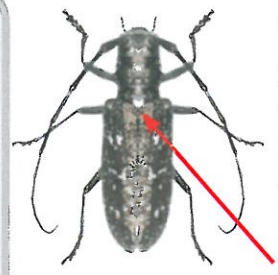
MDAR
MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES
http://www.mass.gov/agr

ASIAN LONGHORNED BEETLE LOOK-ALIKES

(all insects shown approximately to scale, sizes given do not include antennae)

Asian longhorned beetle
(*Anoplophora glabripennis*)
¾ – 1½ inch long
Shiny black, bright white spots
Long antennae, banded black and white
Black scutellum





Whitespotted sawyer
(*Monochamus scutellatus*)
¾ – 1 inch long
Dull or bronzy-black, may be mottled with whitish patches
Long faintly banded antennae
White scutellum

Northeastern sawyer
(*Monochamus notatus*)
¾ –1¼ inch long
Mottled light brown/white, no distinct spots

Eyed click beetle
(*Alaus oculatus*)
1 - 1¾ inch long
Black with white speckles;
Black "eye spots"

Brown prionid
(*Orthosoma brunneum*)
1 – 1½ inch long
Light chestnut brown, no spots

Broadnecked root borer
(*Prionus laticollis*)
1 – 1½ inch long
Black with no white markings
Solid black antennae

Longhorned Beetle
(*Graphisurus fasciatus*)
⅓ – ⅔ inch long
Dark with gray/light brown mottling
Antennae banded white and black

Western conifer seed bug
(*Leptoglossus occidentalis*)
About ¾ inch long
Various shades of brown with a distinct geometric pattern on wings
Last segment of back legs flared out

For more information about the Asian longhorned beetle, or to report a sighting, visit mass.gov/agr/alb.htm or call toll-free 1-866-702-9938

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Flyer adapted from a design by the Maine Department of Agriculture

Photos: Asian longhorned beetle: Pennsylvania Dept. of Conservation and Natural Resources - Forestry Archive, Bugwood.org. Whitespotted sawyer, Northeastern sawyer, Broadnecked root borer: Michael Bohne, USDA Forest Service. Eyed click beetle: Tom Murray, bugguide.net. Brown prionid: Kristin Riolo, Priceless Memories, Bugwood.org. Graphisurus fasciatus: Jennifer Forman Orth, Massachusetts Dept. of Agricultural Resources. Western conifer seed bug: Giancarlo Dessi, Wikimedia Commons

DON'T MOVE FIREWOOD

Our forests are threatened by nonnative insects that can kill large numbers of trees. Three recently introduced insects—emerald ash borer, Asian longhorned beetle, and Sirex woodwasp—are wood-infesting species that can be transported long distances in firewood. Once transported into new areas, these insects can become established and kill local trees. We must **STOP THE SPREAD** of these insects and protect our forests and trees.

How you can help:

- Leave firewood at home—do not transport it to campgrounds or parks.
- Use firewood from local sources.
- If you have moved firewood, burn all of it before leaving your campsite.

Inset photo: Asian longhorned beetle larva (courtesy of Thomas B. Denholm, New Jersey Dept. of Agriculture; www.forestryimages.org)

HELP STOP INVASIVE PESTS

For more information, visit the following Web sites:
www.emeraldashborer.info
www.na.fs.fed.us/fhp
www.aphis.usda.gov/ppq/ep

USDA Forest Service
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