



Integrated Pest Management Issues

Invasive species: Asian longhorned beetle

Asian longhorned beetle (ALB), *Anoplophora glabripennis*, is a wood-boring beetle that feeds on a wide variety of hosts, primarily hardwood trees, and is native to China and the Korean Peninsula. It is established in the eastern United States where aggressive detection and eradication programs are in place to limit its spread within the country. Invasive wood-boring insects may be introduced to the United States through live plants for the plant trade or wood packaging material such as pallets or crates. Firewood is also an important pathway for the spread of invasive wood-boring insects that are already established in the United States.

Description:

Asian longhorned beetle adults are relatively large and conspicuous beetles between $\frac{3}{4}$ and $1\frac{1}{2}$ inches long and shiny black with white spots. Adults also have distinct white and black striped antennae. Eggs are laid in notches chewed in the bark by females. Young larvae feed beneath the bark in the phloem tissue while mature larvae tunnel into the heartwood. Larvae are creamy white and legless and can be up to $2\frac{1}{2}$ inches long.



1. ALB adult



2. ALB larvae

Asian longhorned beetle larvae initially feed beneath the bark of trees. As the larvae mature, they tunnel into the heartwood of the tree which can degrade the wood and potentially lead to structural weaknesses. Preferred hosts for ALB include a wide variety of hardwood trees and shrubs. In Alaska, native species such as willow, poplar, and birch and ornamental species such as maple are likely hosts.

Signs and symptoms of ALB may include:

- Presence of any lifestage on or in the tree
- Exit holes or egg notches chewed in the bark
- Boring dust accumulating at the base of the tree or on bark (Boring dust can look like wood shavings.)
- Branch dieback
- Excessive sap or resin flow



3. ALB egg notches (tan-colored pits chewed in the bark) and exit holes (round holes chewed through the bark)

Pest significance in Alaska:

Asian longhorned beetle establishment in Alaska could have severe economic and environmental impacts. Host species in Alaska are widespread and abundant in both urban settings and natural forests. Establishment in urban and community trees would be an economic burden on private landowners and municipalities due to the cost of controlling the pest and the potential decrease in property values and aesthetics. Establishment in natural forests could impact biodiversity, ecosystem services, and the recreational value of an area. Establishment in natural areas may also impact industry in terms of decreased product value and regulatory costs such as bans on exports.

If you think you may have invasive wood-boring beetles but are unsure what type, contact your local Cooperative Extension Service office for assistance in identifying what pest you may have and what treatments or control measures may be needed. Images may be submitted through the Pest ID Portal (www.uaf.edu/ces/ipm/cmp/sample-submission/) for identification. Specimens may also be dropped off at your local Cooperative Extension office.



Scan here to go directly to the pest portal.

Look-alikes in Alaska

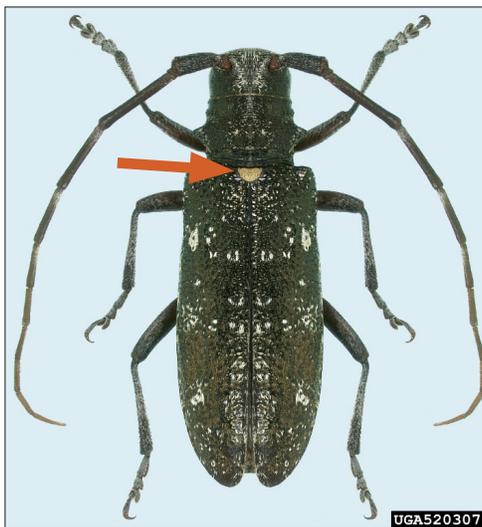
The most common native insect likely mistaken for Asian longhorned beetle in Alaska is the white-spotted sawyer. However, several key differences can help you know if you have found the native or invasive species.



Asian longhorned beetle:

- $\frac{3}{4}$ to $1\frac{1}{2}$ inches long
- distinct white-and-black-striped antennae
- shiny black body with distinct white spots
- no white spot in the middle at the top of the wings

4. ALB adult



White-spotted sawyer:

- $\frac{3}{4}$ to 1 inch long
- faint white-and-black-striped antennae
- dull black to bronze body with less distinct white spots
- white spot in the middle at the top of the wings (shown by arrow)

5. White-spotted sawyer adult

Additional information:

UAF Cooperative Extension Service IPM program can assist with pest identification and control questions. Contact the IPM program at www.uaf.edu/ces/ipm.

Photo credits:

1 and 4: Steven Valley, Oregon Department of Agriculture, Bugwood.org

2: Michael Bohne, Bugwood.org

3: Dennis Haugen, USDA Forest Service, Bugwood.org

5: Natasha Wright, Cook's Pest Control, Bugwood.org

For more information, contact:
UAF Cooperative Extension Service IPM Program at www.uaf.edu/ces/ipm/.

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