Recognizing Asian Longhorned Beetle in Virginia

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Introduction

The invasive Asian longhorned beetle (ALB, *Anoplophora glabripennis*) is a large beetle with long antennae (Fig. 1). Adults measure roughly 2-4 cm (0.75-1.5") long. The antennae are about the length of the female's body, but twice as long in males. They have numerous white spots of different sizes on the shiny black wing covers. The long antennae have distinctive black and white bands. The legs, feet, and underside of the body may appear bluish (Fig. 2).



Figure 1. Adult Asian longhorned beetle (Gillian Allard, FAO United Nations, Bugwood.org).



Figure 2. Adult longhorned beetle (Melody Keena, USDA Forest Service, Bugwood.org).

Longhorned beetles, including ALB, belong to the Family Cerambycidae in the Order Coleoptera. There are many species of longhorned beetles in Virginia. The whitespotted sawyer (Monochamus scutellatus) is the species mostly likely to be confused with ALB. It has a bronzy-black body with white markings and long antennae. However, the body is not as shiny, the bands on the antennae are not as conspicuous, and the white markings are mottled and not well-defined. In addition, there is a prominent white semicircle patch centered at the top of the wing covers and directly behind the beetle's "neck" (Fig. 3). In comparison, this area is dark on ALB. Whitespotted sawyers are harmless native beetles that feed in stressed, dying, and dead conifers.

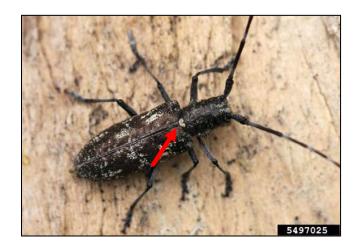


Figure 3. Whitespotted sawyer (Steven Katovich, Bugwood.org). Red arrow indicates a white patch not seen on Asian longhorned beetle.

The southern pine sawyer (*M. titillator*) (Fig. 4) and Carolina pine sawyer (*M. carolinensis*) are longhorn beetles closely related to the whitespotted sawyer. They also have long antennae with light-colored patches on their wing covers, but their bodies are

strongly patterned in dull mottled shades of tan and brown.

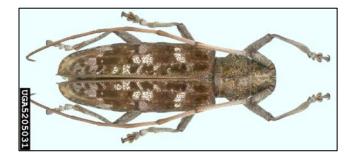


Figure 4. Southern pine sawyer (Natasha Wright, Brahman Termite & Pest Elimination, Bugwood.org).

The eyed click beetle (*Alaus oculatus*) is a native species that superficially resembles ALB (Fig. 5). It averages 2-4.5 cm (0.8-1.8") in length. It has a shiny black body with two very large black spots ringed in white behind the head. The wing covers are noticeably grooved and densely covered with irregular white patches. Unlike longhorned beetles, the antennae are relatively short and the body is flattened.



Figure 5. Eyed click beetle (PA Dept. of Conservation & Natural Resources, Bugwood.org).

ALB larvae develop inside infested trees and are not usually seen unless the wood is split open. The larvae grow quite large as they mature. They closely resemble the larvae of other longhorn beetles (Fig. 6) and genetic analysis is required for species confirmation of ALB larvae.

Adult ALB leave infested wood through exit holes large enough to insert a pencil (Fig. 7). Large beetle larvae found in live hardwoods, particularly maple trees, with large exit holes should be suspect for ALB. Large beetle larvae found in conifers are likely pine sawyer larvae and not suspect ALB.



Figure 6. Typical longhorned beetle larva in gallery (William M. Ciesla, Forest Health Management International, Bugwood.org).



Figure 7. Exit hole (indicted by red arrow) produced by emerging adult Asian longhorned beetles and shallow tan sites where eggs are laid (Dennis Haugen, USDA Forest Service, Bugwood.org).

Did You Find ALB?

If you think you saw an ALB, please collect and freeze the insect if possible. Take a good quality photo of the insect or suspicious tree damage and submit it to your local <u>Cooperative Extension office</u> or your <u>local forester</u>. Keep the specimen as you may be asked to submit it for confirmation. For more information about ALB, see <u>Pest Alert: Asian Longhorned Beetle</u> (VCE Pub ENTO-556NP).

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2023 ENTO-557NP