

Pest Alert: Asian Longhorned Beetle

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Introduction

The Asian longhorned beetle (ALB; *Anoplophora glabripennis*) is not known to occur in Virginia. If it were to establish, ALB would threaten our street, backyard, and forest trees.

Adult Beetle Description

Adult ALB (Fig. 1) range in size from 25-37 mm (1-1.5") in length. The banded antennae can measure over 70 mm (3") long. ALB has a shiny black body with irregular white spots and blue tinted legs.



Figure 1. Asian longhorned beetle adult. USDA-APHIS

Egg and Larva

Female ALB lay 5-7 mm (0.25") long eggs in shallow oviposition pits (Fig. 2) chewed in the bark. After hatching, the very small larvae bore into the tree. Full grown larvae (Fig. 3) can reach up to 50 mm (2") long. ALB larvae are indistinguishable in appearance from the larvae of native roundheaded borers. Fully grown larvae pupate to the adult stage inside the host tree and then chew their way out.



Figure 2. Asian longhorned beetle oviposition or egg laying pits. Joe Boggs, The Ohio State University.



Figure 3. Asian longhorned beetle larva. Melody Keena, USDA Forest Service, Bugwood.org

Host List

ALB has a wide host tree range in both Asia and the United States. Maple is the most common host and where ALB will likely have its biggest ecological impact. ALB also attacks birch, elm, golden raintree, London planetree/sycamore, horse chestnut/buckeye, mimosa, mountain ash, poplar, willow, ash, and katsura.

Damage

ALB adults emerge from large diameter exit holes in host trees when weather warms in the spring. (Fig. 4). Each hole is connected to a deep tunnel (Fig. 5) big enough to insert a pencil (Fig. 6), thus the pencil test is a good indicator of a possibly infested tree. After emergence, ALB females chew oviposition pits 10 mm (0.5") in diameter where they lay eggs (Fig. 3). Initially the pit is light colored but darkens and may weep sap. Multiple exit holes and pits give trunks a spotted appearance (Fig. 4). Larvae tunnel initially in the cambium but later make large tunnels in the xylem (Fig. 5). Extensive large tunnels weaken the branch, causing them to break in strong winds.



Figure 4. Asian longhorned beetle exit holes and bark staining. Pennsylvania Department of Conservation and Natural Resources & Forestry, Bugwood.org

Distribution

ALB was first detected in 1996 in New York City. It has also been found in New Jersey, Illinois, Massachusetts, Ohio, South Carolina, and Ontario, Canada. Eradication efforts continue for infestations in Massachusetts, New York, Ohio, and South Carolina.



Figure 5. Asian longhorned beetle tunneling, tree cross section. Joe Boggs, The Ohio State University.



Figure 6. Pencil test. Joe Boggs, The Ohio State University.

Reporting

Because many native insects resemble ALB, please capture suspect insects in case they need to be examined. Submit insect samples or photos of suspect damage to your [Cooperative Extension office](#) or [County Forester](#).

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