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ASIAN LONGHORNED BEETLE (*Anoplophora glabripennis*)

The Asian longhorned beetle (ALB) is an invasive species in the family Cerymbicidae. Native to China, Korea, and Japan, it is likely that the ALB first came to North America via international trade as larvae inside wooden pallets and packing materials. It was first detected in the United States in 1996 in Brooklyn, NY. As of 2021, there are active ALB eradication programs operating in four states: South Carolina, Ohio, Massachusetts, and New York. Eradication efforts eliminated infestations and removed regulations in Illinois (2008) and New Jersey (2013). The Asian longhorned beetle primary host in North America is maple (*Acer*), however ALBs have also been found to feed on birch (*Betula*), elm (*Ulmus*), horse chestnut (*Aesculus*), and willow (*Salix*). Additional secondary hosts can be found at the website listed below. As infestations always results in tree death, ALB is considered a serious risk to Connecticut's native hardwood forests, wildlife habitats, as well as the lumber, tourist, and maple syrup industries.

Adult ALBs are approximately 1 to 1.5 inches long, have a shiny smooth black body, and long black and white banded antennae. Their elytra, or wing covers, are covered in white spots. The white hairs on the feet often reflect a bluish color.

Generally, males are smaller than females, with antennae longer than their body. Adult females chew a small slit or pit in the bark of the host tree and lay a single egg about the size of a grain of rice directly under the bark onto the conducting tissue. The adult female can lay upwards of 60 eggs in her lifetime. After around two weeks, the egg hatches into a larva which feeds on the sugars and nutrients in the host tree's vascular system for the first two instars or stages. As the larva matures, it feeds on the tree's heartwood leaving the tree structurally weak. Larvae survive the winter protected inside the heartwood. The following spring, the mature larva will create a pupal chamber, where it will pupate for a month.



Gale Ridge, CAES

ALB adults will chew their way out of the tree in the summer around the time Rose of Sharon is in bloom. Exit holes are perfectly round between 3/8 and 5/8" diameter. Adult beetles feed on the veins and blades of leaves as well as on the bark of young twigs before mating and laying eggs. ALBs will infest the upper parts of host trees first and then work their way down over multiple generations. In certain cases, tree decline and death due to ALB infestation may take up to 10 years.

ALB is moved to new locations primarily through the movement of larvae-infested firewood. Although ALB can fly, its flight is clumsy and is not an effective method of dispersal. Comprehensive survey and eradication efforts are underway in all parts of the US where known ALB infestations exist. USDA enforced quarantine zones restrict the movement of wood materials out of infested areas. ALB infestations in Illinois and parts of New York and New Jersey have been declared successfully eradicated.

Information Sources:

Beetle Busters Website: www.beetlebusters.info

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