

**ASIAN LONG HORNED BEETLE FOUND IN MASSACHUSETTS
DEM ASKS TO BE NOTIFIED IF YOU SUSPECT THIS INSECT IS IN RI**

The Asian Longhorned Beetle (ALB), an invasive insect that is native to China and other areas of eastern Asia, has been discovered in Worcester, MA. This invasive beetle infests many hardwood trees.

In cooperation with our Cooperative Agricultural Pest Survey Program (CAPS), the RI Department of Environmental Management's Division of Agriculture requests to be notified of any insect suspects or damage symptoms related to the ALB.

The scientific name for the ALB is *Anoplophora glabripennis* and is also called Starry Sky or Sky Oxen in China. The insect can cause widespread mortality of poplar, willow, elm and maple trees. The beetle is an invasive species in the United States and is a serious threat to many species of deciduous hardwood trees. In addition, nursery stock, logs, green lumber, firewood, stumps, roots, branches, and wood debris of a half-inch or more in diameter are subject to infestation. The ALB was first discovered in the United States in 1996 in the Greenpoint section of Brooklyn, NY and has also been discovered in New Jersey and Chicago. It is believed that the beetle was brought to the US in wooden packing material used in cargo shipments from China.

The beetle is large, ranging from 0.75 – 1.25 inches in length with very long black and white antennae. The body is glossy black with irregular white spots. Adults can be seen from late spring to late fall depending on the climate. The distinctive antennae that give the beetle its common name are as long as the body itself in females, and almost twice the body length in males.



Adult ALB emerge from late spring to early fall and feed on tree bark and tender twigs.

During its larval stage, the ALB bores deep in the tree's heartwood, where it feeds on the tree's nutrients. This tunneling damages and eventually kills the tree. Tree species considered ALB hosts species include all species of maples (Norway, sugar, silver & red maple) as well as horse chestnut, poplar, willow, birch, London plane, ash, mimosa (silk tree) and elm.



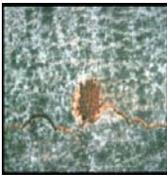
Once hatched, the egg becomes a larva. Larvae bore into the tree, where they feed on the vascular layer.

While the ALB can fly for distances of 400 yards or more in search of a host tree, they tend to lay eggs in the same tree from which they emerged as adults until the insect population becomes too dense on that tree. During the summer months, a mated adult ALB female chews into the host tree bark and lays eggs in each of the pits. The eggs hatch in 10-15 days and the white, caterpillar-like larvae tunnel into the tree's phloem and cambium layers beneath the tree bark. After several weeks, the larval tunnel deeper in the tree's heartwood where they mature into pupae, and then become adult beetles over the winter months.



A larva becomes a pupa. Pupae remain inside the tree until they become adults.

The fullgrown adult ALBs then chew their way out of the tree the next summer, typically as early as May and as late as October or November (depending on climate), leaving perfectly round exit holes that are approximately 1cm (3/8") in diameter.



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



Adults bore their way out of the tree, creating exit holes.

Signs of ALB infestation include: the perfectly round, dime-sized exit holes, frass, a sawdust-like material comprised of tree shaving and insect waste; and oozing sap. Dead and dying tree limbs or branches and yellowing leaves when there has been no drought maybe a signal of ALB. The USDA research indicates this beetle can survive and reproduce in most sections of the country where suitable host trees exist.

References:

- Wanted: “The Asian Longhorned Beetle” USDA APHIS Publication, May 2008, Suzanne Bond
- Antipin, Judy And Dilley, Thomas. “Chicago vs. Asian Longhorned Beetle: A Portrait of Success”
- <http://purl.access.gpo.gov/GPO/LPS6632>
- Smith, Jennifer. “ Monsters in Miniature: An Exotic Invader Threatens US Hardwoods” April 13, 2003 Newsday.com
- http://en.wikipedia.org/wiki/Asian_longhorned_beetle

Photo Courtesies; <http://www.aphis.usda.gov/ppq/ep/alb/gallery>

If you have come across an insect specimen that resembles this insect or have seen symptoms or damage related to the Asian Longhorned Beetle please contact:

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If you think you have seen this insect, please do not disturb infested trees or move any wood that you think could be affected by this pest.