

KEEP AN EYE OUT FOR THE ASIAN LONG-HORNED BEETLE

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While the Asian longhorned beetle (ALB) was eradicated from the Chicago land area back in the early 2000's it is still important to be vigilant. For the past decade, we have been focused on the emerald ash borer (EAB), but the threat from ALB is still very real and is borne out with the recent discovery in South Carolina and a nearby infestation in Ohio.

The ALB is an exotic (not native to North America) invasive pest that originates from China and arrived via wood packing material and dunnage (green timbers used for bracing cargo on ships). Adult beetles are usually present from July to October, but can be found into the fall with warmer temperatures. The adult beetles are 1 to 1.5 inches long, are jet black with white markings on the wing covers and have alternating black and white markings on the antennae (Figure 1).

Like all borers, the larvae form galleries in the vascular system robbing the tree of vital nutrients and water. Once the larvae have completed their galleries, they tunnel into the heartwood causing structural damage to the tree. When it is time to emerge, they chew their way out leaving a round ½ inch diameter hole in the trunk and/or major limbs. The tree begins to decline and show evidence of dieback along with the breakage of limbs causing potential safety and tree hazard issues.

Unlike most exotic, invasive insect pests, the ALB can be a serious problem in its native habitat, and here in the United States, it has a wide host range including **preferred hosts such as maple (*Acer spp.*), birch (*Betulus spp.*), buckeye and horsechestnut (*Aesculus spp.*), willows (*Salix spp.*) and elm (*Ulmus spp.*).** Lesser preferred hosts include ash (*Fraxinus spp.*), sycamore (*Platanus spp.*), and poplar (*Populus spp.*).

In most cases, the ALB has one generation per year, but like EAB, that may extend into a second season depending on geographic location and the amount of resistance the host tree can muster. The adult beetles are not considered strong flyers and usually do not travel very far from their host tree. Upon emergence and after mating, the adult female will chew a slight depression in the bark, lay her eggs and then cover them with frass and other debris (Figure 2). The eggs hatch and the larvae bore into the tree.

When inspecting a suspect tree, look for dime-sized adult emergence holes, presence of sawdust at the base of the tree, dead, dying, or broken limbs in the canopy, and egg laying sites in the bark (Figures 2 and 3).

The Asian longhorned beetle can be managed by applying soil drenches around the trunk of the tree or injecting the trunk with a systemic insecticide, but this must be done early in the infestation cycle. If trees are showing extensive dieback and decline, then they should probably be removed as soon as possible and either chipped or burned. Early detection of infestations and rapid treatment response are crucial to successful eradication of the beetle.

If you suspect a tree may be infested with ALB or you see an adult beetle, contact the Illinois Department of Agriculture (IDA) or your local extension office.

For more information about Asian longhorned beetle in the United States, visit these U.S. Department of Agriculture Web sites:

www.na.fs.fed.us/fhp/alb/ or

www.aphis.usda.gov/plant_health/plant_pest_info/asian_lhb/index.shtml



Figure 1: Adult ALB



Figure 2: ALB Egg site



Figure 3: Adult emergence hole