

# ASIAN LONGHORNED BEETLE

# NEW YORK STATE OF OPPORTUNITY Environmental Conservation

# Anoplophora glabripennis

### What is the Asian longhorned beetle?

The Asian longhorned beetle, or ALB, is an invasive wood-boring insect that feeds on a variety of hardwoods including maple, birch, elm, ash, poplar, horse chestnut and willow, among others. Native to China and Korea, the beetles are approximately 1.5 inches long and shiny black, with white spots on their wing cases. They have black and white antennae that can be up to twice as long as their body.

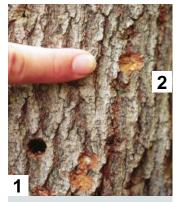
# What are the signs of an infestation?

Trees being attacked by ALB often have wilted foliage and canopy dieback, but the main signs to look for include:

- 1. Round, ½ inch exit holes from adults emerging from trees beginning in late July.
- 2. Round, ½ inch depressions (egg-laying sites) in the outer bark.
- 3. Sap oozing from egg-laying sites and exit holes.
- 4. Deep exit holes, insert a pencil to determine if the hole is at least an inch deep.
- **5.** Sawdust, or frass, collecting at the base of the tree or on branches.



An adult ALB
Joe Boggs, Ohio State, Bugwood.org



Dennis Haugen, USDA Forest Service, Bugwood.org



Dennis Haugen, USDA Forest Service, Bugwood.org



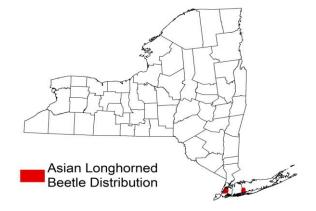
Joe Boggs, Ohio State, Bugwood.org



Robert A. Haack, USDA Forest Service, Bugwood.org

## Where are ALB located?

In 1996, ALB were found infesting Norway maple trees in Brooklyn. Larvae and pupae likely hitchhiked from China in wooden packing material, and the adult beetles emerged after the materials reached the New York Harbor. Additional infestations were later discovered in Manhattan, Queens, Staten Island, Islip and central Long Island. To date, the Manhattan, eastern Queens, Staten Island and Islip infestation sites have been eradicated.



#### What do they do to trees?

Females often chew depressions in the bark where they deposit one to two eggs at a time, laying up to sixty eggs on average. After they hatch, the larvae bore into the tree and begin feeding on the living tissue just underneath the bark which disrupts the nutrient and water flow within the tree. The larvae then continue deep into the heartwood where they continue to feed until they are ready to pupate. Repeated attacks from scores of larvae, generation after generation, eventually girdles the tree and kills it. Tree death usually occurs 7-9 years after the initial infestation, depending on site conditions and the tree's overall health.

#### What is the risk to NYS?

Since maples are a preferred host for ALB, the spread of the beetle into the rest of the state would mean devastating impacts to the maple syrup industry through the loss of healthy sugar bush. Maples are also a valuable hardwood for furniture, flooring, and other uses. Larval galleries through the heartwood may degrade the wood enough to make it useless for milling, costing the forest products industry billions of dollars. The larval galleries also compromise the structural integrity of the tree, resulting in falling limbs and trunks under heavy rain, snow or wind pressure. Removing these hazard trees in parks and towns would be expensive and have serious impacts on property values and tourism.



Before and after the removal of ALB infested trees in Worchester, MA. Kenneth R. Law, USDA APHIS PPQ, Bugwood.org

## What is being done?

- International standards require wooden packing materials to be chemically treated or kiln dried to help stop new introductions from occurring.
- Quarantines have been established around infested areas to prevent the movement of infested materials.
- The NYS Department of Agriculture and Markets has taken the lead on surveying for infested trees, tree removal and tree treatment to eradicate the ALB populations in New York City and on Long Island.

### What can I do?

- Adhere to the NYS firewood regulation which limits untreated firewood movement to no more than 50 miles and obey
  the rules of the ALB quarantines (https://www.agriculture.ny.gov/Pl/alb.html), which prevent regulated materials from
  leaving those areas.
- If you have a pool, you can participate in the ALB Swimming Pool Survey. Whenever you clean your pool, check your filter and skimmers for anything that resembles an ALB. Send a photo of what you find to foresthealth@dec.ny.gov.

If you believe you have found an ALB...

- Take pictures of the infestation signs as described above (include something for scale such as a coin or ruler).
- Note the location (intersecting roads, landmarks or GPS coordinates).
- Contact DEC Forest Health (see below) or your local Partnership for Regional Invasive Species Management (PRISM) by visiting www.nyis.info
- Call the ALB tip line at 1-866-702-9938.
- Report the infestation to iMapInvasives at www.NYiMapInvasives.org.

#### CONTACT INFORMATION

#### **Bureau of Invasive Species and Ecosystem Health**

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