Plant Protection and Quarantine

November 2011

Ohio Regulated Area: Asian Longhorned Beetle

The Asian longhorned beetle (*Anoplophora glabripennis*) (ALB) is an invasive pest that arrived in the United States from Asia concealed in solid wood packing material—the pallets and crates used to transport goods. The ALB was first discovered in the United States in Brooklyn, NY, in 1996.

The ALB is one of the most destructive and costly invasive species ever to enter the United States. It threatens urban and suburban shade trees and recreational and forest resources valued at hundreds of billions of dollars. Potentially, it can impact such industries as maple syrup production, hardwood lumber processing, nurseries, and tourism. If it were to become widely established, its impact would be felt in urban, suburban, and forested parts of the country.

Given the ALB's destructive potential, the goal of the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) is to eradicate the insect from the United States. ALB infestations currently exist in parts of Massachusetts, New Jersey, and New York, and it has most recently been detected in Ohio. ALB infestations found in Chicago, IL, Hudson County, NJ, and Islip, NY, have been declared eradicated.

APHIS confirmed the beetle's presence in Bethel, OH, in June 2011. The Ohio Department of Agriculture (ODA) enacted a quarantine for the State, establishing the initial regulated area within Tate township on June 20, 2011. Due to additional detections of ALB infested trees, the regulated area was expanded within Monroe township on September 9, 2011. As the extent of the infestation is determined, APHIS and the State of Ohio will continue to adjust the regulated area as needed.

The ALB Kills Trees

The ALB kills many species of hardwood trees, specifically 13 different genera of trees and all the species within. Collectively, the tree species that the insect favors are called ALB host trees: *Acer* (maple), *Aesculus* (horse chestnut), *Albizia* (mimosa), *Betula* (birch), *Celtis* (hackberry), *Cercidiphyllum* (katsura), *Fraxinus* (ash), *Koelreuteria* (golden raintree), *Platanus* (sycamore), *Populus* (poplar), *Salix* (willow), *Sorbus* (mountain ash), and *Ulmus* (elm).

In late summer or fall, when the beetle is in its larval (immature) stage, it bores deep into the heartwood of its host tree. There, the larvae feed and develop. The following summer they emerge as adults and then mate, starting the cycle again. The larval tunneling weakens and eventually kills infested host trees making the ALB a destructive and costly invasive species.

ALB eradication activities in Ohio include: removal of infested trees and may include removal of high-risk host tree species after the completion of an environmental assessment, chipping of removed trees and wood (including infested firewood), disposal of wood chips, grinding or treatment of infested tree stumps in woodlots, and grinding of tree stumps in lawns and landscapes. Re-grading of any disturbed soil and re-seeding of any damaged lawn areas will also occur.

To ensure proper disposal, only USDA should remove any tree with signs of ALB infestation.

Working in Ohio's ALB Regulated Areas

APHIS has partnered with the U.S. Forest Service, the Ohio Department of Agriculture (ODA), Ohio Department of Natural Resources (ODNR), Ohio State University (OSU), and Clermont County, including communities within Tate and Monroe townships. Together, these organizations form the ALB Cooperative Eradication Program in Ohio.

Both Federal and State law establish regulated areas around ALB infestations. The regulated areas assist in beetle eradication by curtailing the movement of materials that could host the ALB. This keeps infestations from spreading. Federal and State laws outline the conditions and requirements for moving regulated articles out of or within the infested areas. The Federal regulation can be found in the Code of Federal Regulations (CFR), specifically in 7 CFR 301.51. Ohio State law can be found in Ohio Revised Code 927.70 (B) (1).

APHIS and its cooperators are offering training sessions, workshops and providing other outreach tools in the Tate township area to explain the ALB and laws enacted to eradicate the insect. If a company finds infested host material or infested trees, they should not move the materials at all. Instead, they should report it to the Ohio ALB Cooperative Eradication Program at (513) 502-1251.

Host trees trimmed or cut in the regulated area must be chipped to less than one inch in two dimensions before being removed from the regulated area. Private residents and commercial businesses

may also bring ALB regulated materials to the ALB Marshalling Yard for chipping. The ALB Marshalling Yard is located at 2896 State Route 232 and is open for business from 9:00 a.m. until 4:00 p.m., Monday through Friday. ALB program representatives will accept all ALB host material at the yard that originates from within the ALB regulated areas of Ohio.

Individuals, businesses and municipalities working with trees, nursery stock, cut wood, timber, woody debris, downed tree limbs, or firewood can help save trees by following the rules when living and working in areas regulated to control and eradicate ALB.

The quarantine restricts the movement of regulated articles out of the regulated area. Regulated articles include: firewood, stumps, roots, branches, debris, and other material—living, dead, cut, or fallen—from all hardwood species; and nursery stock and logs of ALB host trees.

Living in Regulated Areas

In regulated areas, ALB program representatives seek access to private property to perform surveys and to conduct other program activities (i.e., locate ALB host trees and inspect them for signs of infestation). ALB program representatives perform these inspections on residential, park, and business properties. Inspections are done from the ground and in tree canopies by workers in bucket trucks and by certified tree climbers.

Residents should not move infested trees and regulated articles from regulated areas. Only ALB eradication program representatives can dispose of infested tree material. Any resident disposing of host material should work with a USDA certified company or use the designated drop-off locations within the regulated area. There is no cost to homeowners for removal of ALB-infested trees. Regulated host tree materials that are not infested cannot be moved outside of regulated areas, either, unless they have been chipped to one inch or less in two dimensions.

Firewood

Residents are allowed, by entering a compliance agreement, to utilize their own ALB infested firewood for this winter (through April 1, 2012). Residents may keep their firewood to burn this winter if they are willing to sign and adhere to the conditions of a legally binding compliance agreement with ODA stating that they will burn all infested firewood on their property before April 1, 2012. Any remaining infested firewood found on a property after April 1, 2012, will be confiscated and transported to the marshalling yard to be chipped.

Infested trees cannot be removed by property owners and used for firewood. Known infested trees surveyed and marked by the program have to

be removed by the eradication program. Property owners can cut down host trees that are not marked as infested and use the wood as firewood on their property for this winter (through April 1, 2012). However, if you have been notified that your property has infested trees, this activity should be coordinated with ALB eradication program officials. Thus, please call the program (513) 381-7180 prior to cutting.

Watch for Signs of ALB Infestation

The adult ALB is a distinctive looking insect measuring 1 to 1–1/2 inches long, not including its antennae. In females, the antennae are as long as the body itself; in males, they are almost twice the length of the body. The insect's body is shiny and black with irregular white spots; the long antennae are banded in black and white.

When ALB adults emerge from the trunks and limbs of host trees, the insects leave behind exit holes. These are perfectly round and about 3/8 inch in diameter. As the larvae tunnel, they often push a material called frass out onto the ground or onto tree branches. Frass looks like pencil shavings or sawdust. Trees with ALB also display small, roundish pockmarks in the bark on trunks or branches where an adult female has chewed a depression to lay an egg. Tree branches and trunks may display running sap from wounds to the tree inflicted by tunneling larvae or females laying eggs.

For more information on the ALB, please visit www. aphis.usda.gov or www.BeetleBusters.info. The Ohio ALB Cooperative Eradication Program can be reached at (513) 381-7180. To report an ALB infestation in Ohio call (855) 252-6450.

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