Using Traps to Detect Asian Longhorned Beetle

This trapping project is a joint research effort of scientists at Penn State University and U.S. Forest Service, Northern Research Station. This project is aimed at detecting Asian long-horned beetles, an invasive pest of hardwood trees, in Massachusetts, in hopes of preventing further spread of the pest beetle. In the battle against the invasive species, detection is the first step in gaining the upper hand and saving our trees.

Asian longhorned beetles (ALB) are a serious invasive species that threaten hardwood trees such as maple, boxelder, horsechestnut, elm, and poplar. In Massachusetts, as well as other areas where ALB infestations are found, early detection of beetles is critical.

USDA’s Animal Plant Health Inspection Service (APHIS) and Massachusetts Department of Conservation and Recreation (MADCR) personnel are surveying for infested trees, so that once found they can be removed before the beetles emerge and spread to other trees. ALB in particular is very hard to detect because it spends most of the year inside the tree as a larva and the rest of the year as an adult that can easily hide in the foliage of the tree. If you see signs of this beetle please report it to the eradication program by calling 1-866-702-9938 or going to http://www.massnrc.org/PESTS/albreport.aspx. This summer, researchers will continue efforts to test the efficacy of the traps by deploying 500 pheromone traps across the five-town area currently under quarantine (Worcester, West Boylston, Boylston, Shrewsbury, and Holden). If proven effective, traps may help to determine if areas previously cleared of infested trees remain free of ALB and may also help delimit the quarantine boundaries.

We appreciate your support and help in carrying out this project to save as many trees as possible from being attacked by this beetle.
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This summer, researchers from the U.S. Forest Service, Northern Research Station and Penn State University will join forces to place 500 pheromone traps for Asian longhorned beetles (ALB) in the communities of Worcester, West Boylston, Boylston, Shrewsbury, and Holden, Massachusetts. The traps will be hung in the lower canopy of trees from June until September. In the past two years, this trap has caught beetles and additional infested trees have been found after a re-survey near areas where they were trapped.

Pheromones, which are chemicals produced and used by insects to communicate with each other, are being used to lure ALB to the trap. In addition to ALB male produced pheromone, we are also using the natural smell of green maple leaves as a lure in the traps; both are natural products. The solution in the cup at the bottom is a saturated salt solution with a couple drops of dish washing liquid added, which will safely kill the beetles that fall into it. The traps will be hung out of reach and we will check them once every two weeks. There is a trap identification number on the bottom of the trap and a phone number to call should anything cause the trap to fall, or if you have questions about this project.

The project is being funded by the USDA Forest Service and the Alphawood Foundation. The following groups are also collaborating on this project: USDA Agricultural Research Service and Animal and Plant Health Inspection Service; and the Massachusetts Department of Conservation and Recreation.

For more information on ALB visit these websites: