

Asian Longhorned Beetle Sentinel Tree Project

The Sentinel Tree Project is a pilot project begun in 2009 to help detect Asian Longhorned Beetle (ALB) infestations in New Hampshire, and to educate the general public and green industry professionals about Asian Longhorned Beetle (ALB) detection methods. Several maple tree species have been identified as being more attractive to the Asian Longhorned Beetle than other tree species. According to USDA-ARS research, the painted maple, *Acer mono*, native to China and Korea, in particular appears to be significantly more attractive than other maple species. Based on this research, NH Sentinel Tree Project participants planted painted maple trees where they could be easily monitored by green industry personnel and the general public for ALB infestations. Educational signs depicting a mature painted maple tree, the life cycle of ALB, a summary of the project, and symptoms used to detect ALB were installed to accompany the tree plantings in 2010. Sentinel trees will not attract ALB to NH but will give us an early warning that they are already here. Early detection will allow ALB eradication more quickly and cheaply than if the infestation becomes widespread.

The program was spearheaded by Thomas Durkis, formerly State Entomologist of the NH Department of Agriculture, Markets & Food (now retired), in partnership with Mary Reynolds, State Urban Forester with DRED, UNH Cooperative Extension Service, and the NH Plant Growers Association. As noted by Ms. Reynolds, the Tree City USA communities that participated in this project spanned the state on a continuum from our eastern City of Portsmouth to our western border of Keene. Please see the table below for locations of the sentinel trees.

Table of Tree Locations

<u>Location</u>	<u>Date Planted</u>	<u>Quantity</u>
Seabrook Rest Area <i>Seabrook</i>	6/30/2010	2
UNH <i>Durham</i>	7/24/2009	5
Public Works Building <i>Keene</i>	7/17/2009	1
Rollins Park <i>Concord</i>	7/30/2009	1
RollingGreen Nursery <i>Greenland</i>	6/30/2009	1
Urban Forestry Center <i>Portsmouth</i>	6/30/2009	1
The Rocks Estate <i>Bethlehem</i>	6/5/2010	1
<i>Orford</i>	9/15/2009	1
St. Paul's School <i>Concord</i>	9/10/2009	1
Canterbury Rest Area <i>Canterbury</i>	6/25/2010	1
Rotary Common Park <i>Nashua</i>	7/15/2009	2
Derryfield Park <i>Manchester</i>	7/27/2009	1
Shaker Road School <i>Concord</i>	7/6/2010	1
26 Little Pond Road <i>Concord</i>	7/27/2010	3
Brochu Nursery <i>Concord</i>	7/20/2010	1
Laconia City Hall- River Walk <i>Laconia</i>	7/19/2010	1
NH State Forest Nursery <i>Boscawen</i>	7/16/2010	3
<i>New London</i>	7/16/2010	1
Maple Street School <i>Hopkinton</i>	8/11/2010	1
Vermont Department of Agriculture	5/1/2010	1



Asian Longhorned Beetle

Painted Maple ° Sentinel Tree



Oviposition site



Oozing sap

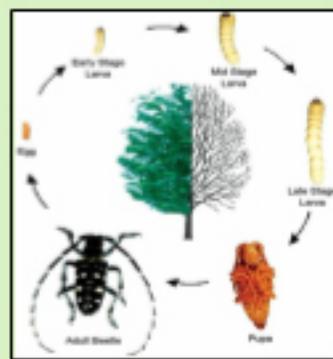


$\frac{3}{8}$ " diameter exit hole



Wood shavings/ frass

The **Sentinel Tree** Project was developed to help detect the presence of Asian longhorned beetles (**ALB**) in New Hampshire, which are not yet known to occur here as of 2010. Painted maple (*Acer mono*) trees, like the one standing before you, were selected because of their ability to lure any ALB occurring in close proximity to them. These trees are native to China and Korea and at maturity reach heights of 30-40'. In the fall their foliage turns a vibrant yellowish orange color.



ALB Life Cycle

The **ALB** poses a serious threat to a large variety of deciduous hardwoods in North America. Evidence of these beetles to look for includes: $\frac{3}{8}$ " diameter exit holes, coarse wood shavings called frass, oozing sap, oviposition sites, as well as mature beetles.

If any signs of ALB are found, please call:
NH Dept. of Agriculture at (603) 271-2561, or
ALB Hotline at 866-702-9938



New Hampshire
 Department of Agriculture,
 Markets & Food

