

## Public Awareness “First, Not Last”

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### Abstract

The hemlock woolly adelgid (HWA), *Adelges tsugae* Annand, is expanding its range about 20 miles per year. In many areas along the East Coast, the insect has caused significant mortality of both eastern and Carolina hemlock trees. It has become a major problem in forests and suburban communities. Its management is difficult and often ineffective or restricted to using chemical sprays in non-sensitive areas. Because the trees commonly grow along rivers, lakes, and swamps, applications of insecticides are limited. The general public can play a critical role in the early detection of adelgid infestations if they are aware of the problem.

In many states where the adelgid is not found, or even in noninfested areas within infested states, the public is completely unaware of the threat posed by this exotic pest. The primary purpose of our work was to promote widespread awareness of the hemlock woolly adelgid to facilitate early detection of infestations, minimize tree loss in suburban communities and forests, decrease environmental impact from use of costly insecticides, and maintain the health of hemlocks.

### Keywords:

Public awareness, detection.

### Summary

Early pest detection allows a focused management approach for eradication and containment of populations that slow or stop expansion. As an essential part of integrated pest management (IPM), the general public must be informed of the threat of HWA and what is being done to address the problem. Emphasis should be placed on educating people relative to the benefits of using IPM, and how HWA biological control contributes to management and minimizes negative environmental impacts. A primary focus of our work was to inform the “green industry”, such as landscapers, nursery and garden center owners, and managers about HWA as they regularly work with nursery stock, a source of recent infestations in New Hampshire and Maine. The bottom line of any education program must be to clearly define the positive role the public and the “green industry” can

play in protecting our hemlock resource.

We describe herein a coordinated tri-state (Maine, New Hampshire, and Vermont) HWA public awareness program initiated in 1999. The following steps were taken:

- Formation of a regional public awareness working group.
- Designing and formulating plans for education and public awareness suitable to individual state needs.
- Establishing roles and responsibilities for group members.
- Implementing awareness plan region-wide by:
  - o Developing eye-catching and innovative educational materials unique to

*A Citizen's Guide*  
**Hemlock Woolly Adelgid**



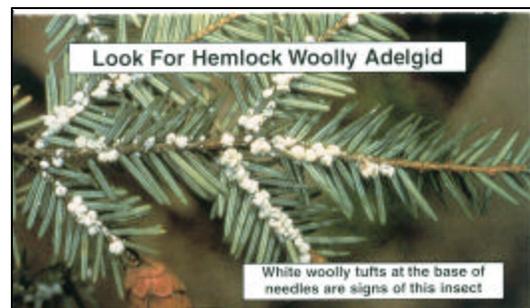
Photo: M.S. McClure

The Hemlock Woolly Adelgid (HWA) is an introduced pest that infests eastern, Carolina and several exotic ornamental hemlock trees. It doesn't attack pine or fir trees. It came from Asia and is now established in several states along the East Coast.

**HWA KILLS HEMLOCK TREES!**

This serious pest is not established in Vermont, New Hampshire or Maine, but it occurs in forests near our borders. Small spot infestations have recently been discovered in New Hampshire and Maine and are being eradicated.

***We need your help NOW.***  
*Watch for this pest!*



**Please Note**

**You have just bought  
a healthy hemlock!**

The hemlock woolly adelgid is an exotic insect pest that sometimes infests this type of tree. If you see hemlocks in your area with signs of this pest (see photo below), report it to Vermont State personnel:

Forestry: (802) 241-3606  
Agriculture: (802) 828-2431



Photo: M. McClure

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- each state (Figure 1).
- o Preparing and releasing information to the media.
  - o Developing linkages with partners of outreach, including nature-oriented volunteer groups, Extension system personnel, etc.
  - o Establishing hotlines in each state to:
    - Furnish up-to-date information to callers.
    - Respond to potential new sightings.

This one-year project was extremely timely because it was initiated just before spot infestations of HWA were discovered in Maine and New Hampshire. Efforts to locate HWA infestations were facilitated by public responses. Because state forestry personnel were fully occupied with eradication activities, they had little time to develop the needed educational materials. Through this collaborative project with the University of Vermont, these supplies were efficiently produced without diverting critical human resources from eradication.

Several educational materials were developed, among them wallet-sized HWA identification cards, 8.5 x 11 inch posters, a tri-fold display for presentation at conferences and public meetings, and a brochure describing the HWA problem in these three states. Because educational materials were developed jointly among the three states, they could be produced in large quantities at relatively low cost. Production of effective materials is only part of the process of educating the public. Equally important is dissemination of the materials. Using existing mailing lists, these educational materials have been sent out widely throughout the tri-state region. In Vermont, ID cards are sent out by the Master Gardener program to anyone who requests garden-related information. Volunteers of the Green Mountain Hiking Club have put up HWA posters at key locations along the trails statewide. They also hand out cards to interested hikers they meet along the trail. The opportunities for innovative techniques for spreading the word are endless and unique for each state.

Public awareness should be an integral component of every IPM program. To limit or minimize involvement of the public in the management of HWA and other significant pests is shortsighted. Too often the public is seen as a major part of the problem with respect to spreading exotic pests to new locations. Through this program we are making them part of the solution instead. The public and the “green industry” demonstrated a sincere and sustained interest in HWA and its elimination from Maine and New Hampshire, as well as keeping it out of Vermont. Effective public awareness takes time and money. A sustained effort to continue this program is critical to maintain this positive collaboration between the public and the forest pest managers on a regional scale.

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