

Hemlock and HWA Hunters

Hemlock Woolly Adelgid (HWA) Survey Protocol

Survey Protocol for Hemlock Woolly Adelgid:

- Look at multiple branches/twigs on all sides of a hemlock tree
- Look for hemlocks in poor health: with weakened or declining crown; defoliation; pale, greyish foliage, lack of new buds
- Look on ground for infested hemlock branches that have fallen from the canopy

HWA Identification: November—April

- HWA actively growing and developing
- White, waxy wool masses on hemlock twigs at base of needles on new growth
- Best seen looking at underside of twig



HWA Identification: May—October

- HWA in period of dormancy called aestivation
- Black nymphs surrounded by white halo of wool
- Easiest to see using magnification (hand lens or magnifying glass)



Other Clues of Potential HWA Infestation (These do not guarantee an infestation is present, further surveying needed)



Weakened tree crown, loss of needles in canopy; absence of new green shoots in June



Pale, greyish cast to foliage, easily spotted when boating/from a distance



Woodpecker damage from infestation of hemlock borer (native pest)



Elongate Hemlock Scale infestation (INVASIVE-REPORT IF SEEN)

Reporting Protocol: Use one of the following methods to report a known HWA infestation

Use NYiMapInvasives mobile app:

- Download NYiMapInvasives app on your smartphone (App Store or Google Play); create username/password online at www.nyimainvasives.org
- Report **HWA** (for infestation presence) or **X-HWA** (for infestation absence)
- Visit www.nyimainvasives.org for training dates and resources
- Data uploaded into statewide invasive species map

Call DEC's Forest Pest Information Line:

(1-866-640-0652)

Email location details/photo/GPS coordinates to NYS Hemlock Initiative:

nyhemlockinitiative@cornell.edu

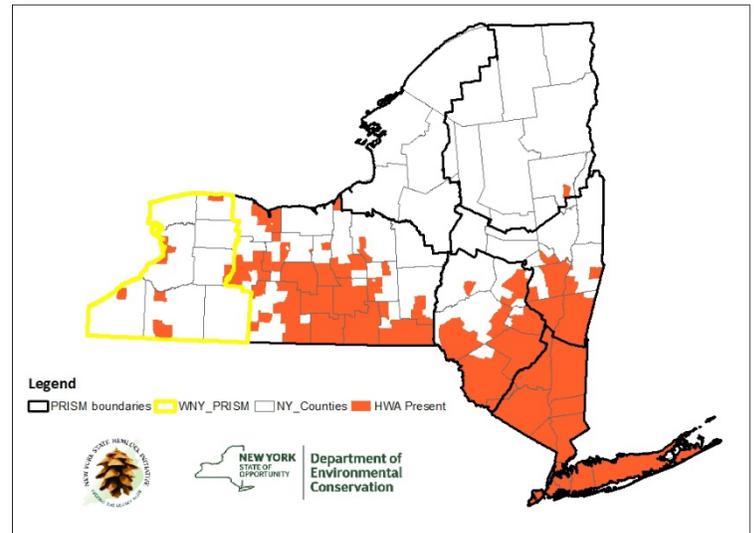
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HWA Survey Protocol: Western New York (WNY) PRISM

PRISM stands for **Partnerships for Regional Invasive Species Management**. New York has eight PRISM regions, each made up of conservation organizations concerned with invasive species detection and management at the local, regional, and state level. Additionally, each PRISM has specific goals regarding hemlock conservation and HWA management in its region.

WNY-PRISM HWA Outlook:

Western New York first spotted HWA infestations in 1998. Today, HWA is found only in a few towns in the region. **Due to the limited scope of HWA in the region, the Western New York PRISM (WNY-PRISM) is currently focused on early detection efforts.** New infestations often turn up near established HWA populations or can be spread through movement of birds, animals, or humans. HWA can also be spread through hemlocks purchased at local nurseries. **For the WNY-PRISM, finding new infestations can be critical to long-term health of the region's hemlocks.**



Get Involved:

- **Report any HWA findings in your area.**
- **Consider treatment options** on your property if you have infested hemlocks. Management information is available on the NYSHI website (see address below).
- **Consider getting involved with our hemlock hedge program.** If you have an infested hemlock hedge and are interested in hosting a colony of HWA predator insects, please let us know.
- **Become a NYSHI HWA Phenology volunteer** and track HWA's major life stages throughout the year.
- **Consider becoming an HWA predator food collection site.** Allowing our field team to collect infested foliage from your property allows us to keep our biocontrol lab colony well-fed.

Additionally, in this region:

- **Report any findings of pine bark adelgid (PBA)** in the area (characterized by white, woolly fluff similar to HWA wool on the trunk, branches, or twigs of white pine trees). Findings help us improve our biocontrol research program.

Resources for HWA Management in WNY-PRISM

WNY-PRISM website:

www.wnyprism.org

WNY-PRISM Facebook page:

www.facebook.com/wnyPRISM

New York State Hemlock Initiative website:

www.nyshemlockinitiative.info

NYS Hemlock Initiative Facebook page:

www.facebook.com/NYSHemlockInitiative

For questions about HWA management in your area, or for more information on getting involved with our Citizen Scientist volunteer programs please email us at nyshemlockinitiative@cornell.edu