WHAT IS HEMLOCK **WOOLLY ADELGID?**

The Hemlock Wooly Adelgid is a tiny, aphidlike insect that has been killing North American hemlock forests since the 1950s. It has been moving slowly northward, becoming adapted to colder climates. HWA was found in the Finger Lakes in the early 2000s.

When HWA settles on a hemlock (blown by wind, carried on clothing, fur or feathers), it inserts a long feeding tube into the hemlock twig. When enough adelgids are present, the tree responds by shutting down food to the twig, killing the buds, needles, and finally the tree. From beginning to end, the process can take six to twenty years in New York.

Hemlocks are some of the largest and most beautiful trees in the Finger Lakes forest. Because they are shade tolerant, they often grow in gullies and help to stabilize slopes, support unique indigenous assemblies of plants and animals, and keep water and homes cool and shady.

Looking for more information?



The mission of the New York State Hemlock Initiative is to coordinate research, management, and volunteers to conserve New York State's hemlock resources in the face of multiple threats, particularly that posed by an invasive pest, the Hemlock Woolly Adelgid.

for more information.

TREATMENT OPTIONS FOR LANDOWNERS

The Hemlock Woolly Adelaid, a pest we CAN manage.

Have you identified HWA on your hemlock trees? It's not too late to protect them!

There are two insecticide treatments available. imidacloprid in several forms and dinotefuron (Safari). A licensed professional applicator will be able to analyze your trees, and discuss the best treatment option with you based on the health of the trees and the level of HWA infestation.

The best times to treat your trees are spring and fall, when the trees are actively taking up water. Treatments can be effective for up to 7 years.

Biological controls are also being developed, but are currently only available for research purposes. It's important to act now and keep our hemlocks alive until further treatment options are available.

FINDING AN APPLICATOR

Because hemlocks often occupy areas near the water's edge, landowners looking to treat are strongly encouraged to work with NYS Certified Pesticide Applicators to treat responsibly with minimal impact to adjacent waters. The NYS Department of Environmental Conservation has compiled a list of state certified applicators which can be accessed here: https://www.dec.nv.gov/nvspad/?0

> **Canandaigua Lake Watershed Association** www.canandaigualakeassoc.org (585) 394-5030

> > Stay Connected!



Hemlock Woolly Adelgid In the Canandaigua and Honeoye Lake Watersheds



A guide for property owners on the impacts of Hemlock Woolly Adelgid.

CANANDAIGUA LAKE WATERSHED ASSOCIATION



HOW YOU CAN HELP.

Eastern Hemlocks (*Tsuga Canadensis*) have been occupying Finger Lake gullies for more than ten thousand years, since the last glaciers retreated. The recent discovery of the invasive forest pest Hemlock Woolly Adelgid (HWA) in our watersheds is a reminder of what an important role that hemlocks play in our ecosystems.

HWA has the ability to attack and kill hemlock trees in the matter of a few years, posing a significant threat to the structure of our watershed gullies, the beauty of our lakeside properties, and ultimately, the water quality of our Lakes.

Join with us in the detection of HWA in our area by following these 3 steps.



STEP 1: LEARN HOW TO IDENTIFY

Look for Eastern Hemlock in or near gullies or on steep slopes, where their tenacious root structure holds highly erodible soils in place.



Look for:

- Flat, blunt evergreen needles arranged in pairs
- Glossy on top, pale green underneath
- Two white lines on the underside of each needle
- Hemlocks have the smallest cones, half an inch in length, of any other local evergreen

STEP 2: LOOK FOR SIGNS OF HWA

- Check underside of branches near the ground, and examine branches that fell to the ground after a storm
- Look for small, woolly egg masses attached near the base of needles on the underside of hemlock branches
- Best time for detection is between January and May, but the white wool can be seen year round
- When examining trees from afar, look for gray foliage tint



STEP 3: TAKE ACTION

- Keep a lookout for the tell-tale signs of HWA when hiking with friends and family
- Focus on high risk locations, like watershed gullies
- Report suspected
 infestations

Spread the word about HWA:

- Tell your neighbors, family and friends about the threat
- Help your neighbors scout for signs of HWA on their trees and hedgerows
- Initiate a neighborhood action team help by distributing info and treatment options

Know. Observe. Report.



Early detection will help us gain a clearer picture of HWA coverage in our watershed forests.

Download the iMapInvasives App for your smartphone and select "Hemlock Woolly Adelgid" as the species.

Snap a picture of suspected infestations, and submit! The app records your GPS coordinates and will map the occurrence of HWA in the Finger Lakes Region to help direct management efforts in the future.



THREE STEPS TO HELP IDENTIFY HWA