SLELO PRISM Partners Share These Goals:

PREVENTION

Prevent the introduction of invasive species into the SLELO PRISM region.

EARLY DETECTION & RAPID RESPONSE

Detect new and recent invaders and rapidly respond to eliminate all individuals within a specific area.

COOPERATION

Share resources, expertise, personnel, equipment and information.

INFORMATION MANAGEMENT

Collect, utilize, and share information regarding surveys, infestations, control methods, monitoring and research.

CONTROL

Control invasive species infestations by using best management practices, methods and techniques to include:

ERADICATION - Eliminate all individuals and the seed bank from an area.

CONTAINMENT - Reduce the spread of established infestations.

SUPPRESSION - Reduce the density but not necessarily the total infested area.

RESTORATION

Develop and implement effective restoration methods for areas that have been degraded by invasive species and where suppression or control has taken place.

EDUCATION / OUTREACH

Increase public awareness and understanding of invasive species issues through volunteer monitoring, citizen science and community outreach.

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This QR code will link to more resources.

FOR MORE INFORMATION CONTACT THE:

St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management

SLELO PRISM

C/O The Nature Conservancy

(315) 387-3600 x 7724

www.sleloinvasives.org

Get Involved

Help find invasive species of interest in your region. For details, contact megan.pistolese@tnc.org

Stay informed, join our listserv Follow these steps to join:

- 1. Email <u>cce-slelo-l-request@cornell.edu</u>
- 2. Type "join" in subject space
- 3. Leave email body blank and send

Cover Photo: CT Agg. Experiment Station, bugwood.org Tree dieback: Will Blozan, http://www.ethanzuckerman.com/ . Woolly Masses: Left Photo, ag.umass.edu. Right Photo: Alyssa Reid, OPRHP . Spittle bug: University of Arizona Cooperative Extension. Elongate hemlock scale: Vermont Invasives on Flicker. Underside and top of hemlock needles: Rob Routledge, bugwood.org. Hemlock cones: Lyndon Photography, bugwood.org. Hemlock bark: Keith Kanoti, bugwood.org.



What You Should Know About Hemlock Woolly Adelgid (Adelges tusgae)



SLELO PRISM

"Teaming up to stop the spread of invasive species"

What is Hemlock Woolly Adelgid?

Hemlock woolly adelgid (HWA), (Adelges tusgae), is a small, aphid-like insect native to Asia that is threatening hemlock trees (Tsuga spp). HWA feeds on host tree's food storage cells, disrupting nutrient flows eventually leading to mortality of the host tree.

Visit <u>www.sleloinvasives.org</u> to download a detailed guide to HWA infestation signs and hemlock tree ID.

HWA Infestation Signs:



Needle discoloration, canopy dieback. Lack of bright green foliage in spring (new growth).

Presence
of white woolly
masses at
needle base on
hemlock tree
branches
(Most visible
from fallspring)





Look-a-Likes For HWA

Elongate hemlock scale

- •White waxy secretions build up on leaves
- •Needles turn yellow and fall off.
- •Please notify SLELO PRISM and /or DEC if found.



INVASIVE

Spider eggs

• Egg sacs enclosed in a web



Pine Sap

• Sticky residue buildup



Hemlock Tree Identification:



➤ Needles are flat ranging from 1/3 – 2/3 inches long

➤ Underside of needles have two white parallel lines



Cones are small, ½ inches long





➤ Bark is graybrown with white ridges & furrows