



Nick Dietschler of NYS Hemlock Initiative

HEMLOCK WOOLLY ADELGID

Adelges tsugae

Origin: Asia, Southern Japan

INVASIVE RANKING, NYS

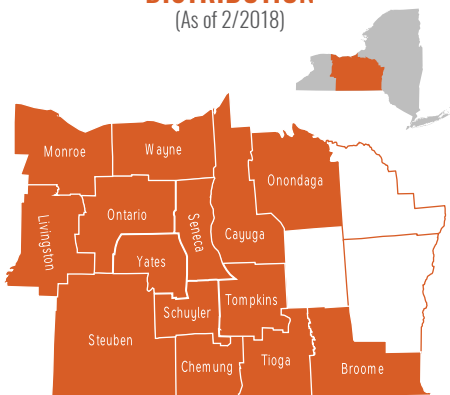
High

MANAGEMENT STRATEGY

Chemical
Biocontrol
Prevention

DISTRIBUTION

(As of 2/2018)



www.fingerlakesinvasives.org

The hemlock woolly adelgid is a small, aphid-like insect that attacks hemlock trees. They are most easily recognized by the white “woolly” masses of wax they use to protect themselves and their eggs from desiccation and predation. These ovisacs can be readily observed on the undersides of branches, at the base of the needles, from late fall to early summer. Infested trees may have gray-tinted foliage or exhibit needle loss and branch dieback.

HABITAT

The hemlock woolly adelgids feed on native eastern hemlock (*Tsuga canadensis*), and on any ornamental species of hemlock. They are found on twigs at the base of needles.

THREAT

Hemlock woolly adelgids use their long, sucking mouthparts to tap into the food storage of plant cells, which causes the tree to wall off the wound with scar tissue. After an intense infestation, the tree is unable to get sap to the end of its branches to produce new growth; once existing needles die, the tree cannot produce food. Dieback can occur in as little as two years, and mortality in 4-20 years depending on site characteristics and climate. Hemlock woolly adelgids reproduce asexually in the eastern US, so one insect can start a new infestation.

MANAGEMENT

Treatment with systemic insecticides is effective and relatively inexpensive, with treatments remaining effective for up to seven years. Limiting the movement of infested nursery stock will slow its spread. Biological controls are under development and are the best long term management option.

REFERENCE - Childs, Robert. Hemlock Woolly Adelgid Frequently Asked Questions. <https://ag.umass.edu/landscape/fact-sheets/hemlock-woolly-adelgid-frequently-asked-questions>.

DEC. Hemlock Woolly Adelgid <http://www.dec.ny.gov/animals/7250.html>. May 31, 2017.

US Forest Service. Pest Alert - Hemlock Woolly Adelgid https://www.na.fs.fed.us/spfo/pubs/pest_al/hemlock/hwa05.htm. May 25, 2017. Hemlock Woolly Adelgid, *Adelges tsugae* Factsheet. 2016. New York State Department of Environmental Conservation. https://www.dec.ny.gov/docs/lands_forests_pdf/hwafactsheet.pdf.



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