

The Hemlock Woolly Adelgid

The hemlock woolly adelgid (HWA, *Adelges tsugae*), an invasive forest pest, was recently confirmed in several locations around the southern and central region of Canandaigua Lake.

HWA is a small, aphid-like invasive insect that is native to Asia. It attacks hemlock trees and slowly kills them over a span of up to ten years. HWA are identified easily in the winter when they cover themselves in a white waxy coating that is easily detectable as small white balls at the base of the needles of a hemlock branch. HWA poses a serious threat to watershed health as hemlocks act as a keystone species in this community. Hemlocks typically grow in gullies where their roots hold the soil in place on steep slopes. When hemlocks in these locations die, the slopes are more susceptible to soil erosion, which can lead to water quality issues. Soils hold nutrients such as phosphorus and nitrogen, and excessive nutrients in a lake can result in unwanted algal blooms, aquatic ecosystem damage, and poor water quality. Without hemlock to protect the integrity of the ecological community, areas become easily degraded.

Fortunately, it is possible to protect hemlocks from HWA through chemical application, although care must be taken to avoid excessive use within the watershed. Chemical pesticides are available for use by homeowners or via licensed chemical applicator to save hemlock. Chemical treatments have been proven to be highly effective and last up to seven years. A biological control may soon be a management option as research is currently being employed to determine the efficacy of a non-native beetle on HWA containment.

For more information about HWA and management options:

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New York Invasive Species website, specifically the section pertaining to the hemlock woolly adelgid: www.nyis.info