Managing Invasive Species in the Skaneateles Lake Watershed

This fact sheet aims to provide homeowners and land managers within the Skaneateles Lake Watershed information on the different invasive species present in the Skaneateles Lake Watershed and the management options for them. While eradication is difficult, best management practices can be used to reduce populations, prevent their spread and maintain water quality in this sensitive watershed.

Water Quality

Removal of invasive species often requires the usage of pesticides to kill living material or excavation of the affected terrain to remove root and seed stock. Both of these options provide risks to water quality, from the exposure of easily-erodible ground to the movement of chemicals within the soil and groundwater.

In the case of excavation, always make sure you are within the <u>Skaneateles Lake Watershed's Rules & Regulations</u> for soil disruption. This includes disturbance activities which expose more than 5000 square feet of soil and are within environmentally sensitive areas. These areas are defined as:

- land within 300 feet of the lake or watercourse
- areas with slopes greater than 15%
- within 300 feet of NYDEC-defined wetlands, or
- soils that are highly erodible

Best Management Practices

When applying herbicides to control invasive vegetation, it is not just important, but it is law to follow the instructions on any pesticide label entirely. Labels will provide the user with water advisories in place to prevent contamination of groundwater. For more information on reading a pesticide label, visit: <u>www.</u> <u>dec.ny.gov/docs/materials_minerals_pdf/pm3.pdf</u>



Buckthorn in a hedgerow, Scott, NY.

Be sure to know how close to a surface water source or a well that a herbicide can be applied to ensure minimal risk in the contamination of a potential drinking water resource. Loading and mixing sites should also be located a safe distance from surface water to avoid a potentially potent contamination risk.

Comprehensive invasive vegetation management plans, including cutting and excavation can greatly reduce the potential for contamination of water resources. For more information, visit your local Soil & Water Conservation District or Cornell Cooperative Extension office.

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Management Options for Common Invasive Species

Hemlock Woolly Adelgid

About • HWA is a small, aphid-like insect which forms woolly masses at the base of hemlock needles, slowly sucking nutrients from the tree until an inevitable death if gone untreated. Loss of hemlock trees destabilizes streambanks and steep ravines in which the hemlock trees often grow, and access to the trees can be difficult for removal.

Management Options • Left untreated, the loss of hemlock trees is a substantial risk in regards to erosion and habitat removal. The insecticide **imidacloprid** can be effective for as many as seven years with a single treatment. A soil drench of **imidacloprid** is the only option available for landowners without the utilization of a Certified Pesticide Applicator.



Hemlock Woolly Adelgid, Moravia, NY.

European Buckthorn (photo on front)

About • European buckthorn (or common buckthorn) is a small shrub-tree of 10-25 feet and will grow in many locations including roadsides, hedges, abandoned fields and woodlot fringe. The shrub produced egg-shaped dark green leaves (1-2") and small green berries that ripen to black. Birds eats the berries and distribute the seeds across the landscape.

Management Options • Small buckthorn seedlings can be pulled when identified early. Larger stems need to be cut at the base and treated with herbicides (typically **glyphosate** or **triclopyr**) or sprouting of new growth will occur.



Stand of Japanese knotweed and fox grapes overtaking a clearing in the woods, Scott, NY.

Japanese Knotweed

About • Japanese knotweed is a tall-growing (6-10'), hollowstemmed plant often referred to as "bamboo." Knotweed colonizes roadsides and stream banks while growing in vast monocultures, providing visibility issues and damage to roads.

Management Options • Knotweed must be controlled at the rhizome, the roots of the plant. Cutting is not effective, as the roots will continue to sprout through the growing season. However, cutting the stems to the ground with a follow-up herbicide application can be effective, but foliar spray herbicide (usually **glyphosate** or **imazapyr**) treatments have been the successful, but herbicides should be used during an optimal summer growth window.

Phragmites

About • The common reed, or Phragmites, is an aggressive perennial grass growing upwards of 15-18' feet in wet areas, especially ditches and roadsides. The grass rapidly out-competes native vegetation and during dry season can become a brush fire hazard.

Management Options • The rhizome root systems of Phragmites are difficult to remove, and even with pesticide treatment, the plant can sprout from underground roots and produce (amount of seeds per head) in a single season, leading to a difficult seed bank to remove.



Japanese knotweed and Phragmites taking over a small stream gully, Van Buren, NY.