

Invasive Species Management

Niagara Parks works on the front lines of the ongoing fight against invasive species. With lands stretching from Lake Erie to Lake Ontario along the Niagara River Corridor, Niagara Parks is often the first Canadian defence against emerging threats. Invasive species—plants, insects and animals—can have significant consequences for everything from wildlife habitat to the economy.

- **Degradation of Natural Areas:** Invasive plants can squeeze out native species in the competition for resources. This, in turn, impacts the fauna that depend on native plants for food and shelter. Some invasive species like the common buckthorn can even change the chemical composition of the soil.
- **Interference with Agriculture:** Invasive plant species can introduce new crop diseases and crop-damaging insects. The soybean aphid's impact on Canadian farms expanded as it began to use the buckthorn as an over-winter host.
- **Reduced Forest Regeneration:** Invasive plants can compete directly with tree seedlings, resulting in reduced forest growth rates. The dog-strangling vine, for example, forms dense mats of vegetation that impair forest regeneration.
- **Danger to Human Health and Safety:** Some invasive plants, like giant hogweed, have sap that is toxic to human skin. Other plants can cause injuries, create fire hazards and reduce visibility on trails and roads.
- **Economic Consequences:** The costs of mowing, pruning, pulling and fighting invasive species can be significant. The Canadian Food Inspection Agency has spent more than \$30 million in Ontario alone to fight a single invasive species: the emerald ash borer.
- **Adverse Impacts on Recreation:** Invasive species can adversely affect outdoor activities including hiking, fishing, bird watching, hunting, swimming and mountain biking as invasive species alter views, reduce songbird populations, clog swimming areas and choke wilderness trails.

The Defences

Niagara Parks employs a variety of tactics to manage invasive species including:

- **Mechanical removal:** pulling plants out of the ground
- **Prescribed burning:** expertly targeted and controlled fire
- **Bio-controls:** deploying a particular plant, insect or animal to eat, impede or compete with the invasive species
- **Solarisation:** trapping solar energy to change the conditions that support the invasive species
- **Chemical controls:** utilizing pesticides and herbicides with a natural resource exemption from the Ontario Ministry of Natural Resources and Forestry



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Invasive species come in many forms including amphibians, fish, insects and plants. Niagara Parks' current priority is fighting invasive insects and plants that are threatening habitats in Niagara Parks properties and beyond.



The **Emerald Ash Borer** is an insect that destroys ash trees.



The **Hemlock Woolly Adelgid** insect kills eastern hemlock trees and was discovered in Canada for the first time in 2014 on Niagara Parks property.



The **Tree of Heaven** is a fast-spreading deciduous tree, also known as stinking sumac, that crowds out native species.



The **Common Buckthorn** shrub can overrun habitats from riverbanks to mature forests and agricultural fields.



Garlic Mustard is a fast-spreading herb that invades a range of habitats including forests.



Dog-strangling Vines are two vines—black swallowwort and pale swallowwort—that strangle other plants and trees.



Phragmites is a densely growing grass, also known as common reed, that crowds out native species.