

Invasive Species Factsheet

June 2018



Phragmites

What are invasive species?

Invasive species are defined by the Ontario government as "harmful alien species whose introduction or spread threatens the environment, the economy, or society, including human health."¹ Alien means "species of plants, animals, and micro-organisms introduced by human action outside their natural past or present distribution."¹

These serious threats to our environment, economy and society caused the Ontario government to take action. In 2012 the [Ontario Invasive Species Strategic Plan](#) was published and on November 3, 2016, Bill 37, the [Ontario Invasive Species Act](#) came into force. Sixteen aquatic invasive species found in lakes and river systems are identified in the [Regulation](#) as prohibited under the Invasive Species Act. Three plant species which are restricted are phragmites, dog-strangling vine and Japanese knotweed.

A key objective of the Invasive Species Act, 2015 and the Strategic Plan 2012 is to prevent new invasive species from arriving and establishing in Ontario, since the most efficient and cost-effective way to manage invasive species is to prevent their introduction in the first place. Actions must be taken "to slow and where possible reverse the spread of existing invasive species, and to reduce the harmful impacts of existing invasive species."² It is important to note that the Act points out that the species listed represent only a small segment of the total number of invasive species that have the potential to be introduced into Ontario or have already become established in Ontario.

Examples of invasive species already in Toronto that pose a threat to our natural areas, in addition to phragmites, Japanese knotweed and dog-strangling vine (pale swallowwort), are: garlic mustard, common buckthorn, hedge parsley, reed canary grass, periwinkle, Siberian squill (Scilla), Norway maple, tree of heaven, European fire ants – and many more.



Dog-strangling Vine

What are the effects of invasive species in Toronto?

Invasive species are widespread in Toronto and pose one of the main threats to biodiversity in our natural areas. Essentially this means that our native birds, insects and mammals that require natural areas to survive have a difficult time finding shelter and food in our natural landscapes. The book [Bringing Nature Home](#) by Douglas Tallamy documents this clearly. Some of the alien species exude chemicals from their roots and change the soil chemistry in ways that are detrimental to native plant growth. Others thrive on the compacted, degraded soil that we often find within our nature parks. The three provincially restricted species – dog-strangling vine (pale swallowwort), Japanese knotweed and phragmites – are often encountered in Toronto's natural areas.



Japanese Knotweed

How do invasive plants spread into our natural areas?

Some plants are spread along trails by seeds from hiker's boots, bicycle tires, dog and other animal fur and paws, and by equipment such as lawn mowers, bobcats or backhoes used to mow lawns or do other maintenance work adjacent to or in natural areas. Some spread by travelling in our rivers and waterways when fragments of roots or stems break off and then lodge in new places downstream and begin to reproduce. Edges of natural areas are especially vulnerable. Some plant seeds such as dog-strangling vine are spread by wind.



Garlic Mustard



Siberian Squill (Scilla)



Norway Maple

What can be done about invasive species?

- Learn about invasive species in your area and also those that may be coming soon, due to climate change and human transportation activities. (For example, mugwort from the United States has been spreading along the edges of some of our 400 series highways, and is now showing up at the edges of natural areas in Toronto.)
- On private property make sure that invasive plants are eliminated.
- Choose native plants or non-invasive plants that will contribute to native biodiversity in our city and provide pollinators, butterflies and moths, native birds and mammals the food and shelter they need to thrive. For ravine property owners this is especially important.
- Join a stewardship group. There are number of stewardship groups around the city that spend time removing invasive plants on public property.

Fact Sheets, Control Methods and other Resources

[Invasive Species Centre](#) The Centre looks at Invasive species from a national perspective. Reports are available to download.

[Ontario Invasive Plant Council](#) The Council looks at invasive plants from a provincial perspective. Fact sheets about particular invasive plants and how to control them are available to download. "Plant Me Instead" is a booklet giving gardeners alternatives to some of the worst invasive plants that are found in gardens. Webcasts on current practices are presented regularly and archived for easy access.

[A Landowner's Guide To Managing and Controlling Invasive Plants in Ontario](#) This guide and its appendices is an excellent source of detailed information about our most common invasive plants.

[Sustaining Biodiversity](#) This booklet has a list of priority invasive plants in southern Ontario including Toronto.

[Bringing Nature Home](#) This book by Douglas Tallamy explains what you can do in your own garden and why non-native species don't serve our native insects and other animals well.

[Toronto Field Naturalists](#) The website has many resources to explore with articles on native and invasive plants.

[High Park Nature](#) This website has extensive research and information on native plants and invasive species in Toronto's High Park.

Toronto Stewardship: [City of Toronto Stewardship Groups](#), [High Park Stewards](#)

[The Stewardship Network](#) This organization in Michigan has excellent information and resources. Webcasts by researchers and ecologists on many topics are current, and informative. Webcasts are archived (under the Resources button). Michigan is nearby and experiences many of the same invasive species issues as Toronto.

[Ravine and Natural Feature Protection](#) Ravines are protected by By-law 658. You can download the brochure [here](#). Invasive species are a huge threat to the health of our Toronto ravines.

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1. Ontario Invasive Species Strategic Plan, Glossary, page 54
 2. Ontario Invasive Species Strategic Plan Executive Summary, page i