



Invasive Species

How can you help reduce the spread of invasive species?

- Learn to identify invasive species. Early detection is very important in the management process.
- Try substituting for native species. If that is not an option, be sure to ask garden centres about non-invasive plants.
- Stay on designated trails. Be sure to clean off clothing and any equipment after being in an area that may have invasive species.
- Do NOT dump your bait buckets and be sure to drain water from your boat, livewell, motor and bilge.
- Do NOT move wood. Buy firewood locally.
- Do NOT release aquarium or water garden pets or plants.
- When removing invasive species, properly bag and dispose at your local landfill.
- Check plant species origins at invasiveplantatlas.org

Report invasive species!

- Ontario Invasive Species Program: invadingspecies.com
- Ontario Invasive Plant Council: ontarioinvasiveplants.ca



**Nottawasaga Valley
Conservation Authority**

8195 8th Line

Utopia, ON, L0M 1T0

705-424-1479

admin@nvca.on.ca

nvca.on.ca



A closer look at invasive species threatening aquatic and terrestrial ecosystems in Collingwood.

What are Invasive Species?

Invasive species are plants, animals or pests that are not native to Canada. They are typically introduced here through world trade and travel. When introduced they then spread rapidly throughout Canada via human movement, animals, wind and water.

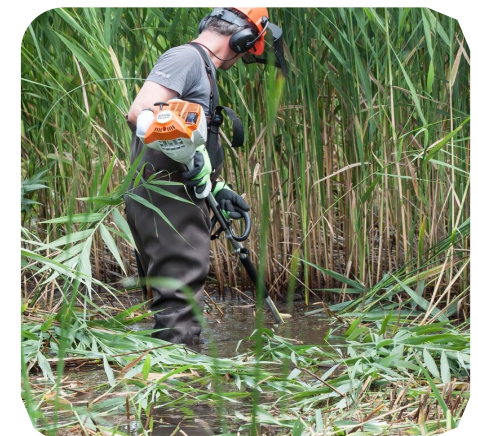
Invasive species can spread through:

- Recreational and commercial boating
- Release of live bait
- Aquarium and water garden trade
- Horticulture and gardening
- Seed mixtures
- Firewood transport

Why are Invasive Species so Destructive?

- They are highly adaptable.
- They have few predators.
- They thrive in disturbed systems.
- They outcompete native species for food and habitat.
- They reproduce quickly.

The species in this guide are to be considered the most threatening invasive species in the Collingwood area. These species are severely impacting native species and their habitats. They pose a threat to the environment, the economy, and in some cases, human health.



Managing invasive species costs Canadian agriculture and forest industries \$7.3 billion each year.
(Government of Ontario, 2015)

West
Collingwood
Shoreline

Community
Phragmites
Action Plan



**GEORGIAN BAY
FOREVER**
Protecting your water.



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Contact the NVCA if you require this document in an alternative format.

Collingwood's "Dirty Dozen" Invasive Species



Robert Vidéki, Bugwood.org

Giant Hogweed
(*Heracleum mantegazzianum*)

This tall herbaceous plant (2-4 m) looks similar to Queen Anne's Lace and Cow Parsnip. It has a hollow, hairy stem with purple spots and large white flower clusters. This plant contains toxins that cause severe burns when touched. Avoid contact! This plant can be found along the Oak St, canal.



http://cloca.ca/lwc/forests_invasive.php

Dog Strangling Vine
(*Vincetoxicum rossicum*)

This vine grows 1-2 m tall by entangling itself onto other plants. It has pinkish purple star-shaped flowers and bean-shaped seed pods. It can completely cover the forest floor, choking out all other species. Dog Strangling Vine can be found along the shores of White's Bay.



https://en.wikipedia.org/wiki/Impatiens_glandulifera

Himalayan Balsam
(*Cortaderia seloana*)

This 1-2 m tall herbaceous plant has a fleshy-pink stem and distinctly jagged, opposite leaves. It has an irregular cone-shaped pink flower and can be found along stream banks, such as the Oak St. canal.



Wasyi Bakowsky

Phragmites
(*Phragmites australis*)

Also known as European Common Reed, this invasive grass can grow up to 5 m tall. It has tan stems and large red seed heads. It is very aggressive, creating dense monocultures and is commonly seen along shorelines and roadside ditches. *Phragmites* can be found inhabiting the shoreline of Georgian Bay .



https://www.ontario.ca/page/emerald-ash-borer

Emerald Ash Borer (EAB)
(*Agrilus planipennis*)

The creamy white larvae (right) is between 26-32 mm, whereas the green metallic beetle (left) is 8.5 to 13.5 mm long. Signs a tree is infested include a yellowing or thinning canopy, young growth shoots, cracked bark and D-shaped exit holes. Beetles prefer to attack green, white and black ash trees.



Jan Samanek, Bugwood.org

Common Buckthorn
(*Rhamnus cathartica*)

This small tree grows between 5-6 m tall. It has smooth, dark green leaves that are finely toothed, and oppositely arranged along the stem. Most branches older than 1 year end in a thorn. It has small yellow flower clusters and berry-like black fruit in late summer and fall.



INCA

Common Carp
(*Cyprinus carpio*)

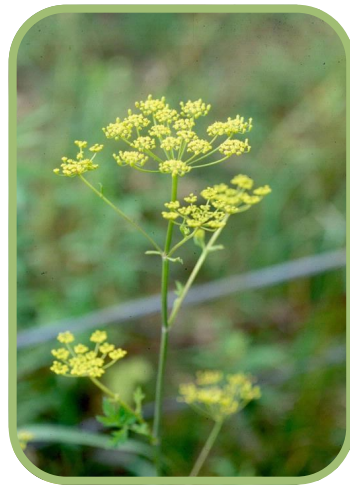
Common carp is not an invasive Asian carp, but were introduced here from Europe in the 1800s. Common carp impact our native fish species by eating aquatic vegetation used for habitat. They also muck up the shoreline which can smother native fish eggs.



Chris Evans, Bugwood.org

Garlic Mustard
(*Alliaria petiolate*)

First year plants have a rosette of dark green foliage. In its second year, white flowers appear on a stalk that is up to 1.2 m tall. In mid-summer narrow seed pods are present. Young plants produce a strong garlic odour when crushed. It can be found under the forest cover in Harbourview Park.



John Cardina, bugwood.org

Wild Parsnip
(*Pastinaca sativa*)

This plant is in the same family as Giant Hogweed, but has yellow coloured flowers and only reaches 1.5 m tall. The dense stands can outcompete native species. Do not touch! It's sap causes severe burns. Wild Parsnip can be seen growing along the Pretty River.



http://www.pestid.msu.edu/weeds-and-plant-identification/japanese-knotweed-polygonum-cuspidatum/

Japanese Knotweed
(*Fallopia japonica*)

This plant is aggressive and has strong root systems. Stems are round, reddish-purple, smooth and have a bamboo-like appearance. Small flowers are greenish-white and ovate leaves. Japanese Knotweed is one of the hardest invasive plants to control. This plant can be seen along the boardwalk at Harbourview Park.



Photo by Amy J. Benson, US Geological Survey

Zebra/Quagga Mussels
(*Dreissena polymorpha & D. bugensis*)

Zebra mussels are black or brown with white or yellow zigzagged patterns. Quagga mussels have dark concentric rings on their shell with a pale color near the hinge. Zebra mussels sit flat, whereas quagga mussels do not. These mussels occur offshore of Georgian Bay.



http://www.creditvalley.ca/wp-content/uploads/2013/05/Round-Goby-Ratray-03.jpg

Round Goby
(*Neogobius melanostomus*)

This invasive fish is established in the Great Lakes and Lake Simcoe. It is 6 to 16 centimetres long with a cylindrical body and a rounded, blunt snout. The most distinguishing feature is the black spot on its dorsal fin. Caution: can be confused with native Sculpins!