

Invasive Species Update

The potential negative impacts of invasive species that have been introduced into Ontario's terrestrial and aquatic environments have already been realized in some regions of the province. In the Temagami area, invasive *Phragmites*, the LDD moth, the spiny waterflea, and other invaders have been identified.

Invasive species have the potential to alter the environment, damage the economy, and cause other detrimental effects. Thus, preventative and mitigation measures (which are enacted quickly) can prove to be extremely important.

Specific challenges in dealing with invasive species include:

Loss of Habitat: Invasive species can move in and overwhelm endemic ecosystems. Invasive plants monopolize land and nutrients, and suppress native vegetation, while invasive animals compete with native species for food and space. High reproductive rates may also enable invasives to devastate some habitats in a relatively short period of time.

Loss of Native Species and Biodiversity: When key food sources and habitats are taken over by invasives, populations of native species can be reduced or eliminated. Invaders may appear in the form of predators, diseases, or parasites that can directly harm, or cause the loss of, native species (and biodiversity) in local areas.

Difficulties in Eradication: Because invasive species are not native to a region, there are typically no natural forms of control, such as predators or disease. It can, therefore, be extremely difficult to halt the proliferation of these invaders.

In October 2021, the Ministry of Northern Development, Mines, Natural Resources and Forestry amended Ontario Regulation 354/16 under the *Invasive Species Act, 2015*. A total of 22 species are now “prohibited” under this Act (i.e., illegal to import, possess, transport, or release anywhere in Ontario), and 11 other species are “restricted” (i.e., illegal to bring into provincial parks or conservation reserves, or import or release in Ontario).

PROHIBITED Invasive Species – Fish (8): Bighead Carp (*Hypophthalmichthys nobilis*); Black Carp (*Mylopharyngodon piceus*); Grass Carp (*Ctenopharyngodon idella*); Silver Carp (*Hypophthalmichthys molitrix*); all species in the Snakehead (*Channidae*) family; Stone Moroko (*Pseudorasbora parva*); Wels Catfish (*Silurus glanis*); and, Zander (*Sander lucioperca*).

PROHIBITED Invasive Species – Aquatic Invertebrates (3): Common Yabby (*Cherax destructor*) – freshwater crayfish; Golden Mussel (*Limnoperna fortunei*); and, Killer Shrimp (*Dikerogammarus villosus*).

PROHIBITED Invasive Species – Plants (5): Brazilian Elodea / Brazilian Waterweed (*Egeria densa*); European Water Chestnut (*Trapa natans*); Hydrilla (*Hydrilla verticillata*); Parrot Feather (*Myriophyllum aquaticum*); and, Water Soldier (*Stratiotes aloides*).

Newly-PROHIBITED Invasive Species (6 – as of January 1, 2022): Marbled Crayfish (*Procambarus virginalis*); Red Swamp Crayfish (*Procambarus clarkii*); New Zealand Mud Snail (*Potamopyrgus antipodarum*); Tench (*Tinca tinca*) – fish; Prussian Carp (*Carassius gibelio*); and, Mountain Pine Beetle (*Dendroctonus ponderosae*).

Exceptions for PROHIBITED Invasive Species:

- Dead and eviscerated (gutted) bighead, black, grass, or silver carp, zander, and/or snakeheads may be imported, transported, bought, or sold in Ontario.
- If you catch a prohibited invasive fish, invertebrate, or plant species while fishing, you must immediately destroy it so that it can't reproduce or grow. Do not release it back into the water.
- Stay away from infested areas when boating in waterbodies where European Water Chestnut or Water Soldier are found. Also, avoid spreading these plants, remove them from your boat, motor, and trailer before travelling over land, and dispose of them properly – so they won't end up back in the water.

RESTRICTED Invasive Species – Plants (4): Black Dog-Strangling Vine / Black Swallowwort

(*Cynanchum louiseae*); Dog-Strangling Vine / Pale Swallowwort (*Cynanchum rossicum*); Japanese Knotweed (*Reynoutria japonica* var. *japonica*); and, Invasive *Phragmites* / European Common Reed (*Phragmites australis* subsp. *Australis*).

Newly-RESTRICTED Invasive Species (7 – as of January 1, 2022): Yellow Floating Heart

(*Nymphoides peltata*) – aquatic plant; European Frogbit (*Hydrocharis morsus-ranae*) – aquatic plant; Carolina Fanwort (*Cabomba caroliniana*) – aquatic plant; Bohemian Knotweed (*Reynoutria x bohemica*) – terrestrial plant; Giant Knotweed (*Reynoutria sachalinensis*) – terrestrial plant; Himalayan Knotweed (*Koenigia polystachya*) – terrestrial plant; and, Wild Pigs (*Sus scrofa*).

Exceptions for RESTRICTED Invasive Species:

Outside a provincial park or conservation reserve, it's not illegal to deposit or release a restricted species if you are trying to manage or control it, or are working on your farm, in your business, or doing maintenance. In addition, a dead specimen of a prohibited or restricted species can be preserved for scientific or educational purposes – using a method other than refrigeration or freezing that prevents it from reproducing.

Watercraft as a Carrier of Invasive Species:

Moving watercraft overland from one waterbody to another may inadvertently spread invasive species. Precautions based on the “Clean, Drain, Dry” practices that have already been promoted for some time across North America are, therefore, required to prevent their proliferation.

As of January 1, 2022, the following actions have been legislated:

- Boaters are now required to take out drain plugs, drain all on-board water, and rid watercraft of any aquatic plants, animals, or algae upon removing such vessels from a waterbody. (“Watercraft” include motorboats, rowboats, canoes, punts, sailboats, or rafts.)

- Prior to reaching a launch site for a body of water, the watercraft, associated equipment, and any vehicle or trailer used to transport the watercraft and equipment must be free of aquatic plants, animals, or algae.

Preventing the Spread of Invasive Species at the Cottage:

- ✓ Garden using only native or non-invasive plant species. The *Grow Me Instead* guide published by FOCA (<https://foca.on.ca/wp-content/uploads/2017/04/Grow-me-instead-N-Ont.pdf>) highlights non-invasive plants that can be grown in Northern Ontario gardens.
- ✓ Empty bait buckets on land. Don't release live bait that was caught in one lake into another waterbody.
- ✓ Use local firewood, as invasive insect eggs, larvae, pupae, and adults can travel inside cut logs. Also, do not move firewood between regions.
- ✓ Inspect and clean your boat and motor (and other items used outdoors) when changing waterbodies. Also, drain water from the motor, live well, bilge, and transom wells on land immediately after leaving a waterbody,
- ✓ Learn to recognize invaders. Your first defence against invasive species is knowing how to identify them. Determine which species may emerge in your area, and develop a plan of action to address a potential incursion.
- ✓ If you find invasive species, suspect that you have them on your property, or want further information, call the "Invading Species Hotline" at **1-800-563-7711**, or visit www.invadingspecies.com.

Sources:

Federation of Ontario Cottagers' Associations (2021)

Invasive Species Centre (2021)

Ministry of Northern Development, Mines, Natural Resources, and Forestry (2022)

Ontario's Invading Species Awareness Program (2022)