

Bad News, Good News: The Cost of Invasive Species

The term “invasive species” is everywhere these days, but what exactly does it mean?

An invasive species can be any plant, animal, insect, fungus or micro-organism that is not native to a given area and causes harm or damage to the environment. Invasive species tend to grow quickly and spread aggressively.

Because invasive species tend to be fast growing and strong, they can outcompete native species for food, space and other resources, often forcing them out of an area entirely. Adding to the problem, invasive species usually don't have many, if any, natural predators. This means they don't have anything to keep their growth in check.

The fast, seemingly unstoppable spread of invasive species not only poses a threat to the natural environment, but to our wallets as well...



The Bad News...

Ontario has more invasive species than any other province or territory in Canada. A report by the Invasive Species Centre (ISC) found that Ontario municipalities and conservation authorities collectively spend approximately **\$50.8 million per year** on invasive species prevention, detection and control (ISC 2019)! Yes, I said million.

The most expensive invasive species to deal with by far is the Emerald Ash Borer, an invasive beetle that costs the municipalities of Ontario over **\$22 million per year** (ISC 2019). The beetles tunnel into and live inside most species of ash tree.



This tunneling disrupts nutrient transport throughout the tree, and often results in tree death.

Invasive Zebra and Quagga Mussels are also quite pricey for municipalities, collectively costing over \$8 million per year (ISC 2019).

Zebra and Quagga Mussels are fresh water species that can quickly grow to block water intake and outflow channels of various industry operations. They are also big eaters, filter feeding to the point where they actually clarify water. This allows more sunlight to penetrate through the water, resulting in the explosive growth of harmful algae, which can starve a water body of oxygen.



Invasive Phragmites, also known as European Common Reed, is another thorn in the side of Ontario municipalities, costing nearly \$3 million per year (ISC 2019). Invasive phragmites is a large grass most commonly found growing on wetland shorelines and in road side ditches. The plant dominates in its environment, outcompeting most all native plants and making the habitat unsuitable for most animal species. Invasive phragmites can also endanger drivers as it can grow to be 4 meters tall, blocking site lines along roadways.

For a list of all of the major invasive species in Ontario, and their respective costs to municipalities and conservation authorities, click [here](#).

If you're thinking, wow, that's a lot of cash, but there's no way *my* municipality is paying that kind of money (from my tax dollars) to deal with invasive species, think again. The average annual cost of invasive species per Ontario municipality is **\$218,148** (ISC 2019). To get more regionally specific, individual municipalities in The Land Between spend between **\$132,424 and \$527,573 per year** on invasive species, among the highest amount spent per municipality across the province.

The Good News!



The good news is; it doesn't have to be this way! Studies have shown that investing in spread prevention is **100 times more economically effective** than spending on long term management and control after an invasive species has already become established in an area (ISC 2019). That is, tax payer dollars and the overall effort to address the issue of invasive species can go a lot further by focusing on and investing in the prevention and limitation of the spread of invasive species.

Even better news, preventing the spread of invasives is one of the easiest ways YOU can help! Here are some super easy things you can do:

1. Burn fire wood were you buy it. Transporting fire wood can spread invasive insects like the Emerald Ash Borer to new areas.
2. Make sure you wash and brush off your cloths, boots, gear and pets after you go for a walk, hike or bike ride in the woods. This can help limit the spread of invasive plants and their seeds.
3. Properly clean and drain your boat when moving it from one water body to another. This means draining the water from the boat on dry, flat land and rinsing it with hot (greater than 40 °C) water, or drying the drained boat in the sun for at least five days. This can help limit the spread of invasive aquatic species such as Zebra Mussels and Eurasian Water-Milfoil.
4. Buy native plants. Planting non-native or invasive plants in your garden is risky business, as it is too easy for the seeds of the plant to spread outside of your garden, and into the wild. Not to mention how difficult the plants will be to get out of your garden if you decide you don't like them after a while. Click [here](#) for a list of North American greenhouses selling exclusively native plants, including 22 across Ontario.
5. With the help of EDDMapS Ontario, learn how to identify and report sightings of invasive species in Ontario.

If you'd like to take your fight against invasive species one step further, consider joining one of The Land Between's **Phragmites Surveying and Removal Teams**. Here you can help identify areas of Phragmites in the spring and help remove it in the summer!

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Phrag Fighters can register to survey for invasive Phragmites in the early spring, as well as register to remove invasive Phragmites over the summer months. Surveying Phragmites involves driving designated routes on county roads and recording locations where the plant is growing. The removal of Phragmites is accomplished with a small dedicated team to spade stems and transport them to designated locations for disposal. Volunteer for one or both roles!

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Sources:

- <https://www.invasivespeciescentre.ca/Portals/0/Documents/Economic%20Report/Economic%20Impacts%20FINAL.pdf?ver=2019-10-09-171313-273>
- https://www.invasivespeciescentre.ca/learn/invasive-plant-species?gclid=CjwKCAiAp5nyBRABEiwApTwjXp6yNuVuZnEVtBzsKJ_AdA8C12hFWHcMiEbEzqVHVFnpRvxqCzOFThoC_CQQAvD_BwE
- <https://www.opwg.ca/wp-content/uploads/2017/12/Summer-2017-Phrag-Research-Report-Humber.compressed.pdf>
- https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=1445
- <http://www.invadingspecies.com/zebra-quagga-mussels/>