GEORGIAN BAY FOREVER

Protecting your water.

Got Phragmites? We can help!

Wow! You realise you have non-native Phragmites, evil of all evils, on your property. Now what?

You've just finished learning how much of a problem this reed has been for residents of Lake Erie, and that it is moving northwards into our backyards. You think, "if people down there are spending millions of dollars to fight it, what can I really do to stop this thing?"

Figure 1: Phragmites in the Fall with large dried seed heads

For those who haven't heard, *Phragmites australis subsp. australis* (European Common Reed) is an invasive plant which is starting to enter the unique ecosystem of Georgian Bay and the 30,000 islands. The reed grows in a thick stand that excludes native plants and animals, reducing biodiversity and usable habitat. Frequently, animals that do find their way into a stand end up unable to escape. This includes deer, birds, and at risk species. Its presence encourages lower water levels, and increases the risk of fires due to the build up of previous seasons' stalks. It blocks our access to the water, obstructs the beautiful views of our Bay, decreases property values, and has a negative impact on tourism.

Figure 2: Non-native Phragmites, Amanda Island, Sans Souci, August 2014

This is essentially everything we don't want to be hearing. But Hurray! There is good news. There are teams already working on this problem, and we have the advantage of having the knowledge of seasoned Phrag fighters.

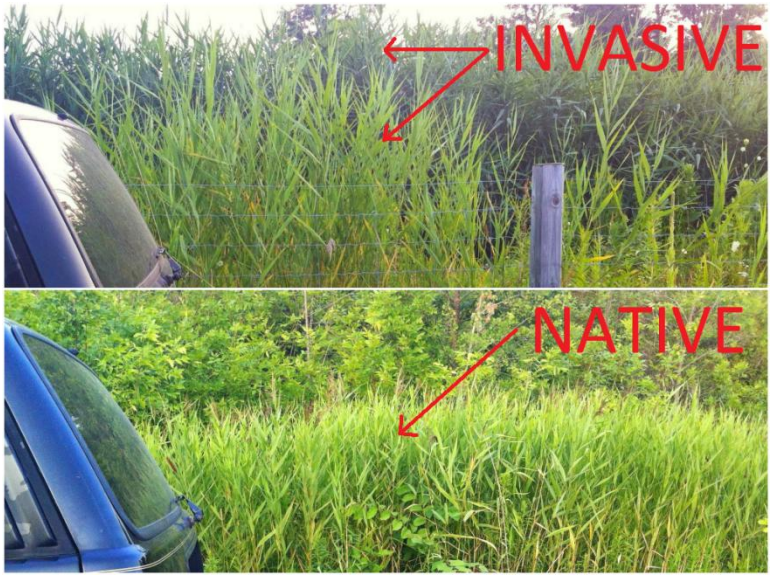

Figure 3: Non-native Phragmites grows taller and more densely than native Phragmites

The first step to take is to confirm that your Phragmites is not the native subspecies. This can be done with one of the many identification guides online (we like the one from the Michigan Natural Features Inventory: mnfi.anr.msu.edu/phragmites/native-or-not.cfm), or you can contact one of the local organizations with a Phragmites program. The second step is to get involved. Georgian Bay Forever is conducting volunteer events during the summers as part of our multi-year effort to strategically manage the invasion around Georgian Bay. We would be happy to come out to survey your property and lead a team of volunteers in stopping the invasion!

Figure 4: Non-native Phragmites has green/tan stalk bottoms compared with the reddish native ones, and grows much taller than the native reed. Non-native Phragmites leaves are wider and longer than the native leaves..

Figure 5:Non-native Phragmites has larger more dense seed heads. There are hairs at the ligule (where the leaf attaches to the stem) in the non-native Phragmites, and little to no hairs in the native one.

There are various techniques employed by teams working against Phrag. GBF's is a coastal focus, from Penetanguishene to Pointe au Baril, and we are excluding the use of any herbicide in our program. Because of the very successful structure of Phragmites, you are much more likely to be successful in eradication if your plan combines several methods. Management techniques include digging, flooding, grazing, tarping, herbicides, mowing, compression/rolling, and prescribed burning. Due to the environmentally sensitive and sometimes remote location of stands in our scope, our program includes cutting and burning over 3-4 years until the energy in the root system has been depleted and the plant dies. The ideal time for cutting is July/August after the energy of the plant has been put into the

aboveground biomass, and before the seeds have set into huge plumes. The ideal time to burn is in the Fall to minimize the impact to other wildlife in the area.

Figure 6: A team of volunteers cutting Phragmites with GBF in Honey Harbour, August 2014

Here's what you can expect if you are attending or hosting a #PhragVolunteer Event:

The day of the event, we will meet up, recap the day's plan and distribute light snacks, water, and sunscreen to those who need them. We will then travel out to one or more stands of Phragmites in the area and cut them with battery-operated brush saws and/or manual knives and shovels, depending on the size and location of the stand. The level of physical activity will be moderate; the hardest part will be holding the saw. We'll be bagging it on site to be safely disposed of. This plant can grow from small root fragments and seeds attached to our equipment, shoes, and tire treads, so before we leave, we'll be cleaning up a bit. It is recommended that you wear long pants, a long-sleeved shirt, water shoes, a hat, and work gloves. Since it is not toxic, dust masks are not necessary. Tools will be provided. It is also a good idea to bring water and a lunch as the event may span the bulk of the day.

Figure 7: Volunteers and the first boatload of cut stalks in Honey Harbour, August 2014

If tackling a stand on your own, here are a few quick tips for dealing with Phragmites: If any seed heads are present, clip them off and bag them. For stands in soft sediment or sand, cut the stalks just below the sediment surface and avoid disturbing the rhizomes as this can stimulate more growth. For stands in firm sediment, cut the stalks as close to the ground as possible. To dispose of stalks, leave them in piles to dry, then burn them.

Georgian Bay Forever (GBF) was founded in 1995 to preserve, enhance and protect the aquatic ecosystems of Georgian Bay through scientific research and education. We often work collaboratively with agencies and other NGOs in both Canada and the United States to undertake projects important to achieving our mission to protect Georgian Bay. Our Phragmites funding partner is the *Lake Simcoe South Eastern Georgian Bay Clean Up Fund, an Environment Canada initiative.* This is the first season of our Phragmites program and we look forward to working with you in the conservation of our beautiful Bay.

To contact Georgian Bay Forever about a Phragmites problem in your area, email us at georgianbaykeeper@georgianbayforever.com, phone at 905-880-4945 x1 or find us on Facebook at facebook.com/pages/Georgian-Bay-Forever