European Common Reed
*Phragmites australis* (subsp. *australis*)

**Invasive Grass Threatening Collingwood’s Shoreline!**

**Description**

European Common Reed, often referred to as *Phragmites* (pronounced frag-my-tees), is a tall, non-native perennial grass that has been spreading in Southern Ontario for decades. It grows up to 5 m in height and has large leaves which are beige to blue-green in colour. It has extremely dense seed heads that are spread by the wind. The grass also spreads outwards from existing stands by its persistent root and rhizome structure.

The native subspecies (*Phragmites australis* subsp. *americanus*) is not invasive, and is separated from its non-native counterpart by its sparse stand growth and smaller overall size. It also has reddish-brown stems with less-broad, yellow-green coloured leaves.

**Phragmites along Collingwood’s Shoreline**

*Phragmites* can aggressively spread over wetlands and shorelines and crowd cut native vegetation. Dense stands of *Phragmites* provide poor habitat for wildlife species due to decreased availability of food and nesting sites. This may affect Species at Risk that currently occupy Collingwood’s coastal marshes. *Phragmites*’ prolific nature can disrupt views of and access to the shoreline by residents and visitors. It can also negatively impact recreational activities such as boating, angling and swimming.

Dense stands of *Phragmites* are encroaching on the globally rare coastal marshes that occur along Collingwood’s shoreline. These coastal marshes are endemic to Great Lake’s shorelines (found nowhere else in the world), and contain extremely sensitive habitats. The low nutrient regime associated with Collingwood’s coastal marshes may limit the initial distribution and growth of *Phragmites*. However, this does not mean that *Phragmites* will not spread over time.

**Did you know...**

- *Phragmites* can have a vertical stem growth of 4 cm per day and have a density of 200 stems per m².
- One seed head can produce up to 2,000 seeds per year.
- *Phragmites* can reestablish from a single fragment or seed! Clippings and roots should be dried and burned, never composted.
- *Phragmites* is a large water-suck! It transpires water much faster than native vegetation.
- Invasive *Phragmites* releases toxins from its roots that impedes the growth of and/or kills other plant species.
- There are no herbicides currently approved for over or near-water use.
Control methods

- Projects attempting to control invasive *Phragmites* should have a clear plan and reflect OMNR's best management practices in order to maximize success and prevent further spread.

- Management options include: mechanical excavation, flooding, herbicide application (terrestrial only) and prescribed burning.

- Continued monitoring and control is required over several years for successful control.

A pilot project at Lighthouse Point Condominiums, spearheaded by Georgian Bay Forever and the condo association, took place in 2014. After the *Phragmites* was removed, residents noticed birds, wildlife and native vegetation returning to the area. Through continued monitoring and control, it is anticipated that habitat diversity, shoreline views and lake

What can you do?

- Be aware! Plant native species rather than the invasive species in your garden or yard.


- Become a citizen volunteer and participate in projects that aim to monitor and control this invasive plant species.

Due to the widespread distribution of *Phragmites* in Ontario, and specifically along Collingwood’s shoreline, the mapping, removal, and monitoring of this species is an extremely large project to undertake. Thus, the Nottawasaga Valley Conservation Authority, Georgian Bay Forever, the Blue Mountain Watershed Trust Foundation and the Town of Collingwood have formed a coalition with local condo associations to combat the spread of invasive *Phragmites* along the west Collingwood shoreline.

For more information about how you can get involved in the fight against *Phragmites* along Collingwood’s shoreline, please contact Brittany Hope at bhope@nvca.on.ca or Kim Woodhouse at kim.woodhouse@georgianbayforever.org. For more information on invasive species visit [http://www.nvca.on.ca/](http://www.nvca.on.ca/) or [http://www.georgianbayforever.org/](http://www.georgianbayforever.org/).
The Unique Nature of Collingwood’s Great Lakes Coastal Marshes

What is a Great Lakes Coastal Marsh?

Coastal marshes on the Great Lakes are transition zones between terrestrial and aquatic ecosystems. Endemic to the Great Lakes (found nowhere else in the world), they are characterized by shallowly sloping limestone shorelines, and they are highly dependent on variable water levels—daily, seasonally and long term—to maintain their form and function. The extent of the marshes expands and contracts with long-term water level cycles.

The Town of Collingwood hosts globally rare Great Lakes marsh communities along its shoreline. These marshes are part of the larger provincially significant Silver Creek Wetland Complex which extends inland and includes forested swamps along former lake shorelines. Collingwood’s coastal marshes are home to a diverse array of flora and fauna including Species at Risk and provincially rare species. They provide suitable spawning, nursery and feeding areas for many fish. They are also used by migratory waterfowl for staging, nesting and feeding.

What is threatening the Coastal Marshes?

Human influences are the primary threat to our coastal wetlands. Incompatible development along southern Georgian Bay has resulted in degradation and fragmentation of coastal ecosystems.

Construction of shoreline protection and nearshore dredging removes coastal marsh habitat and degrades the connections between the lake, wetlands and terrestrial features. Sediment plumes from dredging can affect coastal marshes and their functions.

Sediments and excess fertilizers can enter the coastal marshes through rivers, streams and stormwater discharge. These sediments can cause high levels of turbidity (water cloudiness) that impact marsh features and functions. Excess fertilizers, or nutrients can cause noxious algae blooms.

In recent years, an invasive grass species, *Phragmites australis*, has colonized Collingwood’s coastal marshes. This species has impacted marsh biodiversity as well as human views and uses along the shoreline.
Did you know...

- Collingwood’s coastal marshes are considered globally rare.
- Groynes (rocky structures that extend into the water) that extend 150-300 meters into the water are particularly disruptive to water flow and sediment transport.
- The east shore of Collingwood has more than 30 groynes per kilometre.
- Portions of Collingwood’s shoreline have more than 10 dredged areas/kilometer.
- More than 2/3 of all fish species in Georgian Bay reproduce in coastal wetlands.
- The invasive grass, *Phragmites australis*, can out-compete native species and can change the ecology and hydrology of the wetlands.
- Nottawasaga (Lighthouse) Island is an Important Bird Area that supports one of Canada’s few Great Egret colonies and provides nesting habitat for large numbers of colonial bird species.

Check out Collingwood’s Coastal Marshes for Yourself!

The public is welcome to visit the coastal marshes on public lands for walking, bird-watching and other passive recreational activities. The coastal marshes can be viewed from trails maintained by the Town of Collingwood including the Hen and Chickens Trail and Boardwalk Trail (Harbourview Park). For more information, visit their website at: http://www.collingwood.ca/trails. Please remember that Collingwood’s coastal marshes contain rare vegetation, wildlife species and fragile habitats. Visitors are encouraged to keep to the trail, take only pictures and leave no trace of your presence in this rare coastal habitat.

Be Informed and Get Involved

Learn about water quality and habitat issues that affect the community in which you live and work. Visit or contact organizations involved with wetland protection. Become a citizen volunteer to participate in programs that help protect and restore coastal marshes.

If you are interested in participating in activities that contribute to the enhancement of the coastal marshes, contact Brittany Hope at bhope@nvca.on.ca. For more information on invasive species visit http://www.nvca.on.ca or http://www.georgianbayforever.org.
FIGHT THE PHRAG!

**Phragmites is an invasive plant threatening recreation and wildlife habitat along the Collingwood shoreline.**

Join us August 8 as we tackle this shoreline invader!

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m. - 11:00 a.m.</td>
<td>Phragmites Cutting Work Party 1</td>
</tr>
<tr>
<td>11:30 a.m. - 1:30 p.m.</td>
<td>Free Volunteer Appreciation Lunch - If your stepping up to 'Fight the Phrag' in any way, please join us as we celebrate our success to date! Lunch at the Collingwood Rod &amp; Gun Club, 12 Gun Club Rd.</td>
</tr>
<tr>
<td>2:00 p.m. - 5:00 p.m.</td>
<td>Phragmites Cutting Work Party 2</td>
</tr>
</tbody>
</table>

Volunteering for a work party? Please bring your own work gloves and hand pruners if possible. Don’t forget your waterbottle, sunscreen and hat!

To register for any of these events contact: