

PHRAGMITES IN THE GREAT LAKES AND ST. LAWRENCE RIVER

A Cities Initiative Fact Sheet



WHAT IS PHRAGMITES AUSTRALIS?

Phragmites australis (common name: common reed) is a fast growing perennial grass. Though it is native to North America an aggressive genotype is thought to have been introduced from Europe in the late 1800s; this is the genotype that continues to expand its range and invade wetland ecosystems.

WHERE IS PHRAGMITES FOUND?

Though found most often in and around wetlands, it is not unusual to find phragmites growing along roads, on dry dredge spoils, and in other disturbed sites. Invasive phragmites is now found in every Great Lakes state as well as the provinces of Ontario and Quebec. In the Great Lakes region the distribution of invasive phragmites is largely coastal, with inland infestations common in some states.





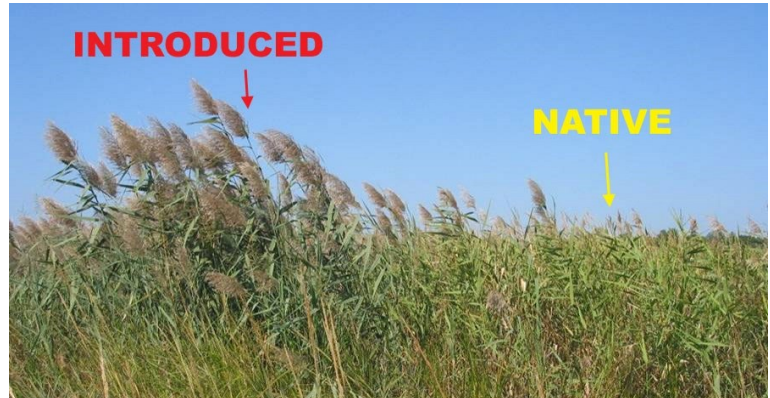
Characteristic	Native	Invasive
Stem color	 Stem nodes are shiny and reddish-purple	 Stem nodes are tan-green, dull and rigid
Leaf color	 Lighter, yellow-green	 Dark blue-green
Rhizome	Yellow	White to light yellow
Growth habit	Co-occurs with other plants	Tend towards mature, dense, monotypic stands
Other	Leaf sheaths fall off during the winter, leaving bare stems standing in the spring	Leaf sheaths do not fall off, litter from the previous year has remnant leaves.

Illustration of the differences between native and invasive phragmites. (A)



Appearance of native and invasive phragmites. (B)

WHY IS PHRAGMITES A PROBLEM IN THE GREAT LAKES?

- Phragmites* tends to become the dominant species in a variety of habitats, due to its dense growth both above and below ground and its ability to release toxins from its roots into the soil to hinder the growth of and kill surrounding plants.
- As native wetland and coastal species are replaced by phragmites, biodiversity is reduced and critical habitat for wildlife is lost. Similarly, wetland processes may be disrupted.
- Economic impacts of invasive phragmites infestations include reductions in property values and revenue loss from impacted recreational activities due to impeded access to coastal areas and restricted views.
- Public safety is also an issue, as large stands of phragmites near residential development represent a fire hazard.

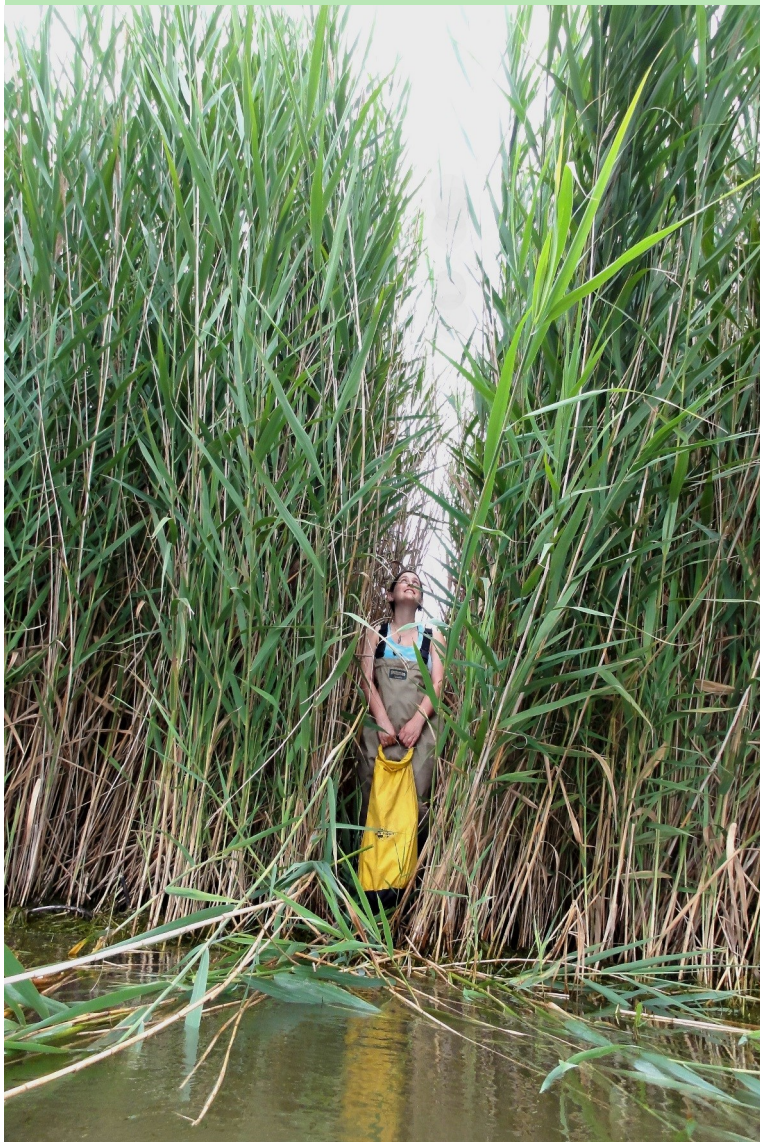
WHAT ARE MUNICIPALITIES DOING ABOUT PHRAGMITES NOW?

Phragmites management through an integrated approach is the strategy that has had the most success in controlling phragmites in the long term. Integrated management involves the use of multiple techniques over multiple years. These techniques include:

- Prevention: preventative measures include cleaning equipment before moving it to prevent transportation via equipment, avoiding purposely planting or composting invasive phragmites, and promoting public education and awareness.

- Early Detection Rapid Response: this is the best initial option. Once established, phragmites are much harder to control and require much greater investment of resources.
- Mapping: helps to establish which areas to prioritize for treatment.
- Control/Management: options include the use of herbicide, cutting and crushing by mechanical means, prescribed fire and flooding.
- Monitoring: helps to gauge progress and evaluate the success of management actions over time.
- Long-term Commitment: maintaining the site is a very important step. Once you start removal, it is important to go back annually and use different treatment methods over time.

There are currently numerous projects focusing on research, mapping and management of invasive phragmites happening all around the Great Lakes region in Canada and the US.



Invasive phragmites can reach impressive heights. (C)

FUNDING OPPORTUNITIES FOR PHRAGMITES-RELATED PROJECTS

Canada

[*Great Lakes Guardian Community Fund*](#)

[*Green Source Funding Database*](#)

[*Environment Canada/Canadian Government*](#)

United States

[*US Fish and Wildlife Service*](#)

[*US Environmental Protection Agency, Great Lakes Restoration Initiative*](#)

[*Sea Grant*](#)

Bi-national

[*Great Lakes Protection Fund*](#)

[*Sustain Our Great Lakes*](#)

IMAGES

- [Great Lakes Phragmites Collaborative](#)
- [National Park Service](#)
- [Newswise](#)
- [Beaver Island Association](#)



Chemical treatment of phragmites. (D)

FOR MORE INFORMATION

A Great Lakes Phragmites Collaborative was formed with the goal of establishing a region wide effort aimed at addressing invasive phragmites, linking people, information and action. The Collaborative has developed a series of webinars aimed at exploring specific topics related to phragmites more deeply, with examples of current research and management projects. The webinar recordings, as well additional information, are available on the Great Lakes Phragmites Collaborative website: <http://greatlakesphragmites.net/>

ABOUT US

The Great Lakes and St. Lawrence Cities Initiative (www.glsclcities.org) is a binational coalition of over 100 Mayors that works actively to advance the protection, restoration and promotion of the Great Lakes and St. Lawrence River basin.