



QUILLS

Queen's University Indigenous
Land-Based Learning STEM

WHAT TO KNOW ABOUT INVASIVE PHRAGMITES

Click on the images below to learn more about the invasive phragmites plant.

PHOTO CREDITS



1

WHAT ARE PHRAGMITES?



2

WHY ARE THEY INVASIVE?



3

WHAT IS THEIR IMPACT?



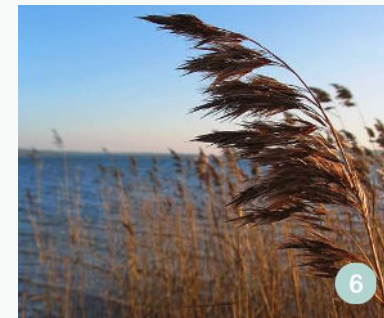
4

HOW TO IDENTIFY



5

HOW TO MANAGE



6

RESOURCES



What are Phragmites?

Phragmites is a species of plant. However, there is an invasive kind that is causing great damage to wetlands, beaches, and biodiversity in Ontario and other places.

It is a perennial grass that is originally from Europe and Asia, although it is unclear how it arrived here.

[BACK](#) ◀

Why are they invasive?



There are native phragmites, which are called Common Reed, and then there are invasive phragmites called European Common Reed. The invasive species has certain characteristics that classify it as invasive, which include:

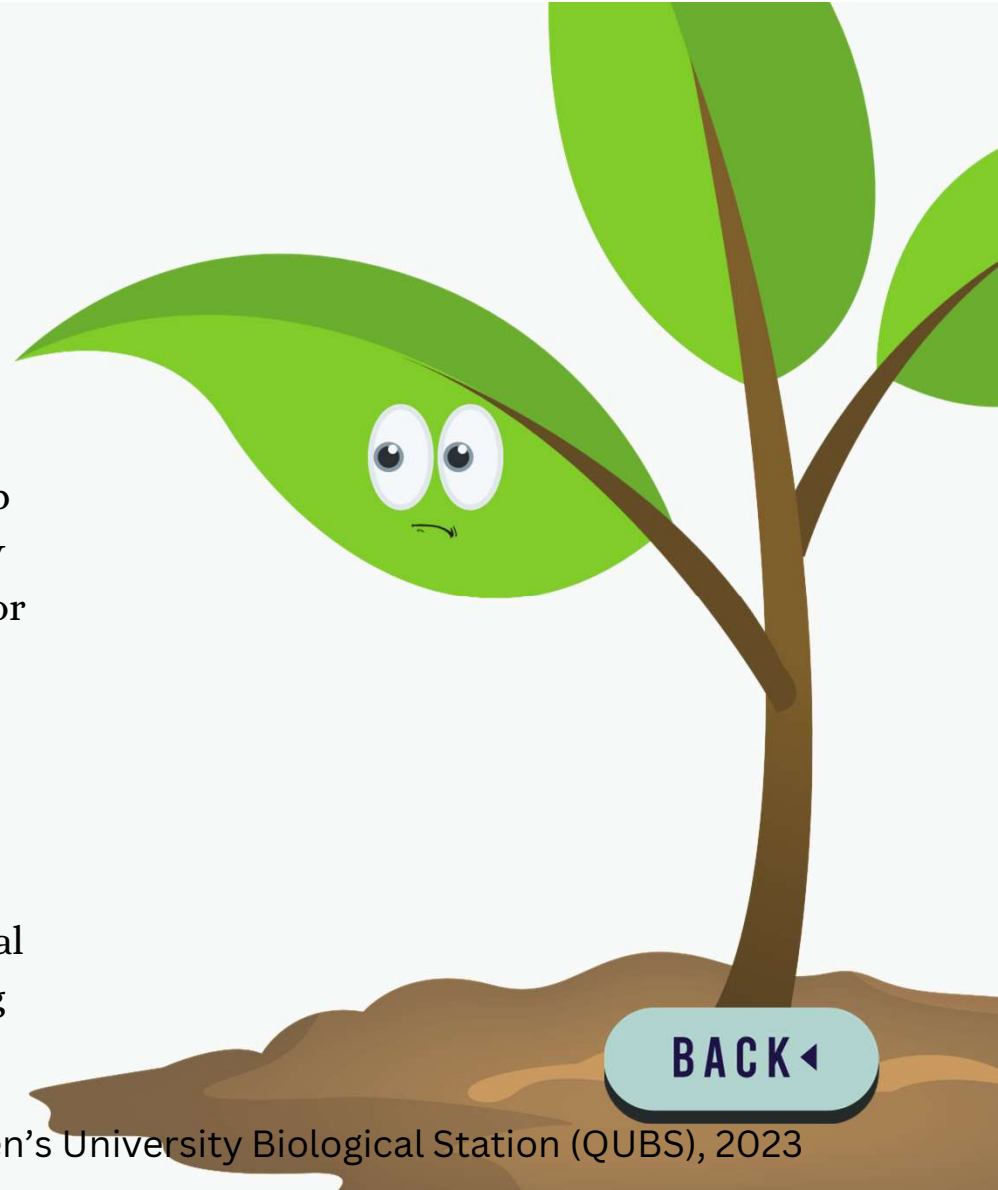
- The ability to spread quickly
- The ability to out-compete neighbouring native species for water and nutrients
- The ability to release toxins from the roots in to the soil which hinders the growth of neighbouring native species
- The ability to grow extremely long roots which allows it to survive in drier areas (can search farther for water)

[BACK](#) ◀

What is their impact?

Invasive phragmites pose a dangerous threat to the balance of ecosystems, as their impacts have been seen in many different areas. The impacts include:

- Crowding out native species in an area (taking up too much space), which decreases plant diversity
- Providing inadequate habitat and food sources for surrounding plants and animals
- Depleting overall water levels because it grows quickly and requires a lot of water
- Increasing fire hazards because of a high percentage of dead biomass
- Affecting agriculture, road safety and recreational activities such as boating, swimming and angling





How are they Identified?

BACK ◀

Invasive Characteristics	Native Characteristics
Grow in very dense patches	Less dense
Can grow to 6 m or higher	Can grow to 2 m
Stems are tan or beige, with blue-green leaves	Stems are reddish brown with yellow-green leaves
Compact and longer seed heads	Open and smaller seed heads

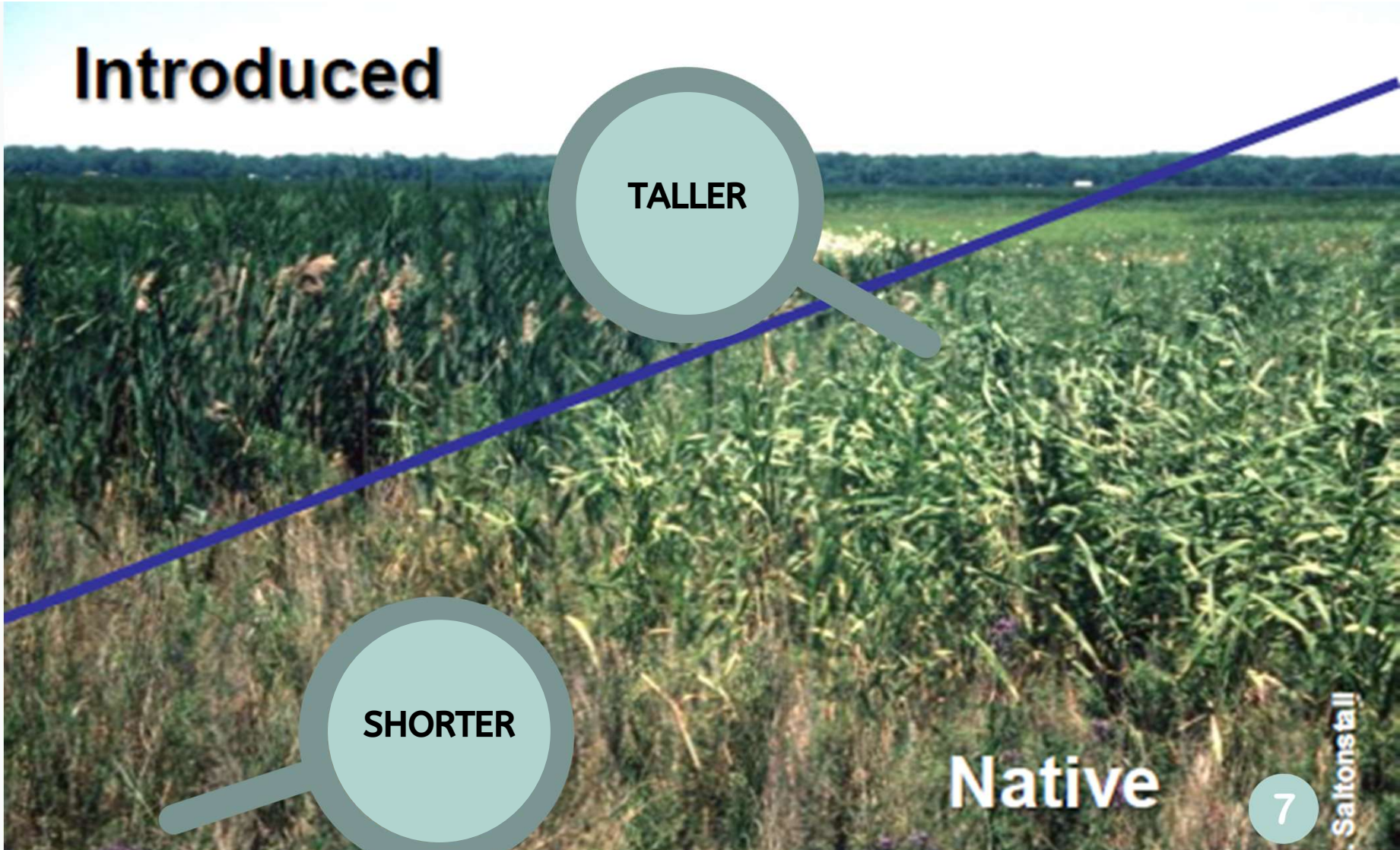
[Image](#)

[Image](#)

[Image](#)



Introduced



TALLER

SHORTER

Native

7

Saltontall



Invasive

Native

**DIFFERENT
STEM & LEAF
COLOUR**



**OPEN &
SMALLER SEED
HEADS**

**COMPACT &
LONGER SEED
HEADS**

Native

Invasive

How are they Managed?

We can all contribute to the management of phragmites by:

- Knowing how to properly identify them
- Avoiding accidentally spreading its seeds by cleaning off shoes, clothing, pets and vehicles
- Avoiding buying and/or composting them
- Being knowledgeable about our local municipality's rules and protocols about invasive species

BACK ◀



10



Resources on Phragmites

The information provided in this presentation is from the first two following websites. Please check out these resource to learn more!

- [Invading Species Awareness Program](#)
- [The Conneticiut Agricultural Experiment Station](#)
- [Ontario Invasive Plant Council](#)

Photo Credits

Image 1: <https://www.ontarioinvasiveplants.ca/invasive-plants/species/phragmites/>

Image 2: <https://www.greatlakesphragmites.net/blog/freshwater-wetlands-fertile-grounds-for-the-invasive-phragmites-australis-in-a-climate-change-context/>

Image 3: <https://www.torontogardens.com/2014/11/stop-spread-of-invasive-phragmites.html/>

Image 4: <https://www.greatlakesphragmites.net/blog/native-vs-invasive-phragmites/>

Image 5: <https://www.greatlakesphragmites.net/management/techniques/>

Image 6: <https://www.invasivespeciescentre.ca/invasive-species/meet-the-species/invasive-aquatic-plants/phragmites/>

Image 7: https://nas.er.usgs.gov/queries/greatlakes/FactSheet.aspx?Species_ID=2937

Image 8: <https://www.natureconservancy.ca/en/where-we-work/ontario/our-work/stewardship/fighting-phragmites.html>

Image 9: <http://www.lakeclear.org/terrestrial-invasive-plants.html>

Image 10: <https://www.greatlakesphragmites.net/blog/managing-phragmites-australis-on-corps-of-engineers-ecosystem-restoration-projects/>