



Introduction

Invasive common reed (*Phragmites australis* ssp *australis*) is a non-native, highly aggressive, perennial wetland grass that rapidly outcompetes its native relatives (*Phragmites australis* ssp *americanus*), and other vegetation. It is a native of Europe and was introduced to the United States in the early 19th century.

Impacts

Non-native *Phragmites* is a serious threat to native biodiversity. It replaces native plant species, reduces fish and wildlife populations and creates ideal breeding grounds for mosquitoes.

Dense, monotypic stands degrade wetlands and coastal areas; reduce recreational value of water bodies for swimming, fishing, and hunting; and increase the risk and intensity of wildfire.

Propagation and Spread

Invasive *Phragmites* can reproduce sexually via seed and asexually via stolons, and rhizomes that are spread by wind, water, and human and animal activities.



Seed

Rhizome

Stolon

Stolon: A thin, horizontal above-ground structure that bears root at the nodes. Stolons can grow several feet a year and new plants can spring from every node.

Rhizome: An underground horizontal stem capable of regenerating new plants. Rhizomes create thick underground mats and can grow more than 30 feet a year.

Native versus Non-native

Native and non-native *Phragmites* can be distinguished by several characteristics

Stand Density



Plant Color



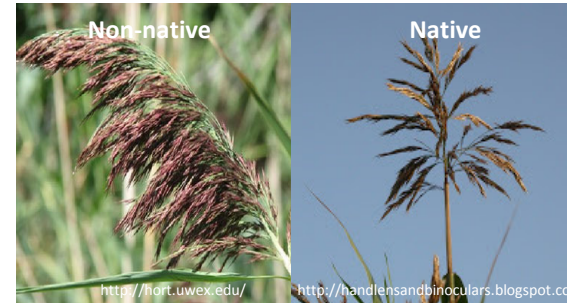
Leaf Collar and Ligule



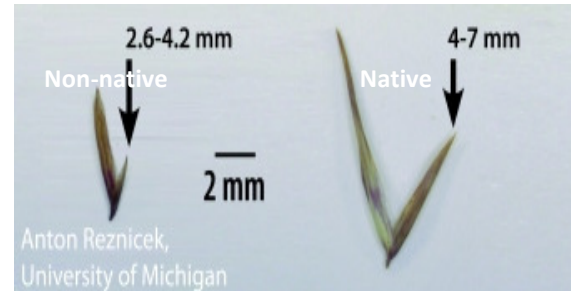
Stem Color



Inflorescence



Glume





Phragmites Management

Invasive *Phragmites* can be controlled by:

Cultural Methods

Mowing*, Cutting, Prescribed Fire etc.,
(effective only following an herbicide treatment)

*No pre-herbicide mowing should be done between March 1 and July 15 to avoid impacts to nesting birds and animals.

Chemical Methods

Glyphosate, Imazapyr, or their combination

Integrated Management Approach

- 1) Apply herbicide in midsummer (mid May through June) or late summer (mid-July through August) and wait at least 2 weeks to allow the herbicide to work.
- 2) Conduct the prescribed fire or mowing next year in late summer or fall until prior to spring green-up.
- 3) Check site the following growing season for *Phragmites* regrowth and spot treat with herbicide if needed.

Once a control level of 85% or greater is achieved, it is recommended to implement an annual monitoring and maintenance program. The Integrated approach will control *Phragmites* for 1-2 years without additional action. However, *Phragmites* usually begins to reinvade 3 years after treatment if follow-up management is not implemented

Information Sources

1) Distinguishing Native and Exotic Forms of Common Reed (*Phragmites australis*) in the United States

<http://www.nps.gov/plants/alien/fact/pdf/phau1-powerpoint.pdf>

2) *Phragmites*: Native or Not.

<http://mnfi.anr.msu.edu/phragmites/native-or-not.cfm>

3) Morphological Differences Between Native and Introduced Genotypes

<http://www.invasiveplants.net/phragmites/phrag/morph.htm>

4) A Landowner's Guide to *Phragmites* Control

https://www.michigan.gov/documents/deq/deq-ogl-Guide-Phragmites_204659_7.pdf

5) A Guide to the Control and Management of Invasive *Phragmites*

http://www.michigan.gov/documents/deq/deq-ogl-ais-guide-PhragBook-Email_212418_7.pdf

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Phragmites- Distinguishing the Native from the Non-native



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