

Phragmites: The Marching Wall



- With few natural predators or diseases in North America, invasive Phragmites is expanding across the landscape virtually unchecked.
- Colonies spread locally via the horizontal root system. Root fragments and seeds start new colonies when spread by mowers, dredging, and construction. The dense seed heads produce thousands of seeds, with viability varying greatly from plant to plant and year to year.

(Photo of Lake Lansing North Park phragmites near the entrance road, courtesy of Nick Sanchez)

What *is* this plant?

Phragmites australis (pronounced *frag-my'-tees*) is an invasive reed grass introduced to the east coast of the U.S. in the late 1700's. It is spreading westward through central Michigan, consuming shorelines and wetlands along the way.

(Photo of Lake Lansing Park North phragmites infestation, courtesy of Laurie Kaufman)



The Southern Wet Meadow Ecosystem



Great Blue Heron
courtesy Laurie Kaufman



Muskrat
courtesy Laurie Kaufman



Marsh Wren
courtesy Jack Bartholmai

Phragmites monocultures displace our native Southern wet meadow, a plant community tolerant of seasonal changes in water levels, with species such as tussock sedge, lake sedge, bluejoint grass, fringed brome, swamp milkweed, swamp aster, Joe-Pye weed, mountain mint, marsh fern, sensitive fern, and common arrowhead. Wet meadows provide home and nesting grounds for animals such as the marsh wren (Michigan special-concern species), muskrat, and sandhill crane.

Background photo courtesy of http://www.earthtonesnatives.com/plant_photos/1231_photo.jpg

Marsh wren photo courtesy of <http://web4.msue.msu.edu/mnfi/>

Phragmites:

A Threat to Wetlands and Lake Shores



Photo courtesy of http://www.mlive.com/grand-haven/index.ssf/2011/03/invasive_giant_reed_grass_topi.html

In just a few years, Phragmites can devour a wetland or lake shore. The 10-15' high reeds grow up to 20 stems per square foot, allowing few other plants to coexist. 80% of Phragmites' biomass is underground. This growing root mass tends to elevate the surface and fill in wetlands.

- Once established, it is unsightly and difficult to eradicate.
- Phragmites clogs drainage ditches, increasing the risk of flooding, and poses a threat to road visibility, especially on winding roads such as Lake Drive.
- It also limits lake access and blocks scenic views.



Photo: <http://stewartfarm.org/phragmites/photos/BlockedHouse.jpg>



Invasive Phragmites



Native Phragmites



Lake Lansing Park North has native as well as invasive Phragmites. How can we tell them apart?

Invasive

- Density: Dense monoculture, forming a wall
- Stem Characteristics: Tan with dead stems present.
- Height: Average 10-15ft
- Head: Large and dense
- Leaf Color: Blue/gray-green

Native

- Density: Colony less dense, often interspersed with other species
- Stem Characteristics: Green with reddish bands
- Height: Average 6.5ft
- Head: Thin and feathery
- Leaf Color: Yellow-green

Information courtesy of <http://web4.msue.msu.edu/mnfi/phragmites/phragmites-native-non-native.pdf>

Center photo courtesy of <http://www.dnrec.delaware.gov/fw/dplap/services/PublishingImages/native%20vs.%20invasive%20phragmites.jpg>

Left and right photos of Phragmites stems, courtesy of Nick Sanchez

Wetland Restoration: The Lake Lansing Watershed

Since 2009, Ingham County Parks, the Mid-Michigan Stewardship Initiative of the Stewardship Network, the Lake Lansing Watershed Special Assessment District Advisory Committee, and a group of dedicated local volunteers have worked together to control invasive Phragmites in the Lake Lansing watershed. We aim to restore these sites to their native wet meadow and emergent marsh vegetation and engage private landowners in Phragmites control on their own properties using DEQ-approved methods that are safe for our water and wildlife.

(Photo: emergent marsh near Lake Lansing, courtesy Leslie Kuhn).



Information sources:

<http://www.phragmites.org>

<http://web4.msue.msu.edu/mnfi/>

<http://www.lakeleelanau.org/docs/fall2009News.pdf>



The Stewardship Network

Pulling together for nature