



MINNESOTA AQUATIC INVASIVE  
SPECIES RESEARCH CENTER

UNIVERSITY OF MINNESOTA

Driven to Discover®

INVASIVE

# PHRAGMITES

## KEY THREATS

- Creates dense, impenetrable stands up to 18' tall
- Outcompetes and reduces native plant diversity
- Reduces habitat quality for fish and wildlife
- Alters wetland hydrology and impacts function of drainage ditches and stormwater ponds
- Reduces access and habitat quality for hunters, anglers, birders, and other recreationists
- May block roadway sight lines
- Linked to declining property values

Photo above: plant height can be from 8' up to 18' tall. Foliage stays green until after the first hard frost. Inflorescences are densely branched, typically upright conical in shape, and orange-tan in color by late fall.

## Minnesota has a rare opportunity to get ahead of invasive *Phragmites* infestations.

*Phragmites australis*, or common reed, is a tall perennial grass found in wetlands, along shorelines, and in other wet areas such as roadsides and stormwater ponds. Both native and non-native (invasive) genotypes occur in Minnesota. While invasive *Phragmites* has taken over vast areas in other states, the scale of invasion in Minnesota still offers hope for effective management. MAISRC has partnered with the Minnesota DNR and many local organizations to support strategic, coordinated control of invasive *Phragmites* statewide. The goal is to slow and ultimately reverse the spread of invasive *Phragmites* in the state.

### How can you help?

- Avoid spreading invasive *Phragmites*; seeds, stem fragments, rhizomes, and stolons can all contribute to spread.
- Keep an eye out for invasive *Phragmites* and report new populations.
- Contact the team at [phragmites@umn.edu](mailto:phragmites@umn.edu) to have invasive *Phragmites* controlled using best practices. Technical, financial, and other resources are available.
- Be careful: The native subspecies of *Phragmites* can be challenging to distinguish from the invasive subspecies. Native *Phragmites* is an important component of native wetlands and should NOT be targeted for management.

## Description

*Phragmites australis* subsp. *australis*, also known as European common reed, is a tall, densely growing perennial grass that can take over large areas. It occurs in wetlands, riparian areas, shorelines, and other wet areas such as roadside ditches and stormwater ponds, and can often be found growing alongside native *Phragmites*. Native and invasive *Phragmites* can be difficult to distinguish from one another.

## Origin and spread

Invasive *Phragmites* was introduced to North America from Europe in the mid-1800s, likely from ships' ballast discharge. Contemporary spread occurs via seed dispersal from established populations, including populations intentionally planted in wastewater treatment facilities where it is used to dewater biosolids. Mowing along roadsides is another important source of spread. Deliberate introductions in Minnesota are now prohibited.

Established patches of *Phragmites* expand in place by sending out long, above-ground runners (stolons) or underground stems (rhizomes). Seeds and stem fragments are major drivers of spread to new locations. Seeds can be spread by wind and mechanically—such as by equipment or on clothing. Mowing during the growing season, i.e., along roadsides, results in stem fragments that can sprout to create a new plant if they drop in a moist location.

## Management

Best practices for control involve treatment with imazapyr and/or glyphosate from August 1st to September 30th. Winter or summer mowing may be used to facilitate access and herbicide contact. Multiple years of monitoring and follow-up treatment are likely needed to achieve sustained control of invasive *Phragmites*. It is critical to confirm identification of invasive *Phragmites*, follow permitting and regulatory requirements, and prevent further spread when conducting control. Visit the website for more information.

## SUPPORT

Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Minnesota Aquatic Invasive Species Research Center (MAISRC) and the Legislative-Citizen Commission on Minnesota Resources (LCCMR).



**Native:** leaf sheaths loosely attached, tending to not overlap; stems smooth and glossy, with segments in lower portion typically red



**Invasive:** leaf sheaths closely attached and overlapping; stems typically green with ribbed texture

The ligule (located inside at the junction of the leaf blade and leaf sheath) is a strong diagnostic character. Both native and invasive *Phragmites* have a fringe of short hairs on the ligule during the growing season.



**Native:** ligule is an upright red-brown smudgy tissue, >1 mm tall



**Invasive:** ligule is a thin discrete brown-black line, <1 mm tall

Distinguishing invasive *Phragmites* from the native subspecies can be challenging. Reliable ID requires using 3-4 different characters. Visit the website for more information.

