

INVASIVE PHRAGMITES SEEDLING IDENTIFICATION



Invasive *Phragmites* Seedlings

Phragmites australis is an invasive grass species that was introduced to North America from its native Europe. *Phragmites* generally grows in moist ditches and wetlands, however it is able to flourish in a wide variety of conditions.

Over time, *Phragmites* creates large patches that exclude most resident plants from growing and animals from the area. The success of this invasive species is owed to aggressive clonal expansion using below ground rhizomes (see photo to the right). *Phragmites* plants are capable of producing hundreds of seeds per plant, but these seeds are often not viable.

Phragmites seeds germinate in moist conditions with little to no shade. When viable seeds are given these growing conditions, *Phragmites* seedlings can germinate in shallow margins of wetlands, ditches, and other suitable areas.

This guide aims to simplify features that distinguish *Phragmites* seedlings from other grass species to allow for early detection of this invasive species.



Above: A *Phragmites* patch from a single seed. The initial *Phragmites* seedling is in the centre of the photo supported by a stick, with clonal plants spreading to the left.

INVASIVE *PHRAGMITES* SEEDLING IDENTIFICATION



Above: A small plant that arose from a single seed. In the centre of the photo is the thin original stem that emerged from the seed, and branching off to the left is a clonal stem. Thankfully, close examination of the leaf's ligule and comparison of the initial stem vs clonal stems allows for several simple methods of identification.



Initial vs Clonal Stem

In this photo the initial stem to emerge is on the right, with a clonal stem on the left. The initial stem is thin, weak, roughly 40 cm tall, and not straight. Clonal stems are rigid, likely more than double the thickness and height of the initial stem, and will grow very straight.



Ligule of Initial Stem

The ligule (a thin tongue like scale where the leaf meets the stem) of the initial stem will be very short and ragged to hairy in appearance. Similar grass species will have large, intact or slightly torn/ragged ligules.



Ligule of Clonal Stem

The ligule of the large clonal stems will be reminiscent of typical *Phragmites* plants. The ligule will be a fringe of light hairs that clasp the stem.

Created by Graham Howell,
Manager of Field Operations