



# WNY PRISM

Partnering to Protect Western New York from Invasive Species

## Best Management Practices: *Phragmites* or Common Reed

*Phragmites* (*Phragmites australis* ssp. *australis*), also known as common reed, is an herbaceous perennial that can grow up to 15 feet tall. It has stiff, sharp leaves with hairy ligules. *Phragmites'* stems are round and hollow and its greenish-tan stem nodes are one of the features that helps distinguish it from the native *Phragmites* (*Phragmites australis* ssp. *americanus*), which has reddish-purple nodes. *Phragmites'* large feathery plume of flowers changes from purple to brown in July and turns tan or gray later in the season.

*Phragmites* thrives in wetlands and in disturbed or degraded soils. It often establishes along roadsides, dredged areas and ditches. *Phragmites* spreads through rhizomes, stolons and seed. Each seed head produces up to 2,000 seeds, which can spread by wind, water or people (e.g., boots, vehicles, mowers). The rhizomes and stolons can grow shoots and roots, which allows *Phragmites* to emerge in areas adjacent to where it is already established. Infestations can take over hundreds of acres, displace crucial native wetland species and change the hydrology of an area.

**Integrated Pest Management (IPM)** is an adaptive approach that involves the selection of multiple control methods and appropriate timing to match the management needs of each specific site and species. The goal is to maximize effective control and to minimize any potential negative impacts.

Management efforts should begin with an invasive species survey and site assessment. This allows for the development of a management plan and selection of appropriate removal methods. Management for most well-established species and/or infestations will require dedication over a number of years, often 3-5. Once initial control is achieved, restoration and continued monitoring and management will likely be required to maintain success.



## Best Management Practices: *Phragmites* or Common Reed

### Management

#### Manual

Individual plants and small infestations in areas with loose soil, sand substrate, or underwater can be removed by spading, a technique where the stem is severed at a 45-degree angle below the soil surface multiple times throughout the growing season until the rhizomes are exhausted and the plant dies.

#### Mechanical

Mowing or cutting stalks above the soil surface is not effective alone because the plant can resprout from its underground roots. To be effective, combine with herbicide treatment. In aquatic habitats, using a machine to cut *Phragmites* below the waterline can be effective as long as no part of the plant or infestation remains above the water afterwards.

#### Chemical

The use of systematic herbicides is the most effective treatment. Either cutting and applying herbicide to the stems or foliar spraying are the preferred methods. Treatments should be applied in late summer to early fall. Mowing stands prior to treatment can help cut down on the use of herbicide needed and reduces the potential for drift; allow plants to regrow at least 2 1/2 feet before treating.

#### Spread Prevention

Care should be taken to limit seed dispersal by conducting management prior to plants producing seeds. If not possible, cut off the top of seed heads prior to management and dispose of properly. Clean mowers and other equipment before and after use. Mow low to the ground and mow non-infested areas first. Mud and debris should be removed from shoe treads using a stiff bristled brush to prevent the movement of seeds.

#### Disposal

Plant material may be bagged (black plastic) and placed in the sun to solarize for no less than 3 weeks to ensure it's no longer viable, and then placed in landfill-bound trash. If biomass is too great, the material may be piled in a dry location on site.

#### Restoration

Restoration efforts should take place after management has been successful (i.e., populations down to levels appropriate for manual removal, seed bank depleted), to help prevent *Phragmites*, or other invasive species, from reestablishing. Plant a mix of appropriate native species.

USE PESTICIDES WISELY: Always read the entire pesticide label carefully and follow all instructions. Pesticide regulations can vary widely between regions; please contact local authorities for additional pesticide use requirements, restrictions or recommendations. Mention of pesticide products by WNY PRISM does not constitute endorsement of any material.



**Photos Front:** Top- infestation; Middle- hairy ligule; Bottom (left to right)- plume of purple flowers, seed head, seed head in winter.  
**Photos Back:** Top- WNY PRISM Crew surveying and treating *Phragmites*; Bottom- machine cutting *Phragmites* under water (Photo Credit: Great Lakes *Phragmites* Collaborative).

#### Additional Resources:

Great Lakes *Phragmites* Collaborative

<https://www.greatlakesphragmites.net/>



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