Phragmites

(Phragmites australis)

Photo: Ontario Woodlot Association

How to Identify Phragmites

- Grows up to 5 m (15 ft) tall in dense stands up to 200 stems per square metre
- Underground root network make up 80% of species' biomass
- Stems are generally tan or beige in colour with blue-green leaves and large, dense seedheads
- As the large seed heads form they are purplish-brown and gradually become fluffier and turn white to tan as it matures
- Important to distinguish between Native and Invasive species

Characteristics

Family	• Poaceae (grass) family
Range & Habitat	• Found throughout Leeds Grenville and eastern Ontario • Thrives in disturbed environments including roadsides and ditches • Grows in aquatic, semi-aquatic and terrestrial habitats
Height	• Up to 5 m (15 ft)/native species are smaller
Flowers	• Are actually seeds (early August/September) • Dense & large – feathery
Leaves	• Are alternate, flat, gradually tapering to a point • 45-degree from stem. • Thin (< 1mm) Blue-green Leaves
Stem	• Hollow, green/approx. .5 to 1.5 cm (up to .5 in) diameter • Later in season they become tan or beige
Lifecycle	• Reproduces by dispersing seeds, root runners • Dormant: November-March (stalks remain standing through winter) • Germination: April-May • Primary growth: June-July. Flowering: August-September
Origin	• Invasive

Photo: Rebekah D. Wallace, University of Georgia, Bugwood.org

Photo: Chris Evans, University of Illinois, Bugwood.org

Phragmites

Impact

- Much of the biomass of invasive Phragmites is found underground, in an intricate system of roots and rhizomes
- Aggressive plant grows and spreads easily, quickly out-competing native species for water and nutrients
- Invades disturbed areas such as roadsides, ditches, shallow waters in wetlands, streambanks.
- Biodiversity impacts: aggressively competes with native vegetation, for water and nutrients
- Releases toxins from its rots into the surrounding soil that impedes the growth and even kills neighbouring plants

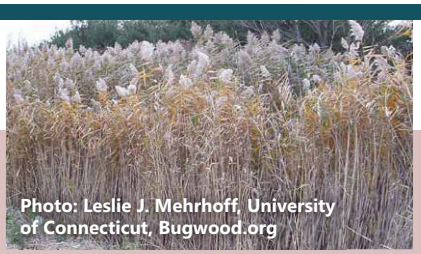

Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Once Phragmites has been confirmed at a location, a control plan can be developed based on:

- infestation size
- site accessibility
- potential for spread
- risk of environmental, economic or social impacts

Site specific conditions such as native plant diversity, wildlife usage and water table fluctuations should also be considered when developing control plans.

An inventory of each site is strongly recommended before starting control efforts to help ensure proper methods and timing are used to minimize negative impacts.

Management of Invasive Phragmites

Due to the extensive underground rhizome (root) system created by invasive Phragmites, the use of a single control measure is not always effective and disturbance to an area may actually increase the density and spread of an invasive Phragmites stand.

A combination of two or more methods into a long-term plan that follows up initial treatments with frequent monitoring and re-assessment, and subsequent treatments may be necessary.

Do Not Compost

All plant materials should be dried and burned or disposed of in the garbage or at a landfill.

Control Methods:

Note: Clothes, tools and equipment should be brushed off on-site to avoid the transfer of seeds to new sites.

Hand Pulling	Mowing or Cutting	Compressing or Rolling	Herbicide
Problematic • Can easily target specific plants • Effective for small isolated stands • Plants less than 2 years old • Labour-intensive • Ensure that roots are removed	*Not Very Effective* • Will not affect the root system and could further stimulate growth • Best in late July/early August for several cuttings • Will destroy other vegetation • Remove debris afterwards	*Not Very Effective* • Similar to mowing • Not effective as stand alone method • Compress after plant is dead • Use method in conjunction with herbicides • Wash equipment after treatment	*Effective* • For dense stands, spray in early fall • For smaller stands hand-wicking can be effective • CANNOT apply in standing water!

Leeds Grenville

Use of herbicides must follow all provincial and/or federal regulations. Appropriate training, timing and application methods are critical factors for success. Anyone having information on specific locations where this weed is posing a significant public risk should contact the Weed Inspector for the United Counties of Leeds and Grenville at 613-342-3840 ext. 2425