Phragmites australis
Integrative Vegetation Programs

Envirotech Environmental Consulting, Inc. (EECI) develops an IVM program custom designed for each site.

An IVM Program for *Phragmites australis* normally involves three (3) phases; initial treatment, clear-cutting (optional), and follow-up treatment.

EECI utilizes state-the-art– products and techniques to ensure the most effective and efficient control/eradication of *Phragmites*.

An IVM program may require follow-up treatment (s) due to *Phragmites* unique physiology.

EECI's extensive experience in controlling *Phragmites* has allowed us to develop effective, efficient and economical IVM programs for clients of all sizes.

Typical *Phragmites australis* Cross-Section

If you are interested in an IVM program for your coastline, wetland or riparian area to improve your property value, increase biodiversity, improve habitat and reduce fire risk, please contact EECI's professional office for a free estimate and site evaluation. During regular business hours call 302.645.6491 or via email at info@envirotechecinc.com.

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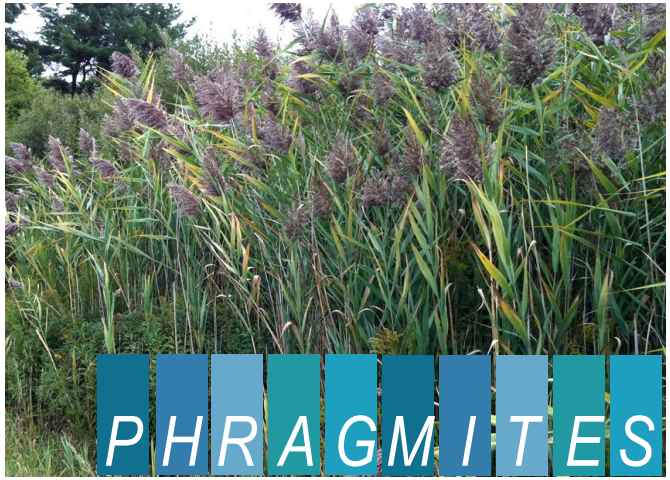

PHRAGMITES australis

Envirotech™
ENVIRONMENTAL CONSULTING, INC.
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Common Reed

Fact Sheet and Control/Eradication Measures

Integrated Vegetation Management (IVM) Programs

Phragmites australis

Phragmites australis, otherwise know as common reed, is a highly invasive grass that typically establishes itself in and around the transition zone between open water and upland ecosystems and disturbed soil sites. The control and eradication of *Phragmites* is encouraged by the Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service, and both Delaware and Maryland environmental agencies

Phragmites reproduces sexually and disperses seeds as well as asexually by way of rhizome systems. These rhizomes (lateral roots) are extensive and grow as much as 5.5 feet below the soil surface with a lateral spread of up to 30 feet or more. For these reasons, control and eradication method(s) require the use of glyphosate-based herbicide(s). The use of environmentally friendly herbicides for controlling the growth and spread of *Phragmites* is the most effective method that provides significant results.

Envirotech Environmental Consulting, Inc. provides Integrated Vegetation Management Programs for invasive species like *Phragmites*. The programs are comprehensive in nature and utilize the most cost effective methods. All services are conducted and supervised by degreed environmental scientist(s).

Phragmites reproduces and spreads at a rate much faster than most indigenous flora species. Often times the *Phragmites* stands will choke out beneficial plant species forming monocultures that provide extremely negative impacts on the environment and biodiversity. *Phragmites* will out compete plant species that typically provide forage and essential habitat for multitudes of fish and wildlife species.

Common Reed may have negative economic impacts to property owners as well. The plant may become so invasive that it jeopardizes the structural integrity of asphalt roadways, stormwater management systems and retention basins. Dwellings and ornamental turf may also be degraded. Due to the height of the stems, *Phragmites* will also degrade aesthetics by restricting views. The density of the stems, the amount of bio-mass that the plant provides, and the proximity of growth to human dwellings makes *Phragmites* a fire hazard by providing a superior fuel source.

Stage 1	Stage 2	Stage 3	Stage 4
			
herbicide application	monitor for results	clear-cutting	native vegetation propagation

Clear-cutting *Phragmites* after treatment can be an important step in an IVM Program., It allows native beneficial plants to re-colonize the area quicker, reduces fire risks , and improves aesthetics and view corridors.

Characteristics

The common reed, foxtail, or *Phragmites* austrailis is a tall, perennial grass that spreads mainly by sending out lateral roots. It is unusual among grasses in its ability to colonize both fresh and blackish water. *Phragmites* enjoys a cosmopolitan distribution throughout North America marshes. It also grows in dense colonies along the borders of lakes, ponds, and rivers.

Is it Really a Nuisance?

Threat to Biodiversity:

When newly introduced, *Phragmites* may establish dense monocultures which displace a variety of native wetland grasses and plants. Marsh structure may also be altered; *Phragmites* strands trap sediment, raising the soil surface, which can dry out the marsh. Wildlife managers generally thought *Phragmites* marshes were barren of wildlife and plants, but a new study suggests important food links to Delaware estuary fish; however, more research is needed to settle the debate about the effect of *Phragmites* on marsh value and function.

Economic Impact:

Marsh restoration efforts to remove *Phragmites* may be very expensive. *Phragmites* is quick to return after burning and single chemical treatments. The effectiveness of removing *Phragmites* from wetlands is currently subject of debate among wildlife managers. However, the removal of phragmites from a colonized area provides a huge return on investment. EECI provides a Clear-cut Removal Program.