



- European Phragmites (*Phragmites australis ssp. australis*), an <u>invasive</u>, alien plant species as observed at Pt. Franks beach east of Mud Creek August 2010
- experts identify Phragmites infestation as <u>the most</u> <u>serious issue currently facing Ontario's coastal wetlands</u>



- in the Fall of 2009 only small sprouts observed
- in August 2010 Phrag reached 2 m tall
- if left unchecked, can reach heights of 5 m or over 15 feet!



Phrag quickly forms dense monocultures choking out native plants, mammals, reptiles and birds, destroying diversity within the ecosystem



- runners (rhizomes) grow horizontally up to 20 m along the ground per growing season and down as far as 2 m below the surface
- break one and five new shoots grow helping the plant propagate rapidly



- Phrag on Port Franks beach west of Mud Creek
- this plant species loves water and migrates to it



- Phrag along Mud Creek near entrance to Lake Huron
- each feathery plume contains ~2,000 seeds
- wind and water disperse seeds widely providing a second, powerful method of propogation



Phrag completely covers both banks of Mud Creek forming a virtually impenetrable barrier to anyone or anything trying to reach the water



Phrag along Mud Creek observed from the Outer Drive bridge looking east



Phrag along Mud Creek observed from the Outer Drive bridge looking west





Phrag along both sides of Outer Drive



Phrag along the Ausable River at Armstrong West near the entrance to Lake Huron





more Phrag along the Ausable at Armstrong West looking north



Phrag observed on west side of Ausable River viewed from Port Franks Marina





Phrag along Ausable River banks looking east from Port Franks Marina



Phrag on west side of Superior near Riverside Drive now taller than street sign





Heavy infestation in Sunfish Bay, Windsor Park

- if left unchecked, the beach environment in Port Franks will change dramatically
- the threat of an extremely dense, 5 m tall barrier growing along the Lake Huron shoreline is <u>real</u>
- will result in:
 - shoreline views blocked
 - the beach disappears
 - access to Lake Huron for swimming and fishing significantly reduced
 - fire hazards from dead plant material increases
 - an infestation which could become so severe no remedial actions will be practical
- WE MUST ACT SOON!

Internet video produced for a Michigan municipality which experienced a severe Phragmites problem:

http://www.peaine.org/environment/phrag mites/video

- Threats to Lambton Shores
 - Tourism
 - The Pinery as a destination attraction
 - · recreational lake use
 - L-Lake biodiversity
 - · Communities in Bloom designation in jeopardy
 - PF's Blue Flag Marina designation in jeopardy
 - Property values
 - · impact on tax base
 - Agricultural lands
 - · eradication costs to farmers

- Phragmites has no natural predator
- · eradication is extremely difficult
- · mechanical methods are mostly ineffectual
- · glyphosate, a herbicide, is safe and effective
- commercial-grade Roundup® an approved glyphosate, not the retail store version
- Ontario's Pesticides Act normally prohibits use
- site-specific MNR authorization can be applied for
- can only be used by licensed pesticide applicators
- treatment most effective when done in Fall
- in Canada cannot be used over water

- as part of a sand dune remediation project, including the planting of marram grass and installation of a dune "blowout" preventer, PFBHA received written MNR authorization to treat its Phragmites infestation with glyphosate
- treatment will occur before Nov. 4, 2011
- cost to PFBHA is approx. \$2,000 not including volunteer time

- some Ontario communities successfully managing their Phragmites problems:
 - √ Saugeen Shores
 - √ Huron-Kinloss
 - √ Sauble Beach
 - ✓ Wasaga Beach
- some communities with Phragmites implementing remediation plans in 2011:
 - ✓ Wiarton
 - √ Kincardine
 - ✓Oliphant

- some First Nations communities managing Phragmites:
 - ✓ Saugeen Ojibway Nation (Chief's Point Reserve)
 - √The Chippewas of Kettle and Stony Point First Nation (hope to begin a major remediation program in 2011)
 - ✓ Walpole Island First Nation (has done Phragmites mapping, first step towards managing)

- some large scale Phragmites eradication programs:
 - ✓ Rondeau Park (over 200 acres treated)
 - √ Fighting Island largest Canadian island in the Detroit River (over 200 acres treated)
 - ✓ Saugeen Ojibway Nation (30 kms of shoreline cleaned up)
 - ✓ Pelee Island Nature Conservancy of Canada (undertaking major project this year)

Finding solutions:

- we met with Lambton Shores Council on March 7 to suggest it take a more proactive role in managing Phragmites infestations by:
- forming a "committee of Council" to examine the problem, to catalogue infestation sites and to submit site-specific remediation recommendations
- we suggested committee could include representatives from stakeholders such as LHCCC, ABCA, MNR, Environment Canada, the Pinery, First Nations, property owner groups, other conservancy groups and Phragmites eradication experts

• Q&A

- could the Lambton Shores' Communities in Bloom group assume a leadership role in managing Phragmites in our municipality?
 - funding might be available to a community group from Environment Canada's Invasive Alien Species Partnerships Program (IASPP), Ontario's Species at Risk Stewardship Fund and Ministry of Natural Resources grants, among others
- demonstration project on "Armstrong Island"
 - Phragmites eradication expert has offered a no-charge demonstration program to the community
- · Next steps