2022 Ontario Phragmites Working Group Meeting

Agenda

Date Tuesday, January 18, 2022

Time 9:00am-6:00pm EST

Location *Virtually hosted on Remo.co (Registration required at https://www.eventbrite.ca/e/220977007177)*

Schedule

Time	Speaker	Presentation Title
9:00am	System Opens	
9:10-9:30	**Janice Gilbert and Gabby Nichols**, Committee Lead Ontario Phragmites Working Group **Belinda Junkin**, Executive Director Ontario Invasive Plant Council **Bailey Bingham** Ontario Invasive Plant Council	OIPC Introduction and Welcome Introduction to Remo (How-To)
9:30-9:50	**Dan and Mary Lou Smoke**	Indigenous Opening Prayer and Welcome
Community-level, Volunteer-led, Long-term Management		
9:50-10:10	**Nancy Vidler** Lambton Shores Phragmites Community Group	**Celebrating Success in the mitigation of Invasive Phragmites australis in Lambton Shores**
10:10-10:30	**Sandra Marshall** Ipperwash Phrag Phighters	**Successful Strategies at Ipperwash**
10:30-10:50	**David Sweetnam & Nicole Carpenter** Georgian Bay Forever	**A Community Approach to Invasive Phragmites Eradication for the Health of our Water and Wetlands**
10:50-11:10	Networking	
Municipalities and Conservation Authorities		
11:10-11:30	**Frank Burrows** Saugeen Shores	**Fighting Phrag! The Saugeen Shores Waterfront experience**
11:30-11:50	**Nathan Schoelier** Ausable Bayfield Conservation Authority and Huron County Township	**Controlling Phragmites on Ontario's West Coast: Huron County's roadside control program**

Last updated 2022-01-11

Science Update		
11:50-12:40	Dr. Rebecca Rooney & Megan Jordan University of Waterloo	Five years later: Efficacy of Phragmites control using glyphosate
12:40-1:20	Lunch Break	
Province-wide Project Updates		
1:20-2:00	Steve Ford Green Stream	**Where we are at! 2021 Roadside Control**
2:00-3:00	Sarah Rang, Karen Alexander, and Colin Cassin Invasive Species Centre Eric Cleland Nature Conservancy of Canada	Updates from the Green Shovels Collaborative: Building the case for Investment in Phragmites Management in Ontario.
3:00-4:30	Janice Gilbert and Gabby Nichols, Committee Lead Ontario Phragmites Working Group Belinda Junkin, Executive Director Ontario Invasive Plant Council	Interactive discussion & closing remarks
4:30-6:00	Evening Mix and Mingle	
6:00pm	Online Meeting Closes	

OUR PRESENTERS

Celebrating Success in the mitigation of Invasive Phragmites australis in Lambton Shores

Nancy Vidler; Lambton Shores Phragmites Community Group

This presentation will highlight restoration projects of the Lambton Shores Phragmites Community Group and our successful efforts to create awareness and engage the community.

Nancy retired from Community and Social Services with the Region of Halton to live in Port Franks, Lambton Shores and has become the driving force behind Phragmites management and habitat restoration in this lakeside community where she and her family have cottaged for many years. She is a member of the Ontario Phragmites Working Group and as Chair of the Lambton Shores Phragmites Community Group, this committee has successfully formed partnerships with the Municipality, local Conservation Authorities, The Lake Huron Centre for Coastal Conservation, Nature Conservancy Canada, Ducks Unlimited Canada, cottage associations and private landowners. She has been recognized by Lambton County Museum and Lambton Wildlife Inc. for her environmental work and assisted Dr. Janice Gilbert with the creation of the Invasive Phragmites Management Plan for the Municipality of Lambton Shores.

Successful Strategies at Ipperwash

Sandra Marshall; Ipperwash Phrag Phighters/Lambton Shores Phragmites Community Group

The Ipperwash Phrag Phighters were established in 2016. Our volunteers are mainly retirees in their 60's and 70's. Our longevity and success is due to the mentorship of Dr. Janice Gilbert with the Invasive Phragmites Control Centre, Nancy Vidler and the rest of the Lambton Shores Phragmites Community Group and our partners: the Municipality of Lambton Shores, St. Clair Region Conservation Authority, Centre Ipperwash Community Association, Lambton Wildlife, Federation of Ontario Cottagers Associations, and most recently the Green Shovels Collaborative. Early detection, site specific control techniques/tools, continuous monitoring and reliable sources of funding have all been essential for our success.

Sandra is a retired elementary school teacher and has been the Chair and Secretary of the Ipperwash Phrag Phighters since they were formed in 2016. She is also a Board member with the Lambton Shores Phragmites Community Group.

A Community Approach to Invasive Phragmites Eradication for the Health of our Water and Wetlands

David Sweetnam and Nicole Carpenter; Georgian Bay Forever

Georgian Bay Forever grew out of the Georgian Bay cottage associations in 1995 to address water quality, quantity and concerns for a healthy ecosystems. Our mission is to preserve, protect and enhance the aquatic ecosystems of Georgian Bay. Georgian Bay Forever is a registered Canadian Charity with supporters throughout the Georgian Bay region including concerned cottagers and residents, businesses and Foundations. We partner with academics, communities, governments and other organizations to enhance our capacity to produce sound science and educate and engage our citizens.

GBF has been working with communities to tackle invasive Phragmites for 9 years and have seen a significant impact of our control and management across southeastern Georgian Bay. The presentation will cover the history, progress and success of our community-based approach to management, as well as the challenges we have faced and ways in which we can overcome these challenges.

David is the Executive Director and Georgian Baykeeper of Georgian Bay Forever. He oversees staff, the scientific research programs and the day-to-day operations of the charity and assists the volunteer board at GBF. David is an entrepreneur who has spent his career in environmental and high tech industries. He was part of the creation of the UV Index in Canada, the United States and Australia addressing public education on the dangers of and solutions to the ozone hole. David and his team designed and manufactured high-tech, solid state atmospheric monitoring instruments used by researchers in over 20 countries around the world. That work had a significant impact in reducing harmful ozone destroying emissions and now, twenty years later, the ozone layer is recovering. David is a playful visionary. He and his team also designed and built the first working Star TrekÂ® Tricorderâ„¢ that pioneered state-of-the-art innovations now commonly used in agriculture, medicine and business. You even choose and match your paint colours today with technologies developed in that little hand-held gadget. David is a scientist with a BSc (Hons) in Biochemistry from the University of Waterloo. He has spent decades canoeing, camping and boating throughout Georgian Bay and its waterways starting at summer camp as a teen and then as a youth working on Beausoleil Island for Parks Canada in the Conservation Corps. David and his wife, contemporary artist Debra Archibald, have six children and two grandchildren between them and spend their summers on the water in Georgian Bay.

Nicole is the Invasive Phragmites and Save Matchedash Bay Project Coordinator at Georgian Bay Forever. She joined GBF in the Spring of 2021 managing the invasive phragmites removal program along eastern Georgian Bay that began almost a decade ago, and supervising student Education Outreach Coordinators that join the GBF team every summer. Nicole has spent her childhood up until now canoeing, boating, hiking, swimming, camping and cottaging in and around the Great Lakes and Algonquin Park in Ontario. She has developed a great passion and understanding for preserving and protecting these freshwater ecosystems for current and future generations. Nicole graduated from the University of Guelph with a BSc (Hons) in Marine and Freshwater Biology, minoring in Geographic Information Systems (GIS) and Environmental Analysis.

Fighting Phrag! The Saugeen Shores Waterfront experience

Frank Burrows; The Municipality of Saugeen Shores

Like many communities in south-western Ontario, Saugeen Shores has been challenged with an ever increasing onslaught of invasive phragmites. The Town prides itself on 18 kilometers of waterfront, much of it, spectacular beaches and natural areas. Over a decade ago, phragmites loomed big on the horizon, would it take over and overwhelm the shoreline wetlands and creep into the beaches? Through ongoing consistent inventory, monitoring and timely repeated herbicide application and manual cutting the phrag invasion has been kept in check along the shorelines. This presentation will briefly share some lessons learned that can be easily transferred to any municipality.

Frank Burrows is the Parks Manager with the Town of Saugeen of Shores. His portfolio includes leading a great team of Parks and Recreation staff that care for the Townâ€™s parks & green spaces, gardens, trails, waterfront and sports fields. Frank was with Parks Canada for 26 years working across Canada (and a stint in Australia) as a Park Ecologist. His last 6 years were as the Superintendent of Bruce Peninsula and Fathom Five Marine National Parks. He sits on the Board of Directors for the Lake Huron Centre and was a founding director of the Bruce Peninsula Biosphere Association. A graduate of Trent University with an Honours BSc in Biology and from Lakehead University with a MSc in Forestry.

Controlling Phragmites on Ontario's West Coast: Huron County's roadside control program

Nathan Schoelier; Ausable Bayfield Conservation Authority

Situated along the shores of Lake Huron, Huron County is a vibrant rural community, where agriculture is the major land use. The county is also ecologically diverse, with Lake Huron providing added leisure and recreational values to the community. Huron County and multiple municipalities throughout its geographical region are also committed to Phragmites management, leading a model roadside Phragmites control program in partnership with Ausable Bayfield Conservation Authority.

The County of Huron began working with the Ausable Bayfield Conservation Authority to control phragmites on county-managed roads in 2014. Since that time, significant amounts of Phragmites have been managed and many lessons have been learned. The program has evolved, and grown to other municipalities, implementing a holistic approach to Phragmites management throughout Huron County (also known as 'Ontario's West Coast'). This presentation will provide an overview of the program, including some of the lessons learned; the importance of Phragmites management from the public works' perspective; and the outlook of the program, with the goal of inspiring similar programs across the Province of Ontario.

Nathan Schoelier is the Stewardship and Conservation Lands Manager for the Ausable Bayfield Conservation Authority (ABCA), located east of Exeter, Ontario. In this role, Nathan oversees the environmental stewardship programs offered to landowners throughout the ABCA watershed. Nathan also oversees the management of lands owned by the Conservation Authority, working to meet the dynamic goals of conservation lands. Phragmites management is a component of both departments, providing Nathan with the opportunity to work with many partners, to control phragmites in this watershed along Lake Huron's southeast shore. Nathan attended Sault College, and Niagara College, where he completed Fish and Wildlife Conservation and Ecosystem Restoration programs.

Five years later: Efficacy of Phragmites control using glyphosate

Dr. Rebecca Rooney and Megan Jordan, University of Waterloo

An Emergency Use Registration issued in 2016 enabled the provincial government (NDMNRF and MECP), NGO (Nature Conservancy of Canada, Ducks Unlimited Canada) and academic partners to use a water-safe glyphosate formulation applied directly over water to suppress invasive Phragmites australis in the Long Point region and Rondeau Provincial Park. As part of that effort, we undertook monitoring to evaluate the efficacy of the herbicide-based treatment. Here we report on results of a rigorous Before-After-Control-Impact design study that tracked the recovery of native plants and the suppression of Phragmites australis for six years, including five years after helicopter-based glyphosate application. Initially we observed worrying levels of secondary invasion by European frog-bit and Eurasian milfoil, but with continued monitoring more of the long-term monitoring plots have transitioned to a native dominated state. Water levels on Lake Erie are naturally variable. High lake levels over the past five years have certainly contributed to the trajectory of recovery and now that lake levels are declining, we anticipate that the wetland seedbank will play a pivotal role in directing succession and limiting re-invaison. Fortunately, the wetland seedbank appears diverse in this region and viable seeds of Phragmites australis appear short lived.

Dr. Rebecca Rooney is an Associate Professor in the Department of Biology at the University of Waterloo, where she leads the Waterloo Wetland Lab. She and her graduate students investigate the role of disturbances, both natural and anthropogenic, in structuring wetland communities and influencing wetland functions.

Megan Jordan is an MSc. student in the Waterloo Wetland Lab at the University of Waterloo. Her thesis tests the efficacy of herbicide-based invasive Phragmites australis control in terms of both Phragmites suppression and native wetland vegetation restoration. She combines greenhouse and field experiments to predict the outcome of Phragmites suppression under different water regime scenarios.

Where we are at! 2021 Roadside Control

Steve Ford, Green Stream

Steve Ford is a Vegetation Management Professional who owns and operates Green Stream Vegetation Management Inc, which provides application and consulting services to the Public Work and Rail Road industries throughout Canada. He is married with two children and resides in Oakville, Ontario. He graduated in 1998 from the University of Guelph with a Diploma in Horticulture.

He is a Licensed Operator, and holds extermination licenses in Landscape, Forestry, Aquatic and Industrial categories in Ontario, Quebec, New Brunswick, Nova Scotia and British Columbia. Steve has been actively involved in the control application and strategy development for Invasive Phragmites since 2012. He has been fortunate to work with Dr. Janice Gilbert and partner with the Invasive Phragmites Control Center in dealing with the invasive plant in wetland and storm

water pond environments using Herbicide and Non -Herbicide control methods. Steve is the Treasurer for the Integrated Pest Management Council of Ontario (IPM) and is actively involved in policy and best practice development for all green industry sectors.

Updates from the Green Shovels Collaborative: Building the case for Investment in Phragmites Management in Ontario.

Karen Alexander[1], Eric Cleland[2], Sarah Rang[1], and Colin Cassin[1]

[1] Invasive Species Centre

[2] Nature Conservancy of Canada

One of the challenges facing invasive species managers and researchers around the globe is the need to secure long-term financing for research, prevention, and control activities. The pressures for financing are building; globally the number of invasive species are increasing, and the costs of damage are tripling every decade (Diagne et al., 2021). In Ontario, land managers are fighting to control one of Canada's worst invasive plants, Phragmites australis (Phragmites) which invades landscapes quickly and causes a wide range of environmental, social, and economic damages. With the support of the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDRF) in 2020, the Green Shovels Collaborative developed a draft Phragmites Framework, evaluated costs and benefits of a landscape-level program and distributed much-needed financial support to 'Phragmites Fighters' in the province.

The proposed Phragmites Framework is based on existing information and survey responses from land managers and community groups across Ontario and provides recommendations to achieve collaborative management at the provincial scale. The cost-benefit analysis presents estimated costs for eradicating Phragmites in Ontario and the economic benefits that would be gained if Phragmites was successfully managed. Results show that the benefits of eliminating Phragmites, exceed the costs to do so. This year, the Collaborative is developing an implementation plan for the draft Framework and investing in new projects to benefit the 'Phragmites Fight'. Progress on Green Shovels Phragmites initiatives will be briefly presented and comments and feedback are welcome.

Karen Alexander is the Policy Coordinator at the Invasive Species Centre. Karen Alexander has over 10 years of experience working on Phragmites control programs in the Great Lakes basin. Karen co-founded the Ontario Phragmites Working Group in 2011 and served as co-chair from 2016 – 2021. She supported the USGS during the development of the Phragmites Adaptive Management Framework (PAMF) while working at the Great Lakes Commission, and she authored the Big Creek Phragmites Control Implementation Plan for the Nature Conservancy of Canada. At the Invasive Species Centre, Karen coordinates Phragmites-related projects including the Green Shovels Collaborative, and the ISC's work to advance novel collaborative financing tools that can support large-scale control and management programs in Ontario. Karen also sits on the Essex County Nature Phragmites Committee, a group of Club members interested in supporting Phragmites control in Essex County.

Eric Cleland is the Director of the Nature Conservancy of Canada's Invasive Species Program for Ontario region. Eric has over 20 years of experience in delivering habitat restoration and invasive species management programs within the government and not-for-profit sectors. Eric currently leads implementation of Canada's largest invasive Phragmites management program in the Long Point; an initiative that pilots novel tools and techniques for control of this aggressive plant. He is a lead author of Ontario's new Phrag-free by 2033 Strategic Framework and looks forward to an Ontario that is free from the impacts of invasive Phragmites.

Sarah Rang is the Executive Director of the non-profit Invasive Species Centre, whose mission is to protect Canada's land and water from invasive species. Sarah Rang has thirty years of experience in conservation policy and programs. She has worked with governments, non-profit organisations and the private sector to help create new environmental

initiatives, including a $1.5 million annual community grant program; worked with First Nations and government to develop a $85 million trust fund for environmental remediation; and worked with the provincial and federal government on joint Great Lakes projects. Sarah Rang has also worked with mayors and municipal leaders on Asian Carp prevention and nutrient reduction. She holds a Master of Science from the University of Toronto.

Colin Cassin is the Invasive Species Policy Manager at the Invasive Species Centre. He strives to deliver positive environmental and social change through more effective invasive species collaborations. Colin has worked in conservation and invasive species engagement for nearly 10 years. He holds a M.Sc in Ecology & Evolutionary Biology from University of Toronto and B.Sc in Restoration Ecology from Trent University.

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