

Building Invasive Species Awareness at the Community Level with Citizen Science & Volunteer Engagement: Lessons from Across Ontario

Colin Cassin, Ontario Invasive Plant Council
20 December 2017



OIPC 2017/2018 Winter Webinar Series

Join the OIPC network to learn about the latest developments in invasive plant management, research & related information!

Date	Topic	Presenter
Wed. Dec. 20 2017	Building Invasive Species Awareness at the Community Level with Citizen Science & Volunteer Engagement: Lessons from Across Ontario	Colin Cassin ONTARIO INVASIVE PLANT COUNCIL
Wed. Jan. 10 2018	Implementing Biological Control for Invasive Plants in Ontario	Rob Bouchier AGRICULTURE & AGRI-FOOD CANADA
Wed. Jan. 24 2018	Approaches for Managing Ontario's 3 Biggest Aquatic Invasive Plants: European Water Chestnut, Eurasian Watermilfoil & Water Soldier	Kyle Borrowman DUCKS UNLIMITED Amanda Cooper TRENT UNIVERSITY Robert McGowan ONTARIO FEDERATION OF ANGLERS & HUNTERS
Wed. Feb. 7 2018	Large-scale Invasive Phragmites Control – Long Point Emergency Use Registration Pilot Project Update	Eric Cleland NATURE CONSERVANCY OF CANADA
Wed. Feb. 21 2018	Fighting Invasive Plants with Municipal Frameworks: Lessons from London, Mississauga, York & Other Ontario Municipalities	Kellie Sherman ONTARIO INVASIVE PLANT COUNCIL
Wed. March 7 2018	Purple Loosestrife & Biocontrol – an Ontario History	Donna Mackenzie ONTARIO BEETLES
Wed. March 21 2018	Implications of Exotic Earthworms for Plant Invasion and Restoration	Michael McTavish UNIVERSITY OF WATERLOO



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#OIPCwebinar

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www.ontarioinvasiveplants.ca/webinars



Collaborative Invasive Species Control

Canadian Food Inspection Agency (CFIA)

- Prevent new species introductions into Canada (import permits)
- Regulate movement of invasive species within Canada

Ministry of Natural Resources and Forestry (MNR)

- Enabling legislative framework to better prevent, detect, respond to and where feasible eradicate invasive species

OIPC, Invasive Species Centre, Invading Species Awareness Program

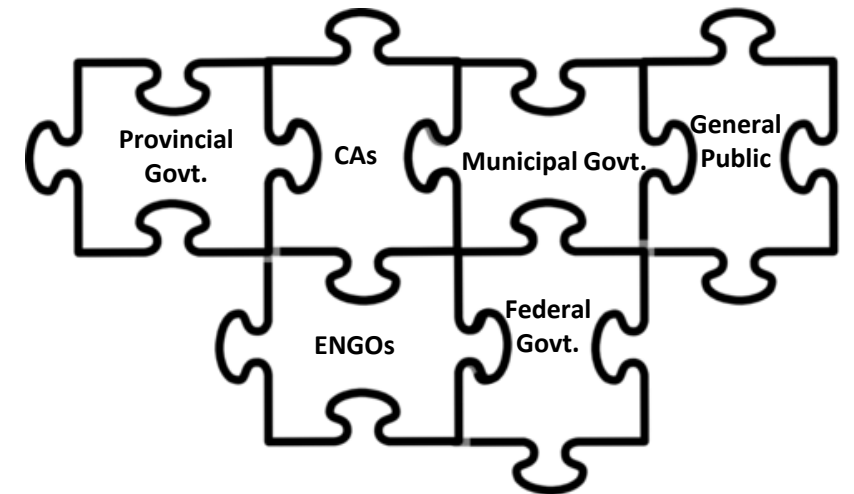
- Education and awareness
- Management and control information
- Connecting experts and maintaining networks

CAs and Municipalities

- Education and awareness
- Management and control on their properties
- Possible regulations via municipalities & invasive species strategies

Other non-profits and grass-roots organizations

- Education and awareness
- Management and control on a local level
- On the ground, hands-on action



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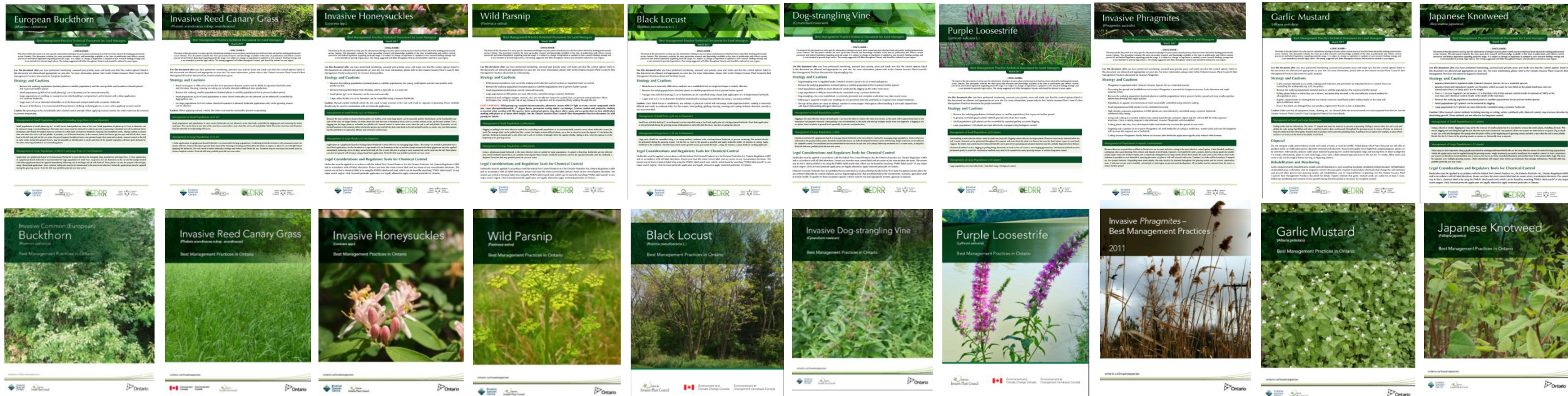
Top Grants for Invasive Species Stewardship

- **MNRF Species At Risk Stewardship Fund (Next deadline: Fall '18)**
 - Typically fit “Habitat Management/Restoration” category
 - Also leveraging outreach & education
- **Environment & Climate Change Canada Habitat Stewardship Program**
 - SAR Stream: removal costs
- **TD Friends of the Environment Foundation**
 - Hands-on volunteer stewardship, plantings, etc.
- **Biodiversity Education & Awareness Network**
 - Volunteer engagement, removal equipment, etc.
- **Local (eg. municipal) Stewardship & Sustainability Grants**
 - Tree planting, volunteer engagement, etc.

No Need to Reinvent the Wheel!

Resources that are here to help you!

- Species Specific Control Resources www.ontarioinvasiveplants.ca/bmp
 - Best Management Practices series
 - Technical Bulletin Series
- Quick Reference Guide to Invasive Plant Species (<https://www.ontarioinvasiveplants.ca/resources/technical-documents/>)

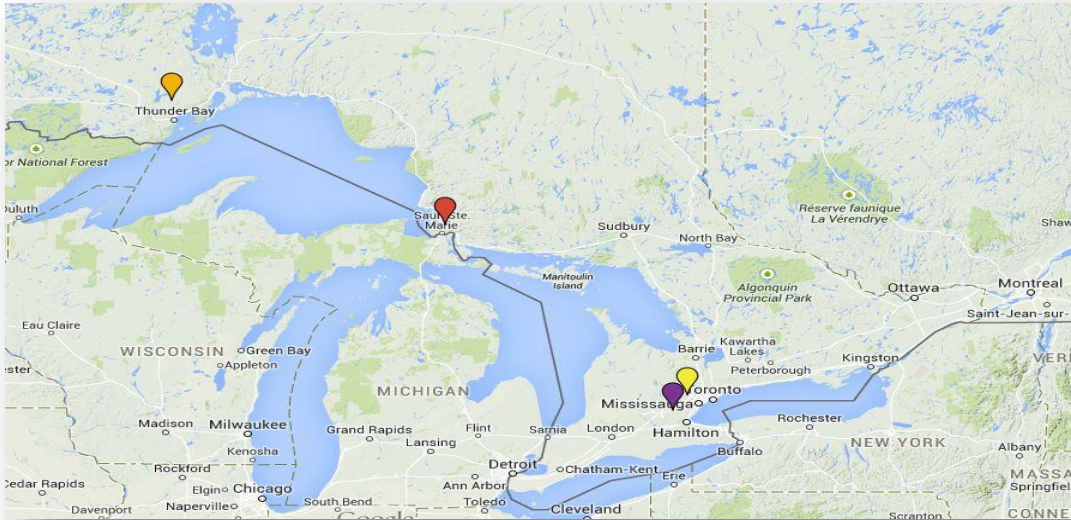


Creative Ways to Bridge Gap between Volunteers & Invasive Species Control



EDRR Network Ontario: In a Nutshell

To create, train and equip an **EDRR network** to provide eyes on the ground to **detect, track, respond to & control** priority invasive species in communities across Ontario.



Peel • Halton • Sault Ste Marie • Thunder Bay
Sudbury & Algoma Region

- Increase awareness & knowledge of invasive species
- Support hands-on work to more rapidly detect and reduce invasive species
- Engage youth & students to foster environmental responsibility
- Facilitate community partnerships to support restoration & maintenance of local habitats and recreational spaces

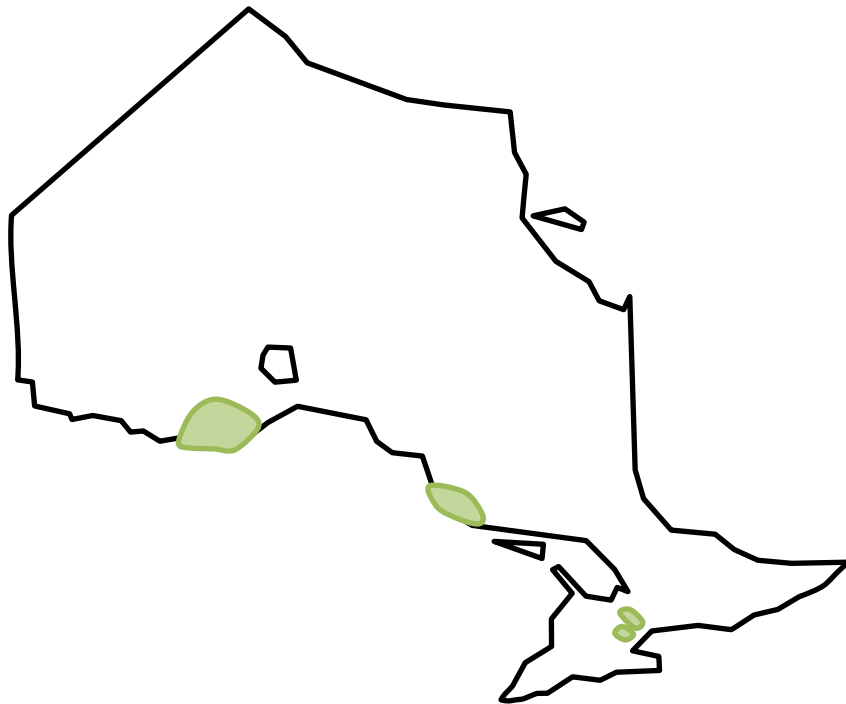


Invasive
Species
Centre

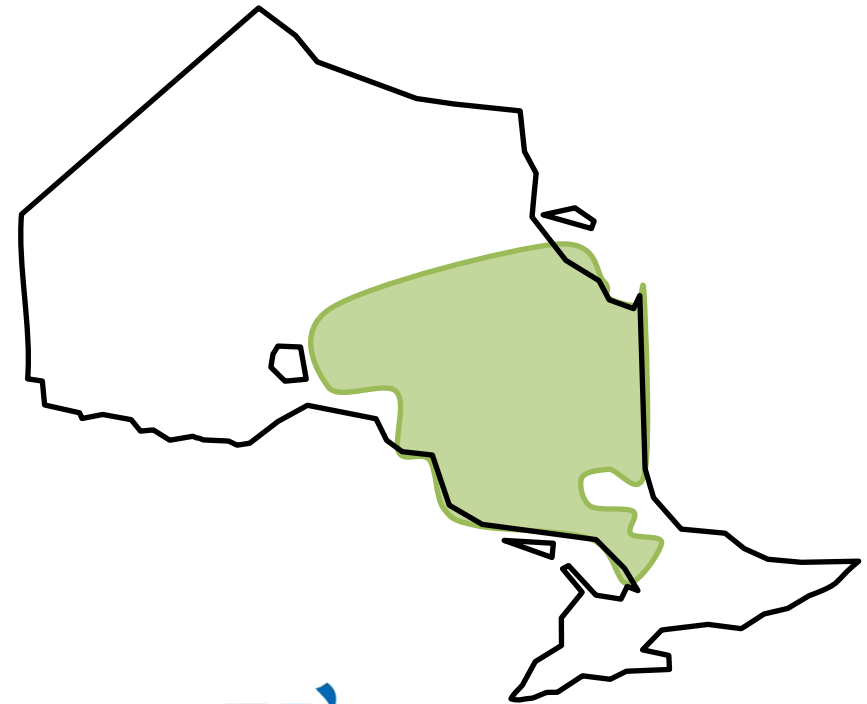


Community-level early *detection* & *action* as appropriate

Phase I: 2014-2017



Phase II: 2017-2019⁺



Focused on “New” Species



Targeted Training Workshops



CFIA Inspection Staff Training 2016 - 2017

EDRR Network staff supported CFIA summer inspection staff training for GTA region held in Guelph.

- Focused on species not present in Canada/Ontario
- Informed future “watch list” development



MNRF District Staff Training 2016 - 2017

Canada/Ontario Agreement funded workshops held in Northern & Central Ontario on EDRR Network priority species.

- Covered species encroaching each district
- Introduced staff to species not present in Ontario
- Worked through collaborative multi-stakeholder invasion scenarios



Professional Training Sessions 2015 - 2017

Workshops hosted in Halton, Peel, SSM & Tbay to present new species to local partners and professionals working in field.

- Conservation Authority staff
- Local, provincial & national ENGOS
- MNRF District staff
- Municipal staff
- Academics & Grad Students

Public Training Workshops



Priority Invasive Monitoring 2016 - 2018⁺

Numerous workshops & sampling days hosted across all 4 pilot areas, hosted in collaboration with local partners.

- “Hemlock Hikes”: Mississauga, Oakville & SSM
- DSV mapping with CVC & Power @ Forks P.P.



Lake Association Training 2017

Lake Stewards, Cottage Association and shoreline residents attended an aquatic invasive species training workshop in Sudbury. Participants learned how to:

- Identify & distinguish aquatic plants
- Systematically survey their lake
- How to control low-priority invasives
- Report high-priority invasives



Invasive Species Summits Winter 2016 - 2018

2018 marks our 3rd annual *Invasive Species Summit for Emerging Environmental Professionals* with participation from colleges & universities across GTA. Students with diverse “environmental” backgrounds attend peer-to-peer training session led by graduate students and industry professionals

- ‘16 & ‘17 participation approx. 50 students
- Diverse backgrounds including forestry, ecology, landscape design, horticulture, etc.

Broader Engagement Initiatives

Trends · Change

#PancakeDay

@Ptbo_Canada, @Mike_Lacey and 1 more are Tweeting about this

#RareDiseaseDay

25.3K Tweets

#werally2021

1,214 Tweets

Brendan Smith

4,517 Tweets

#Sounfest15

#InvSpWk

@CataraquiRCA, @KawarthaConserv and 28 more are Tweeting about this



Invasive Species Awareness Week 2016 – 2018⁺

EDRR resources made the #InvSpWk campaign possible in both 2016 & 2017. Reaching new audiences with priority EDRR species.

- Grew to 32 formal campaign partners
- More than 5M SM interactions, centered around Peel Region, Halton Region & GTA
- Please participate in ISAW 2018 – colin@oninvasives.ca for more!

Invasive Species Cycling Tours 2015 - 2016

Reaching new audiences, and cementing partnerships with invasive species themed safe-cycling tours.

- Partnership w/ local “green-group” resulted in est. an invasive species tool-share program
- Cross promotion of all local EDRR events & increased volunteer base

Hemlock Woolly Adelgid Bus Tour Winter 2018

Bus tour for natural resources professionals from across Ontario to tour HWA infested stands in New York state.

- Partnering with staff from federal, state and local government for improved collaboration
- Attendees include program volunteers & partnering organizations, staff from all 3 levels of government, and many more!

ISAP in Action...



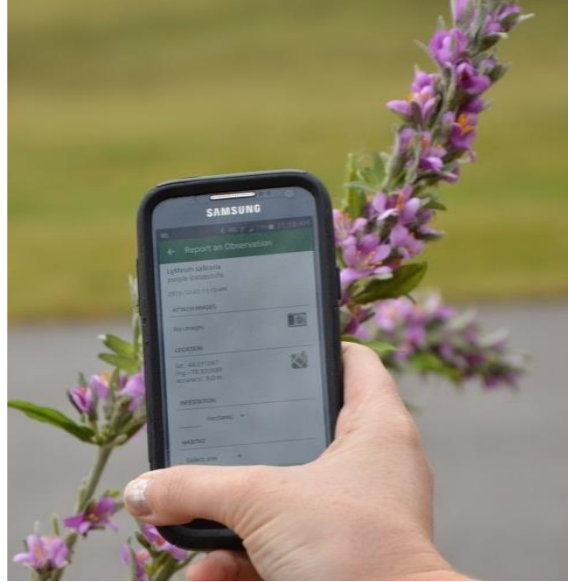
- Invasive species education/outreach across Ontario
- 53 Partners have hosted students since beginning of program
- 259 Students have been part of Invasive Species Hit Squad
- Activities can include:
 - community events
 - invasive species control
 - monitoring/reporting
 - watercraft inspection
 - resource distribution



Your activities will fall into these categories:



Education & Outreach



Monitoring & Early Detection



Management & Response

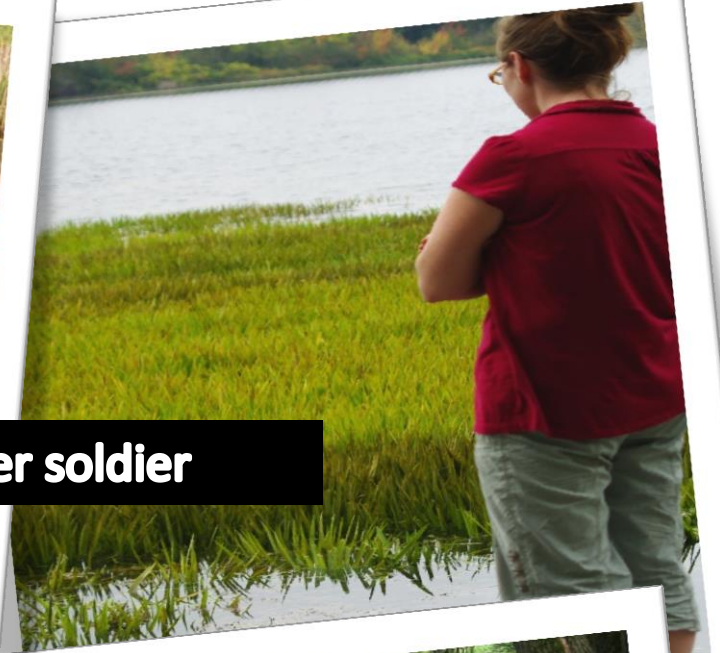
Management & Control



European water chestnut



water soldier



white sweet clover



garlic mustard

Hit Squad Example

- Devon Scratch
- Wheatley Provincial Park
- Attendance at fishing derbies
 - set up a booth to answer questions & distribute resources



Hit Squad Example

- Nigel Moir
- Sibbald Point Provincial Park
- Outreach to campers
 - Utilized existing park program – “Learn to Camp” to educate participants on invasive species



Hit Squad Example

- Porscha Nutley
- Ganaraska Region Conservation Authority
- Community Invasive Species Trail Walk
 - led a hike through the conservation area, pointing out invasive species along the trail
 - informed the public of the various invasive species in their community
 - explained the negative impacts of each invasive species, & discussed the ways to prevent/remove them



Hit Squad Example



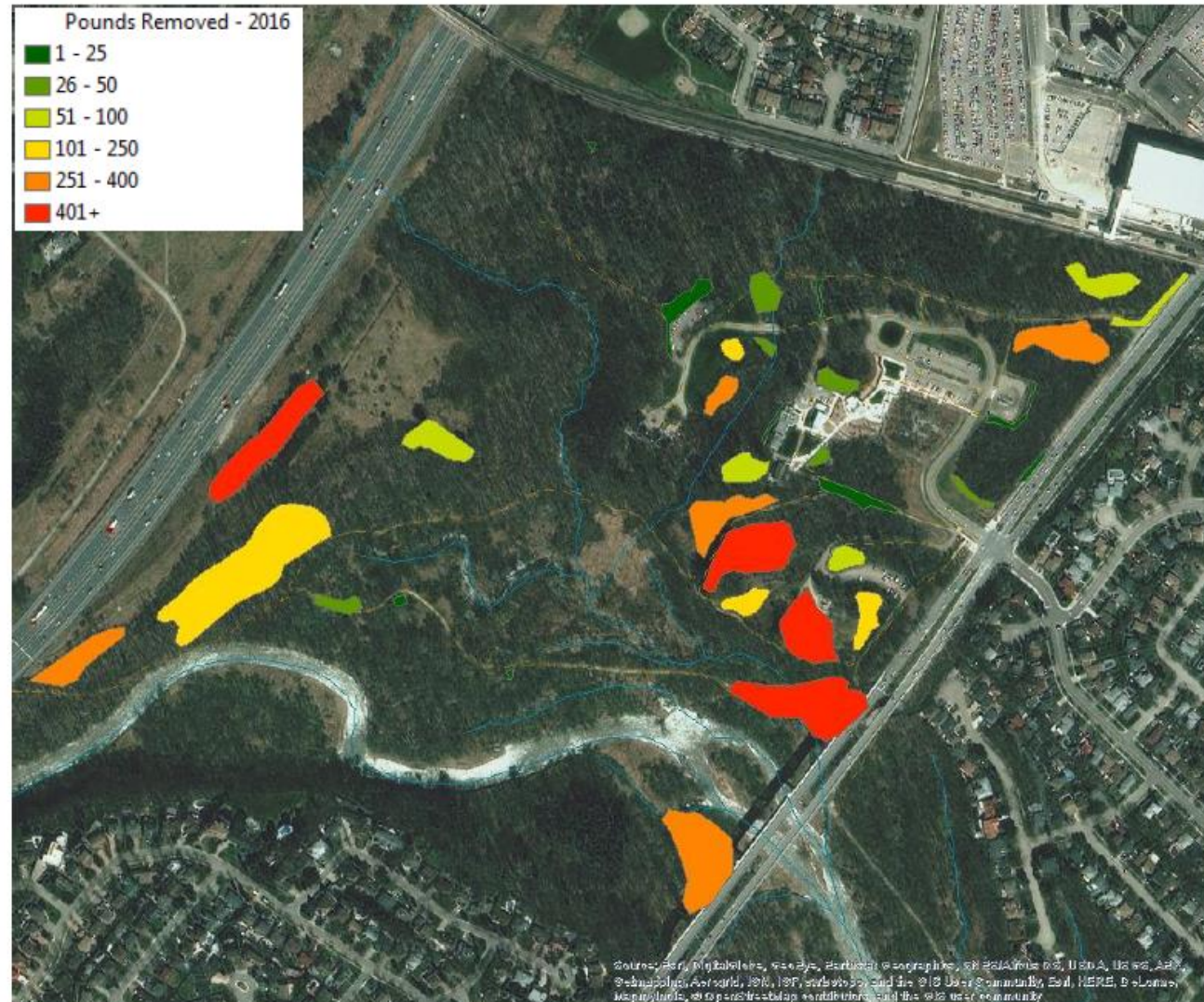
- Michael Brown
- Ontario Streams
- Garden centre outreach
 - Outreach & inventories of IS present
 - provided educational information about the ISAP/invasive species
 - Distributed materials, such as brochures, stickers, and posters for display

Riverwood Conservancy, Mississauga

Garlic Mustard Task Force



Riverwood Conservancy, Mississauga Garlic Mustard Task Force

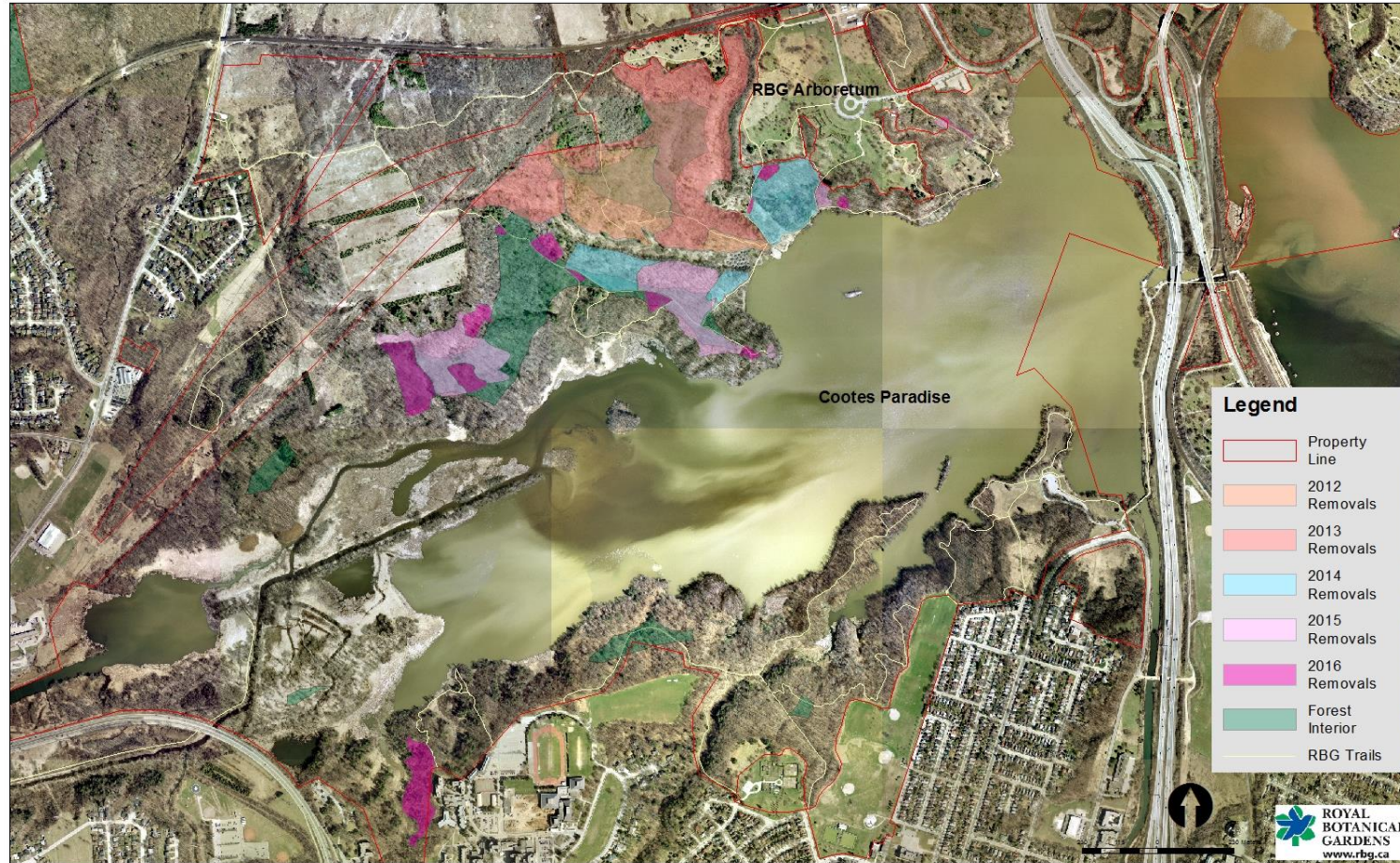


Riverwood Conservancy, Mississauga Native Plant Propagation Program (NP3)



Royal Botanical Gardens, Burlington Invasive Shrub Collaboration

Invasive Tree and Shrub Removals in Cootes Paradise Nature Sanctuary - HSP



Royal Botanical Gardens, Burlington Invasive Shrub Collaboration



ROYAL
BOTANICAL
GARDENS

Hazel Bird Nature Reserve, Baltimore Nature Conservancy of Canada



Hazel Bird Nature Reserve, Baltimore Nature Conservancy of Canada

