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# Invading Species Watch Program

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Ontario Federation of Anglers and Hunters

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# Invading Species Awareness Program

Invasive species are one of the greatest threats to Ontario's biodiversity and health of our lakes, forests and wetlands.

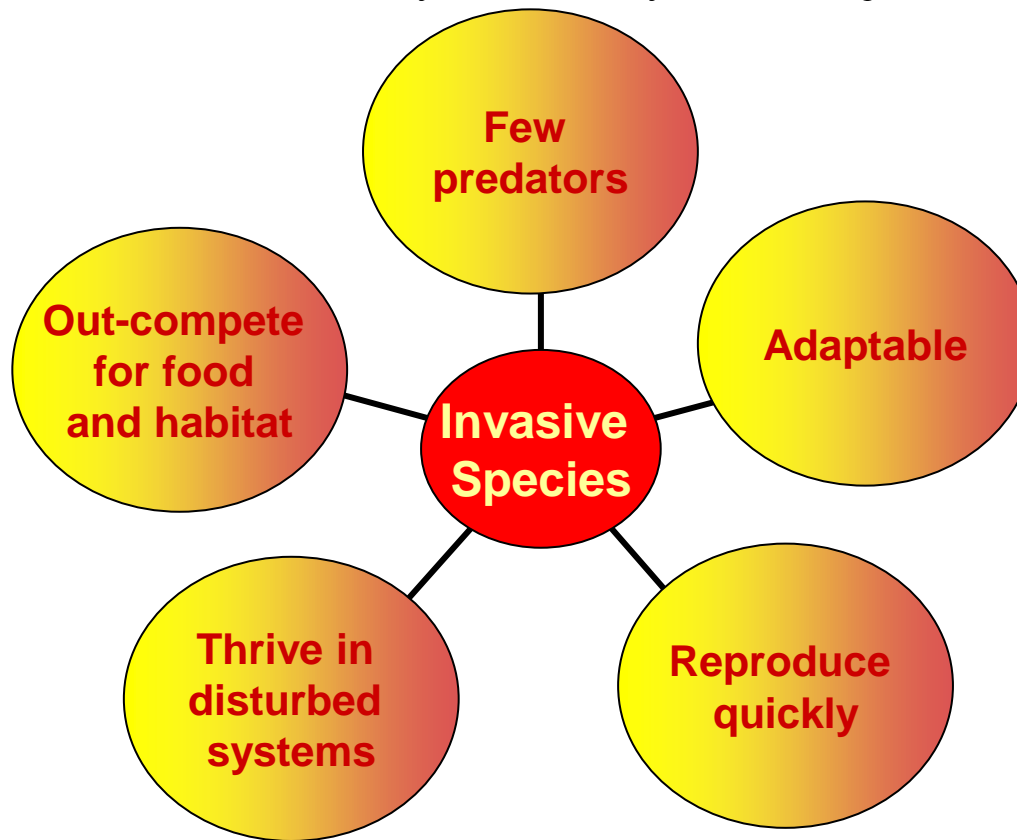
- ∞ Partnership of the OFAH and OMNR since 1992
- ∞ Focus on prevention through multiple pathways
- ∞ Participate in:
  - ∞ Public awareness
  - ∞ Reporting
  - ∞ Monitoring



# Aquatic Invasive Species

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Invasive Species — Harmful alien species whose introduction or spread threatens the environment, the economy, or society, including human health



# Reporting

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## Invading Species Hotline

- In operation since 1992 as the main invasive species point of contact for the public.
- The hotline serves a valuable role especially during times of increased public concern (e.g., Giant Hogweed & Asian Carp).

**[www.invadingspecies.com](http://www.invadingspecies.com)**

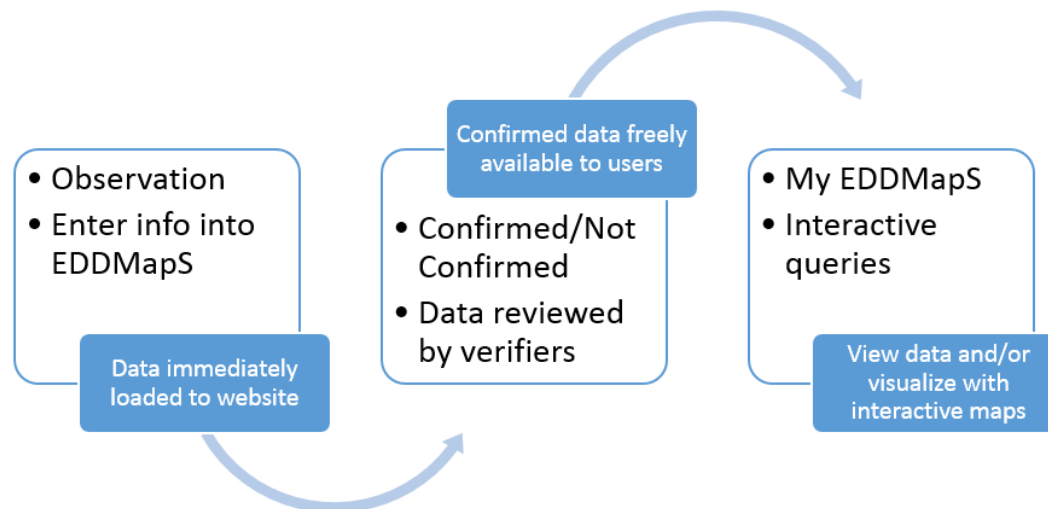
- Individuals can also report sightings via email through the website.

**[EDDMapS.org/Ontario](http://EDDMapS.org/Ontario)**



# EDDMapS Ontario

- Launched in 2005 by the Centre for Invasive Species Ecosystem Health at the University of Georgia
- Combines data from other databases, organizations & Volunteers
- Data will become the foundation for a better understanding of invasive species distribution around the world
- > 2.2 million records and 22,906 of these records are from Ontario (as of April 2015)





# www.eddmaps.org/Ontario

## EDD MapS Ontario

Early Detection & Distribution Mapping System



[About](#) | [Partners](#) | [Contact](#)

Welcome:

Alison Kirkpatrick, Ontario Federation of Anglers and Hunters

[Report Sightings](#) [Distribution Maps](#) [Species Information](#) [Queries and Tools](#) [Training](#) [My EDDMapS](#)

[sign out](#)



### Highlighted Species



5396782

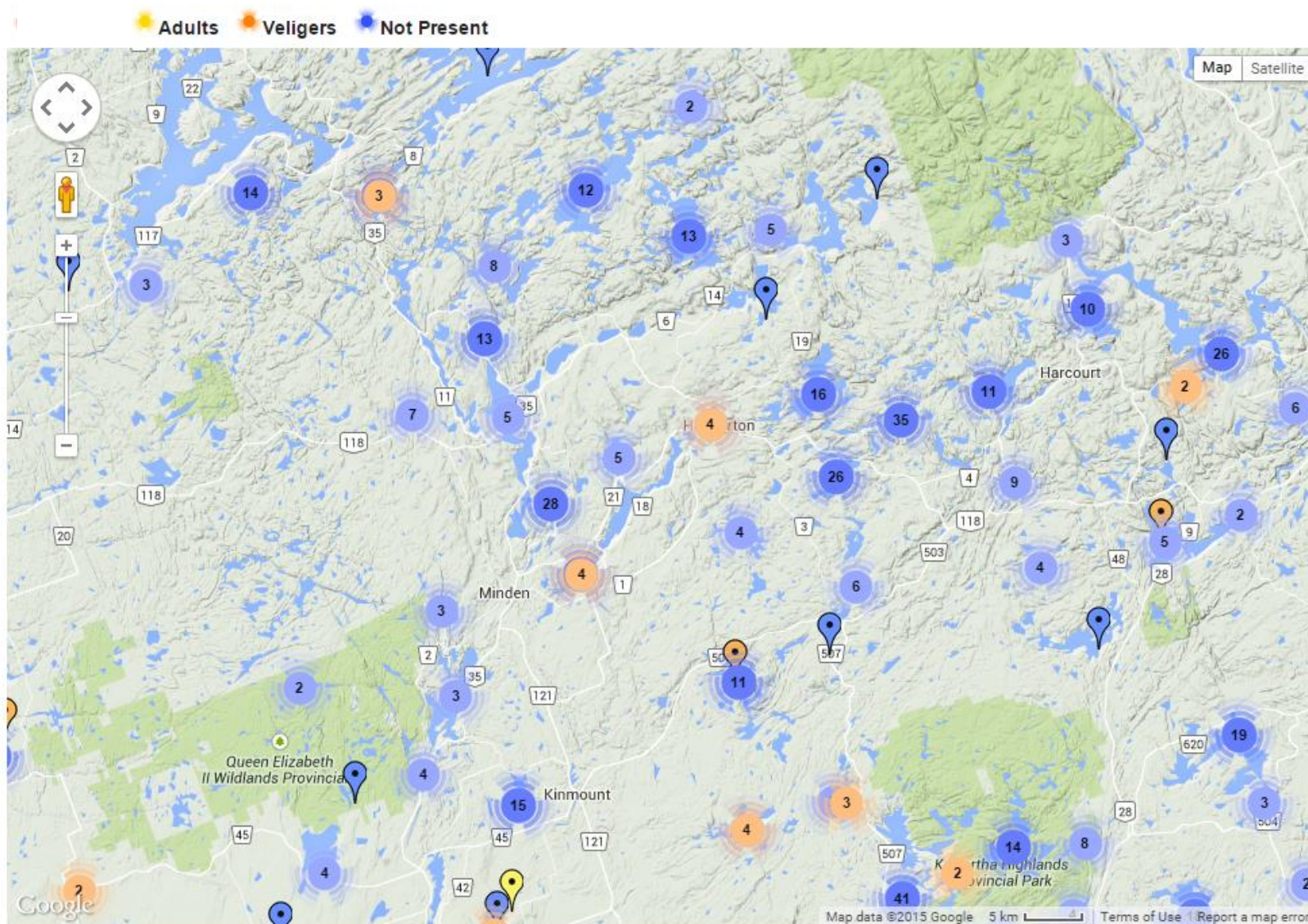
fanwort  
*Cabomba caroliniana*



## *Dreissena polymorpha* (Pallas)

Load Time: 3 ms

[XLS](#) [Shapefile](#)

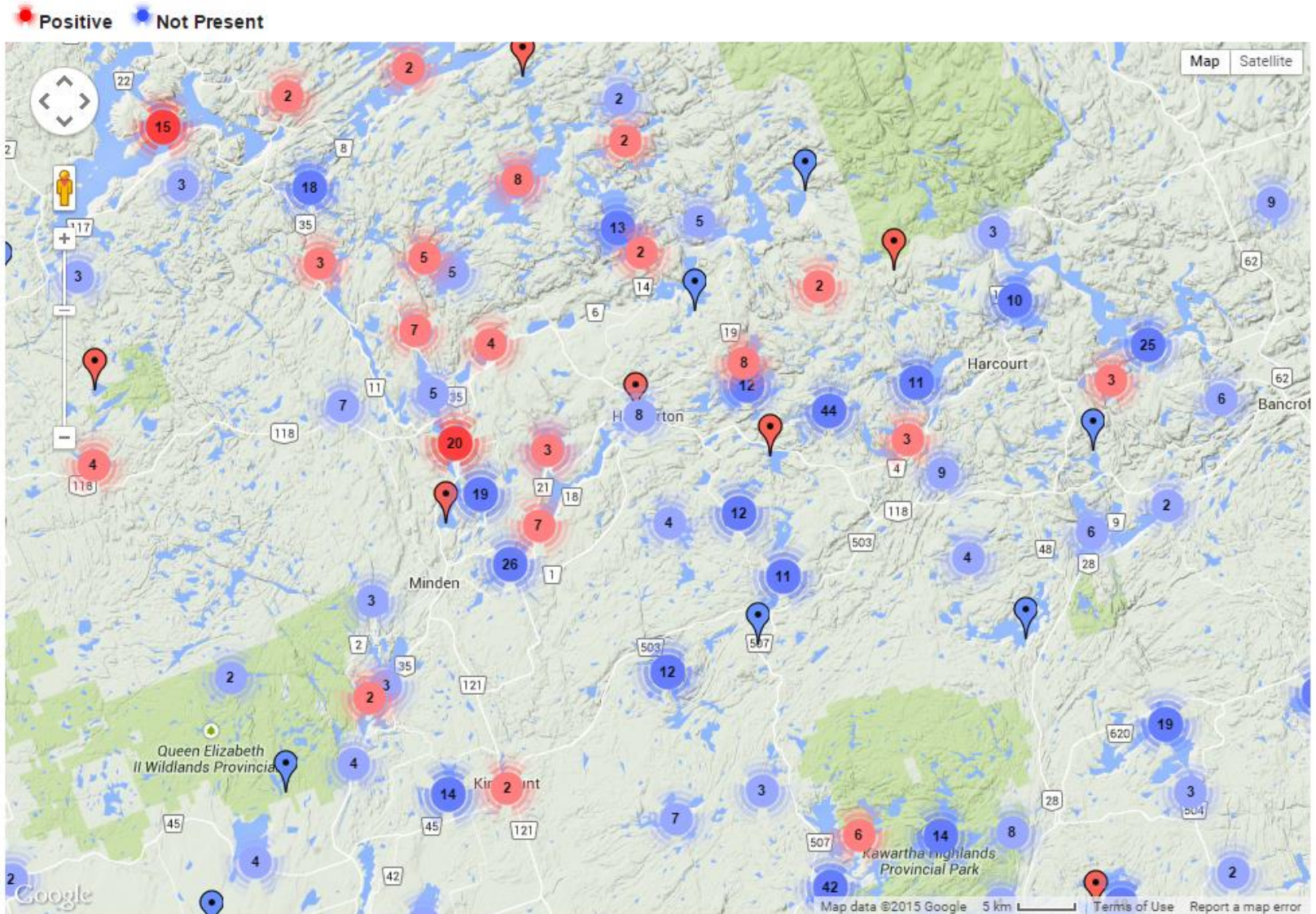




## *Bythotrephes longimanus* Leydig, 1860

Load Time: 0 ms

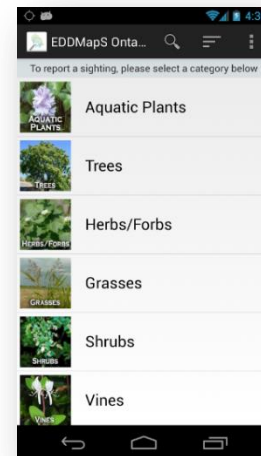
[XLS](#) [Shapefile](#)





# EDDMapS Ontario

- EDDMapS Ontario brings the power of EDDMapS to your Apple or Android device
- Visit the Google Play store or Apple iTunes App store to download it free (wifi preferred)
- Reports are uploaded directly to EDDMapS
- Same verification process as the web reports



# Invading Species Watch Program

- Established in 1998 in partnership with the Ministry of Natural Resources and Forestry
- Free, volunteer based lake monitoring program
- Initiated to assist cottagers and lake residents in detecting aquatic invasive species



# Invading Species Watch Program - Goals

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- One of many initiatives of the Invading Species Awareness Program
- Program was aimed to:
  - establish a volunteer network to track the spread of zebra mussels and spiny water flea in Ontario waters
  - increase local awareness of aquatic exotic species and
  - encourage greater public involvement in preventing their spread.

Since 1998, Over 600 lakes have been sampled!





# How do I Get Involved?

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- Call the Invading Species Hotline — 1-800-563-7711 and see if your lake has been sampled before

- Check your schedule and see what dates work for you, and if there is a kit available



# Invading Species Watch Program

- Volunteers receive monitoring kit and protocol via mail
- Kit includes:
  - Plankton haul net
  - marked & weighted rope
  - Wash bottle
  - Sample log sheets
  - Thermometer
  - Pencil(s) & zip ties
  - Ziplock bags
  - Sample bottles (3) & labels
- Volunteers need to purchase rubbing alcohol



# Invading Species Watch Program

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## The Monitoring Protocol

### 1. Choosing Sampling Sites

- High Traffic Areas
- Deep locations
- Adjacent basins
- Wind Currents

### 2. When to Collect Your Samples

- As soon as possible!
- Weather conditions





# Invading Species Watch Program

## 3. Collecting Your Samples

- Safety First!
- Sampling Log Sheets
- Bottle Labels

## 4. Taking Samples — Plankton Tow Net

- **Vertical Haul Method**
  - Water depth equal or greater than 9 m
- **Horizontal Haul Method**
  - Water depth less than 9 m



# Invading Species Watch Program

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## 5. Back on Shore

- Preserve your samples
  - 2 parts rubbing alcohol:1 part sample
- Equipment Maintenance and Disinfection
- Forwarding the kit and samples



# Invading Species Watch Program

## 6. Getting Results!

- Action Plans
- Awareness
- Annual Report

**2013**

**Invading Species Watch Program  
Annual Report**



**Ontario Federation of  
Anglers and Hunters  
2013**





# Invading Species Watch Monitored Waterbodies

- ★ 2013 First Year Monitored (11)
- 2013 Monitored (104)
- Historically Monitored (626)
- MNR Districts



Data provided by: EDDMapS Ontario. 2013. Early Detection & Distribution Mapping System for Ontario. The University of Georgia – Centre for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org/Ontario/>; last accessed April 15, 2014

Projection: Lambert Conformal Conic  
Datum: North American Datum 1983

Map Designed and Produced by: Alison Kirkpatrick, Monitoring and Information Management Specialist, Invasive Species Awareness Program, Fish and Wildlife Department, Ontario Federation of Anglers and Hunters, Peterborough, Ontario – April 15, 2014

Note: The map point data is based on records contained in the EDDMapS database, Centre for Invasive Species and Ecosystem Health, University of Georgia, compiled from various sources - April 15, 2014. This map is illustrative only. Do not rely on it as being a precise indicator of features. Do not rely on this map as a definitive species distribution, as it is subject to change based on the confirmation of additional sightings. This map may contain cartographic errors or omissions.

1:6,000,000

0 40 80 160 240 320 400 Km



ONTARIO'S  
**INVADING SPECIES**  
AWARENESS PROGRAM

[www.invadingspecies.com](http://www.invadingspecies.com) • Invasive Species Hotline 1-800-563-7711



# Ontario Distribution of Zebra Mussel

- 2013 ISW Veligers Confirmed (29)
- ★ 2013 ISW 1st Occurrence of ZM Veligers (5)
- 2013 ISW Monitored Not Present\* (92)
- ZM Veligers Historically Confirmed (173)
- ZM Adults Historically Confirmed (109)
- ▨ Widespread Distribution Lakes
- MNR Districts



Ontario



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\*The "Monitored Not Present" data is accurate based on the year in which sampling occurred.


0 100 200 400 Km





# Ontario Distribution of Spiny Water Flea

- ★ 2013 ISW 1st Occurrence (3)
- 2013 ISW Confirmed (12)
- 2013 ISW Monitored not Present\* (110)
- Historically Confirmed Records (94)
-  Widespread Distribution Lakes
-  MNR Districts

 Ontario

Data provided by: EDDMapS Ontario. 2013. Early Detection & Distribution Mapping System for Ontario. The University of Georgia – Centre for Invasive Species and Ecosystem Health. Available online at <http://www.eddmaps.org/Ontario/>; last accessed April 15, 2014

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# Why Monitoring Is Important

- Since 1998, over 600 lakes have been tested
- In 2013, 130 lakes were monitored
  - 3 new occurrences for spiny waterflea
  - 5 new occurrences for zebra mussels
- Allows you to see what invasive species are present in your lake
- Can see other lakes nearby and prevent entry through education
- All data is entered into EDDMapS and accessible to public



# How You Can Get Involved!

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Invading Species Hotline 1-800-563-7711



Email [info@invadingspecies.com](mailto:info@invadingspecies.com)

Visit [www.invadingspecies.com](http://www.invadingspecies.com)

[www.eddmaps.org/Ontario](http://www.eddmaps.org/Ontario)



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# Questions?



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