

Natural Heritage Systems Planning

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ENGINEERING PLANNING ENVIRONMENTAL CONSULTANTS



**Other Natural Heritage
Planning Tools**

How?

Some provincial guidance on the identification of natural heritage systems can be found in:



Other Provincial Guidelines

<https://www.ontario.ca/page/natural-heritage-planning-resources-municipal-planning>



The screenshot shows the Ontario.ca website with a dark header. On the left is the Ontario logo. The search bar contains the text "natural heritage guidelines". To the right of the search bar are links for "français" and "MENU". The main content area features a large heading: "Natural heritage planning resources for municipal planning". Below the heading is a descriptive text: "Provincial plans, policies and guidance materials ensure that municipal planners sustain and protect Ontario's natural heritage resources." A horizontal line separates this from the list of resources.

Natural heritage planning resources for municipal planning

Provincial plans, policies and guidance materials ensure that municipal planners sustain and protect Ontario's natural heritage resources.

- Ecological Land Classification System
- Significant Wildlife Habitat Ecoregional Criteria Schedules
- Significant Wildlife Habitat Guidelines
- Significant Wildlife Habitat Mitigation Support Tool
- Significant Wildlife Habitat References
- Natural Heritage System Area (NHSAREA) Data Set
- Natural Heritage Methodology

Ministry Publications



Survey Protocol for Ontario's Species at Risk Snakes

December 2016



Ontario Ministry of Natural Resources and Forestry



Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario

April 2016



Written by Kari Gunson, David Seburn, Julia Kintsch and Joe Crowley

ontario.ca/speciesatrisk



ORMCP Technical Paper Series

1. [Identification of Key Natural Heritage Features](#)
2. [Significant Wildlife Habitat](#)
3. [Supporting Connectivity](#)
4. [Landform Conservation](#)
5. [Identification and Protection of Vegetation Protection Zones for Areas of Natural and Scientific Interest \(ANSI, Life Science\)](#)
6. [Identification of Significant Portions of Habitat for Endangered, Rare and Threatened Species](#)
7. [Identification and Protection of Significant Woodlands](#)
8. [Preparation of Natural Heritage Evaluations for all Key Natural Heritage Features](#)
9. [Watershed Plans](#)
10. [Water Budgets](#)
11. [Water Conservation Plans](#)
12. [Hydrological Evaluations for Hydrologically Sensitive Features](#)
13. [Subwatersheds - Impervious Surfaces](#)
14. [Wellhead Protection - Site Management and Contingency Plans](#)
15. [Recreation Plans and Vegetation Management Plans](#)
16. [Sewage and Water System Plans](#)
17. [Stormwater Management Plans](#)



Ontario



français

 MENU

Natural Heritage Information Centre

Learn about Ontario's conservation data centre and how it tracks the province's biodiversity.

About the centre

Natural Heritage Information Centre staff members conduct research and surveys in the field for priority species and areas across Ontario. The centre collects, reviews, manages and distributes information for:

- species of conservation concern
- rare and exemplary plant communities
- wildlife concentration areas
- natural areas

We work with other government and non-government organizations to advance our understanding of biodiversity, natural heritage and species conservation in Ontario.

A large network of conservation partners all across Ontario sends us information for safe keeping and to add to the provincial record. We also rely on dedicated individuals like you to [report your observations](#).

Related

- [Report rare species \(plants and animals\)](#)
- [Get natural heritage information](#)
- [Natural heritage methodology](#)
- [Make-A-Map: Natural Heritage Areas application](#)
- [Natural Heritage Information Centre Newsletter 2015](#)

http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US

Ministry of Natural Resources and Forestry
Make A Map: Natural Heritage Areas

Looking for a Park, Reserve or Wetland? Enter the name Français

About Bookmarks Map Layers Find Information Markup & Printing Measure

About Zoom In Pan Zoom Out Initial View Previous Extent Next Extent Help

About

I want to...

Make a Map: Natural Heritage Areas

Please note: The NHIC functionality can be found in the "Find Information" tab, "Find" button. All attributes for a location can be retrieved using this tool. Once you have retrieved NHIC data, click on a row to view species, natural areas and plant communities.

The Make a Map: Natural Heritage Areas mapping application displays some of Ontario's natural heritage information, such as wetlands, woodlands, provincial parks, and Natural Heritage Information Centre data. The application can show planning areas and designations for provincial plans such as the Niagara Escarpment Plan. It also displays topographic base information such as roads, rivers and municipal boundaries. You can zoom in and out, turn information on and off, identify features, and print a map of the displayed information along with your own added text. For more information about this application and the data used to support it, please view the following link <http://www.ontario.ca/environment-and-energy/make-natural-heritage-area-map>



Powered By Land Information Ontario | [ACCESSIBILITY](#) | [PRIVACY](#) | [IMPORTANT NOTICES](#) | © QUEEN'S PRINTER FOR ONTARIO, 2014 | [IMAGERY COPYRIGHT NOTICES](#)



Ministry of Natural Resources and Forestry

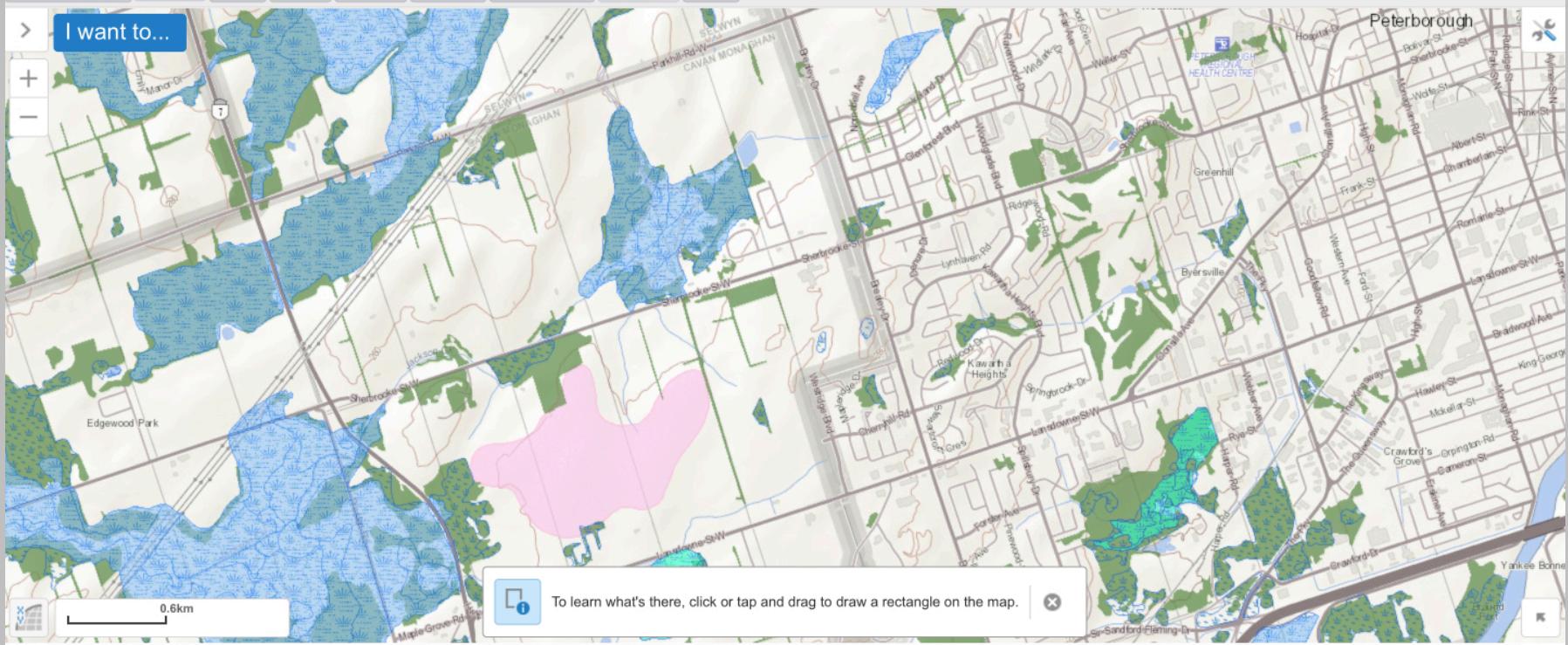
Make A Map: Natural Heritage Areas

[[Français](#)]

Looking for a Park, Reserve or Wetland? Enter the name

About Bookmarks Map Layers **Find Information** Markup & Printing Measure

Search By Location Find ... Pan Zoom In Zoom Out Initial View Previous Extent Next Extent Help



Data Sensitivity

Access sensitive or detailed data

Sensitive and detailed data are only distributed to individuals and agencies that require it to:

- inform resource management
- inform land use plans
- advance scientific studies
- advance the understanding of natural heritage

To access sensitive or detailed data on biodiversity, you will need a Sensitive Data Use Licence. To get a licence, you must:

- demonstrate a legitimate need to know
- complete data sensitivity training

Email the [NHIC](#) or phone us at 1-705-755-2159 to inquire about a Sensitive Data Use Licence.



The image shows the top navigation bar of the Ontario government website. It features the Ontario logo (a stylized bird icon), a search bar with a magnifying glass icon, and language links for "français" and "MENU".

Species at risk

The plants and animals at risk of disappearing from Ontario, and how we protect and recover them.

Species at Risk in Ontario list

The official list of endangered, threatened, special concern and extirpated animals and plants in Ontario, including their status.

Grants for protecting species at risk

How to get money to help protect and recover plants and animals that are in danger of disappearing in Ontario. This includes the Species at Risk Stewardship Fund.

Comment on protecting species at risk

How to give your input on draft documents related to protecting animals and plants in danger or at risk of disappearing from Ontario.

Guides and resources

Standards, guidelines, reference materials and technical resources related to the Endangered Species Act and its regulations.

<https://www.ontario.ca/environment-and-energy/species-risk-guides-and-resources>



Ontario

How can we help you?

Search

contact us | français

Popular +

Species at risk guides and resources

Standards, guidelines, reference materials and technical resources related to the Endangered Species Act and its regulations.

Searchable library of resources

The toolbox is an electronic library of standards, guidelines, best management practices and technical resources that may assist you in meeting the requirements of the Endangered Species Act and its regulations.

The toolbox is for the public, stakeholders, proponents, and government. It will expand as new tools and new information become available.

Email us about other resources for the toolbox

Search list

Resource Title/Author	Species - Common Name	Sector	Regulation	Activity	Species Group
A Guide to Road Ecology in Ontario Ontario Road Ecology Group (Toronto Zoo)					
		Environmental Stewardship (e.g. non-profit); Transportation (Roads & Water Crossing)	~	Assessment of adverse effects to species at risk and their habitat; Avoidance and mitigation of adverse effects; Bridge and culvert construction, repair, maintenance and replacement; Transportation (Roads and Water Crossings) development, maintenance or decommissioning	Amphibians; Reptiles; Mammals; Birds
A synthesis of operational mitigation studies to reduce bat fatalities at wind energy facilities in North America Arnett, E. B., G. D. Johnson, W. P. Erickson, and C. D. Hein	Northern Myotis (Bat); Little Brown Myotis (Bat) <i>Myotis lucifugu; Myotis septentrionalis</i>	Electric Power Generation	Wind facilities	Electric Power Generation (Wind); Avoidance and mitigation of adverse effects	Mammals



How can we help you?

Search

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Popular +

Species at risk in Ontario List

The official list of endangered, threatened, special concern and extirpated animals and plants in Ontario, including their status.

Search list

search

Image	Species Grouping	Common Name	Scientific Name	Status
	Birds	Acadian Flycatcher	<i>Empidonax virescens</i>	endangered
	Mammals	Algonquin Wolf	<i>Canis sp.</i>	threatened
	Amphibians	Allegheny Mountain Dusky Salamander	<i>Desmognathus ochrophaeus</i>	endangered
	Mammals	American Badger	<i>Taxidea taxus</i>	endangered

Recommended for you

[How species at risk are protected](#)

[Species at risk by area](#)

[How to comment on protecting species at risk](#)

[How to get an Endangered Species Act permit or authorization](#)

[Intro to Ses](#)



Acadian flycatcher

Scientific name: *Empidonax virescens*



Status

Endangered

"Endangered" means the species lives in the wild in Ontario but is facing imminent extinction or extirpation.

Date added to the Species at Risk in Ontario List

The Acadian Flycatcher was assessed as endangered when the Endangered Species Act took effect in 2008.

[Assessment Report](#)

What it looks like

The Acadian Flycatcher has an olive-green crown, back and tail with a pale whitish throat and breast.

The most prominent feature of this bird is the bold white ring around the eye, and two whitish horizontal bars on the wing.

The beak is short but wide-based, allowing a big opening for snatching insects out of the air.

The best way to identify the Acadian from similar looking flycatchers is its explosive song, often interpreted as "peet-sah", with a strong emphasis on the first syllable.

Where it lives

It is typically found in mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees. The nest is placed near the tip of a lower limb on a tree, and is loosely woven, with strands of plant material hanging down.

In Canada, the Acadian Flycatcher nests only in southwestern Ontario, mostly in large forests and forested ravines near the shore of Lake Erie.

Where it's been found in Ontario

Related

[How species at risk are protected](#)

[Species at risk in Ontario List](#)

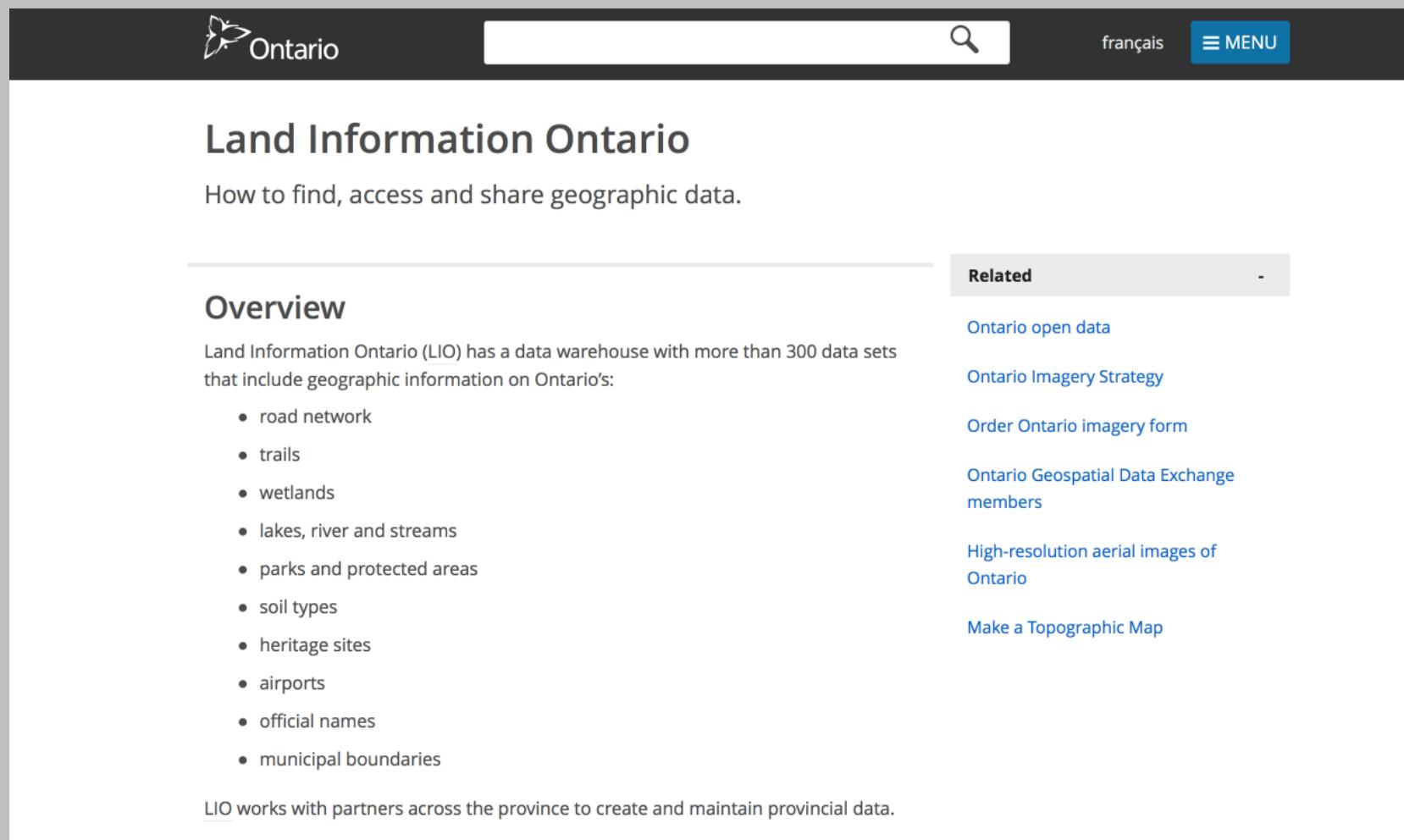
[Find species at risk by area](#)

[How to comment on protecting species at risk](#)

[How to get an Endangered Species Act permit or authorization](#)

Other Map Tools

<https://www.ontario.ca/page/land-information-ontario>



The screenshot shows the homepage of the Land Information Ontario website. The header features the Ontario logo, a search bar, and language links for français and English. A blue 'MENU' button is also present. The main title 'Land Information Ontario' is prominently displayed, followed by a subtitle 'How to find, access and share geographic data.' Below this, a section titled 'Overview' provides information about the data warehouse and a list of geographic data sets. To the right, a 'Related' sidebar lists several links: 'Ontario open data', 'Ontario Imagery Strategy', 'Order Ontario imagery form', 'Ontario Geospatial Data Exchange members', 'High-resolution aerial images of Ontario', and 'Make a Topographic Map'.

Land Information Ontario

How to find, access and share geographic data.

Overview

Land Information Ontario (LIO) has a data warehouse with more than 300 data sets that include geographic information on Ontario's:

- road network
- trails
- wetlands
- lakes, river and streams
- parks and protected areas
- soil types
- heritage sites
- airports
- official names
- municipal boundaries

LIO works with partners across the province to create and maintain provincial data.

Related

- [Ontario open data](#)
- [Ontario Imagery Strategy](#)
- [Order Ontario imagery form](#)
- [Ontario Geospatial Data Exchange members](#)
- [High-resolution aerial images of Ontario](#)
- [Make a Topographic Map](#)

<https://www.registrelep-sararegistry.gc.ca/default.asp?lang=en&n=24F7211B-1>

Government of Canada Gouvernement du Canada

Canada.ca | Services | Departments | Français

Species at Risk Public Registry



Canada

Search

Our Approach SARA Components Get Involved Advanced Search A to Z Species Index

Welcome to the Species at Risk Public Registry

The Public Registry is your source for news, information, and documents related to species at risk in Canada. This web site has been designed to help you better understand Canada's approach to protecting and recovering species at risk, learn about species at risk and what's being done to help them, and get involved in decision making and recovery activities.

[About the Public Registry](#)

The Public Registry fulfills the requirement under the Species at Risk Act (SARA) for the Minister of the Environment and Climate Change to establish a public registry for the purpose of facilitating access to SARA-related documents.

On this site, you can:

- Review [Canada's strategy](#) and [legislation](#) for protecting and recovering species;
- Submit a [comment](#) on a document open for public consultation or [sign up to our email newsletter](#) to stay informed;
- Learn about [funding](#) or [apply for a permit](#) to carry out activities affecting species at risk.

Species Profile

Spotted Wolffish



Tiger Salamander
American Badger jacksonisubspecies
Cryptic Paw Lichen
Swift Fox
Spotted Wolffish

« » II Pause

Photo © Erling Svensen

[Full description of Spotted Wolffish](#)

Watershed Report Cards

<http://conservationontario.ca>

Nottawasaga Valley Conservation Authority

2013

Nottawasaga Valley Watershed Health Check

2013 Health Check Results:
Forest Conditions: Good
Wetland Conditions: Good
Stream Health: Poor
Groundwater Health: Very Good

This Health Check provides an overview of forest, wetlands, stream and groundwater health within the NVCA watershed. It identifies stewardship priorities and programs to improve environmental health. Healthy ecosystems sustain healthy communities – future challenges and opportunities for the watershed community are outlined. More detailed descriptions can be found in individual Subwatershed Health Checks.

The NVCA is one of 36 Conservation Authorities across Ontario and is a proud member of Conservation Ontario.

The watershed is approximately 3,700 km², with jurisdiction in 18 municipalities and is the source of watercourses that flow into Georgian Bay at Wasaga Beach, Collingwood and Severn Sound. It includes 35 km of Georgian Bay shoreline along the Wasaga Beach and Collingwood waterfront.

The watershed is shaped like a bowl – the Niagara Escarpment (west), Oak Ridges Moraine (south) and Simcoe Uplands/Oro Moraine (north and east) represent the height of land along the edges of the bowl. Streams arise from these high areas and flow down slope into the Simcoe Lowlands (the bottom of ancient Lake Algonquin), which forms the bottom of the bowl. These lowlands extend to Wasaga Beach and Collingwood (a “chip” at the edge of the bowl) which allows the Nottawasaga River and Blue Mountain streams to reach Georgian Bay.

The NVCA watershed is largely rural in character, though urban areas such as Barrie, Alliston, Shelburne, Wasaga Beach and Collingwood continue to experience significant growth. Land use is dominated by agriculture; however, compared to many areas in southern Ontario, natural areas are a significant part of the landscape. Forests and wetlands are generally found in areas that are unsuitable for farming – where soils are too wet, dry, rocky or steep.

Physiographic Region

Carden Plain	Horseshoe Moraines	Ore Moraine	Simcoe Lowlands
Dundalk Till Plain	Niagara Escarpment	Peterborough Drumlin Field	Simcoe Uplands
Elmvale Moraine	Oak Ridges Moraine	Schomberg Clay Plains	Subwatershed Boundary

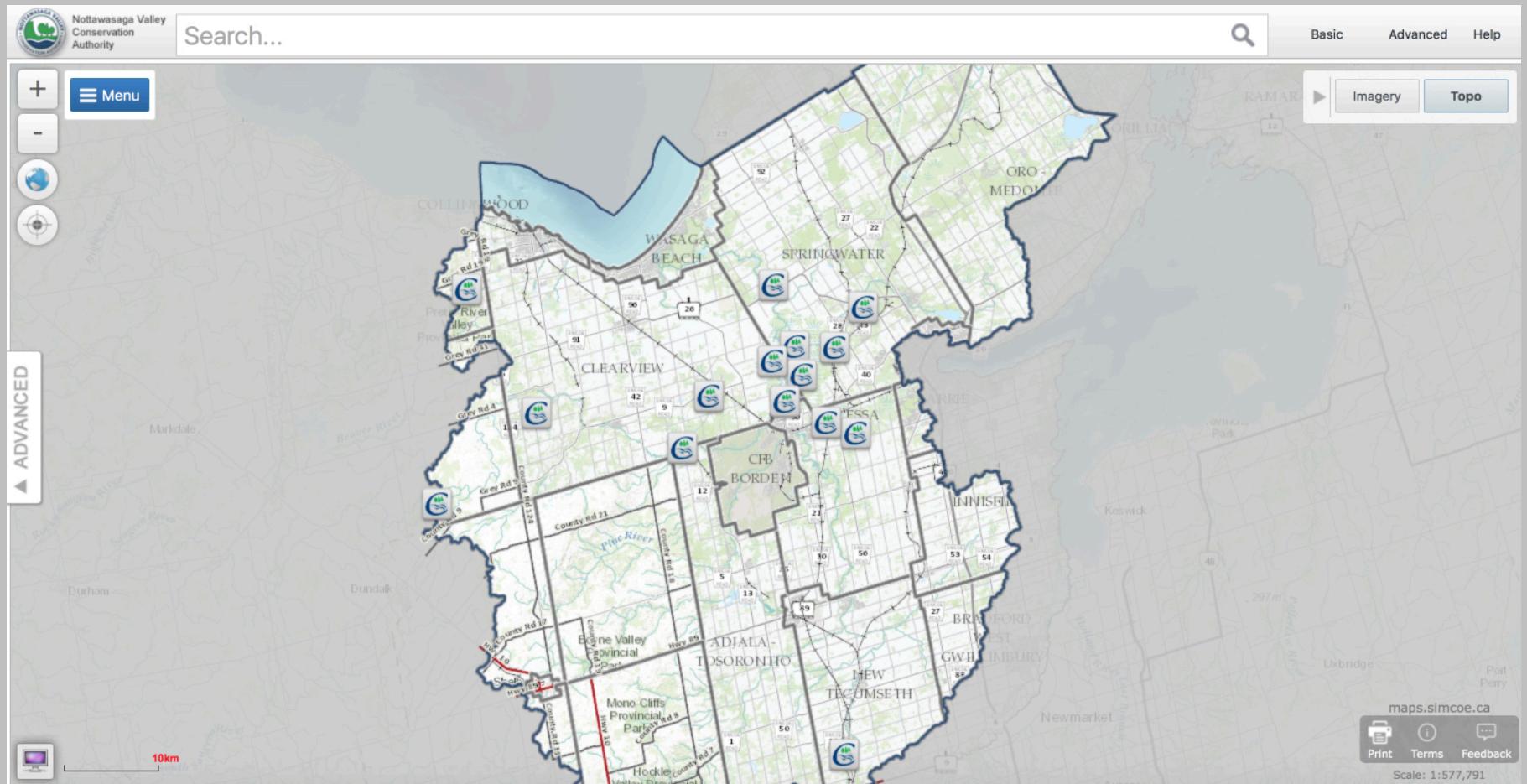
The Nottawasaga Valley Conservation Authority is a public agency dedicated to the preservation of a healthy environment through specialized programs to protect, conserve and enhance our water, wetlands, forests and lands. This Health Check describes the conditions of natural features within the subwatershed, as well as stewardship actions to help maintain the area. Health Checks for the NVCA watershed and subwatersheds can be found online: www.nvca.on.ca

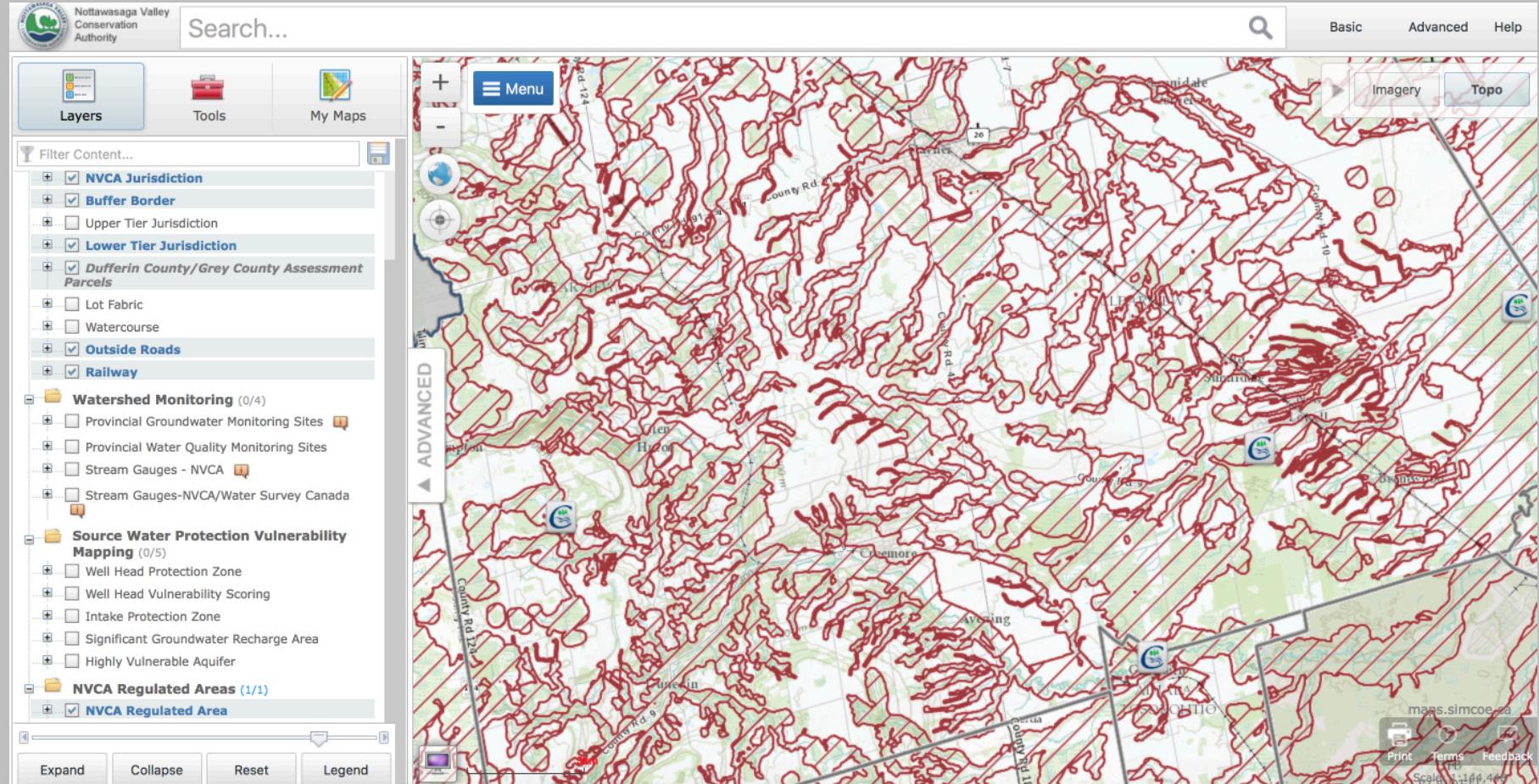
Watershed Indicators rating scale:

very good	good	fair	poor	very poor
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Interactive CA Maps

<https://maps.simcoe.ca/nvca/>





Conservation Ontario Library

Home About Us What We Do Conservation Areas Library Contact

Text Size

Library Home Search Library

Categories

- Accessibility (5 Documents)
- Agriculture (4 Documents)
- Aquatics and Fisheries (26 Documents)

Recent Items

- Conservation Ontario's Comments on "A Wetland Conservation Strategy for Ontario 2016-2030" (EBR# 012-7675)
- Conservation Ontario's Comments on "A Wetland Conservation Strategy for Ontario 2016-2030" (EBR# 012-7675)
- Conservation Ontario's Comments on "A Wetland Conservation Strategy for Ontario 2016-2030" (EBR# 012-7675)
- Conservation Ontario's Comments on "Regulation of invasive species under the Ontario Invasive Species Act, 2015" (EBR# 012-8310)
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Natural Heritage - 38

Aquatics and Fisheries - 26

Climate Change - 13

Green Energy - 18

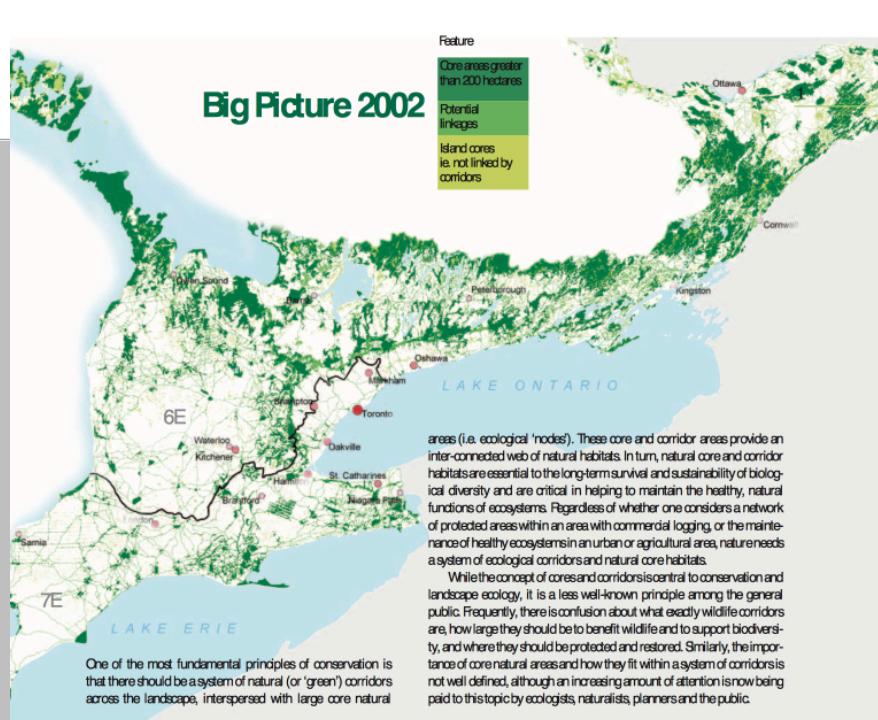
Watershed Management - 23

Natural Hazards - 18

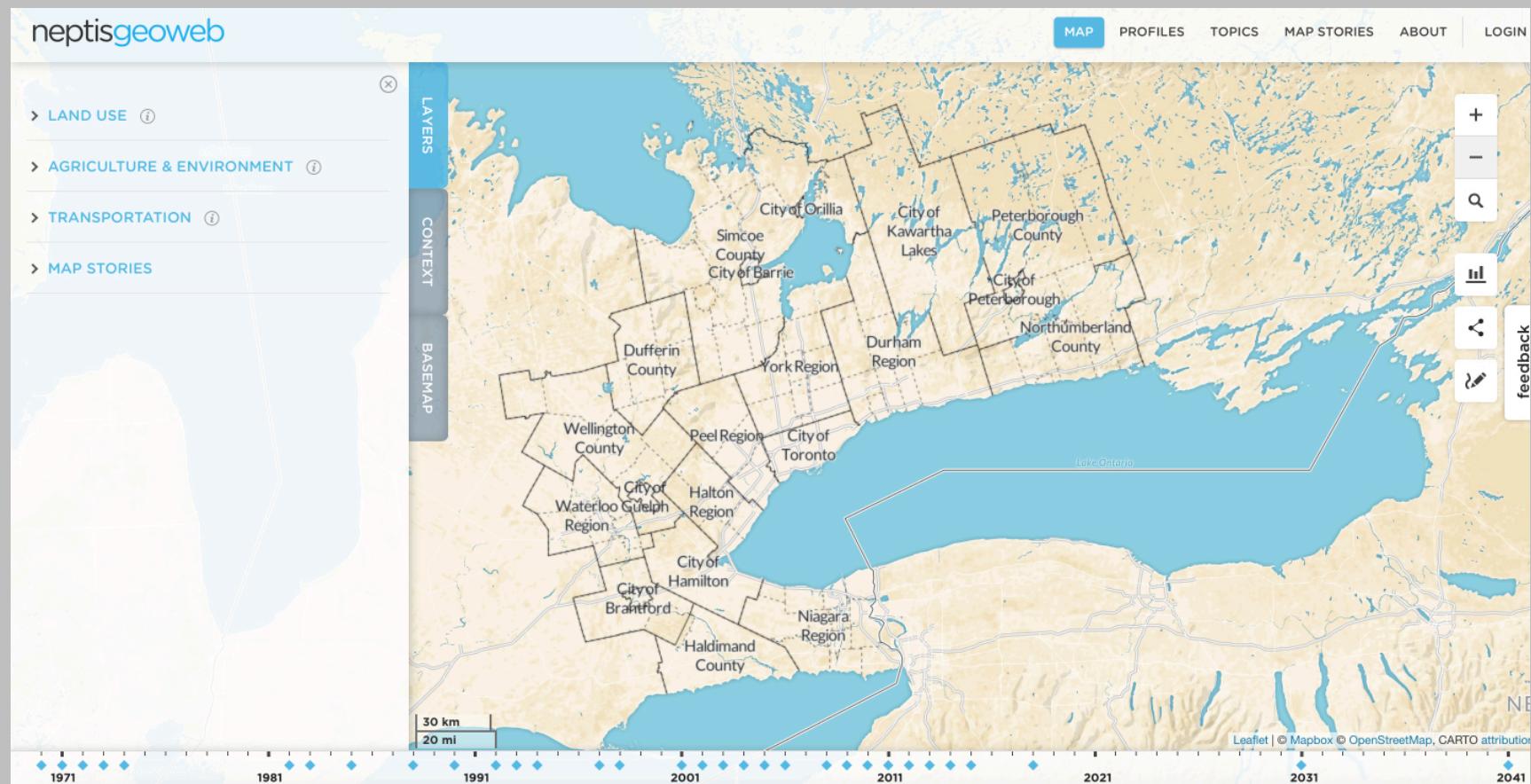
Big Picture Exercises

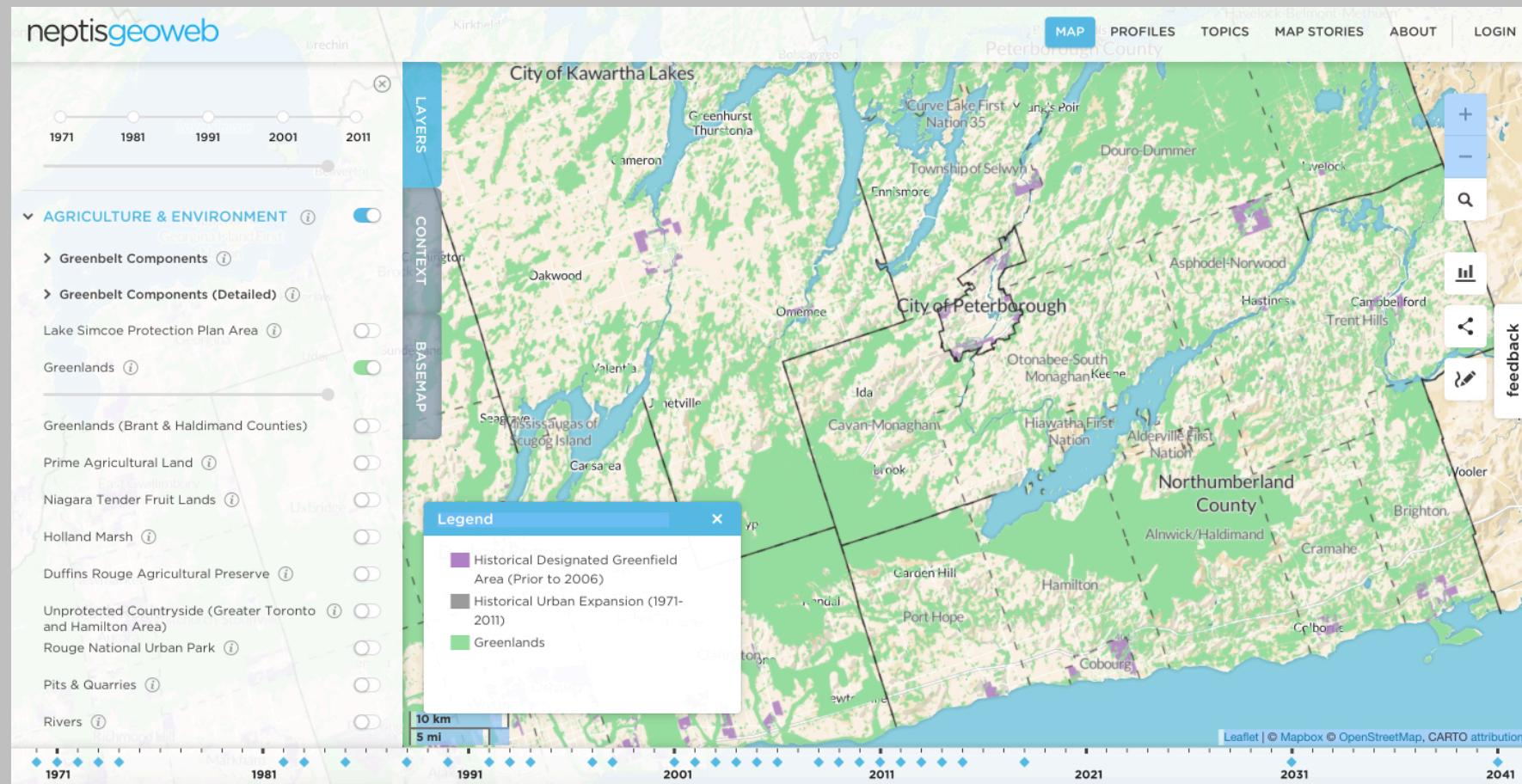


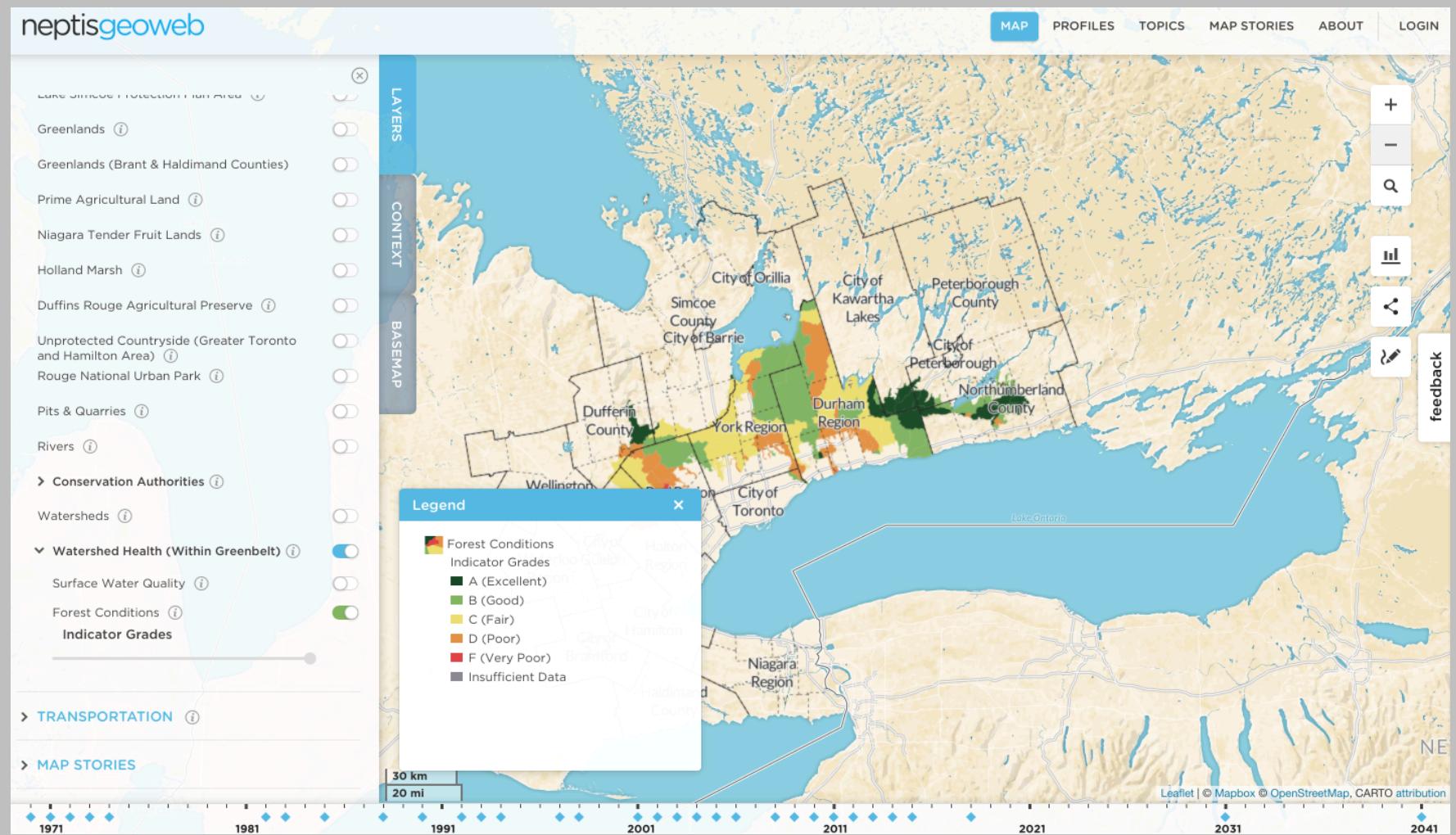
Cores and Corridors—The Importance of a Green System in Southern Ontario



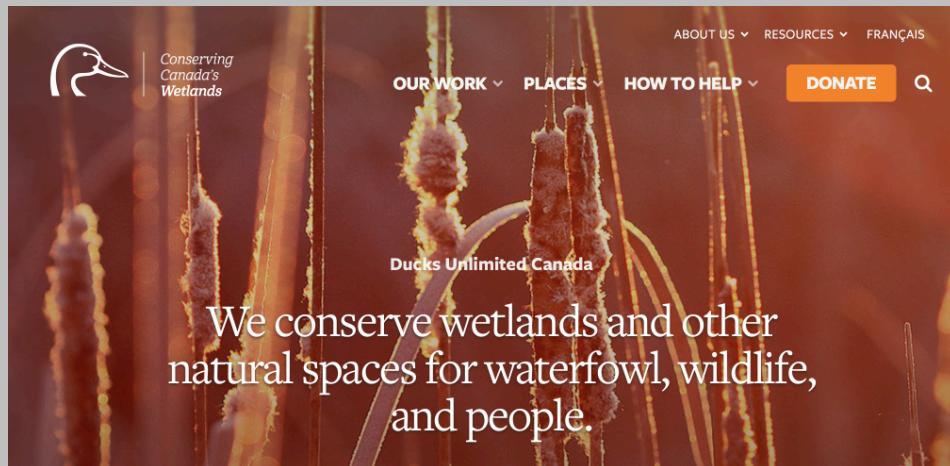
<http://www.neptisgeoweb.org>



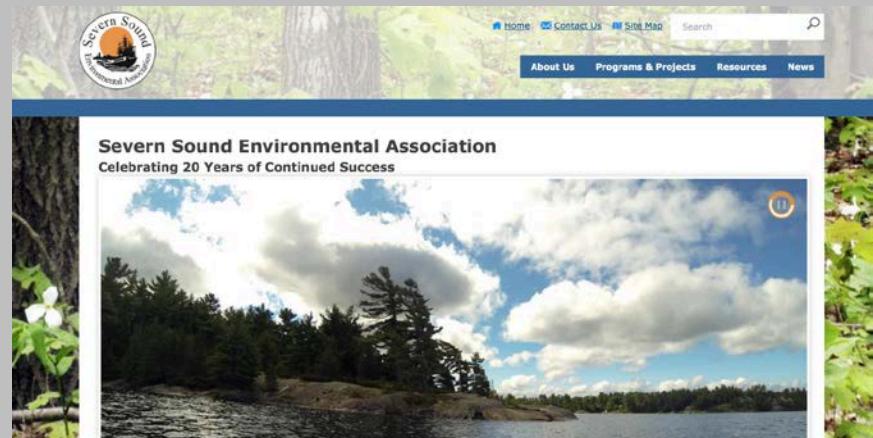




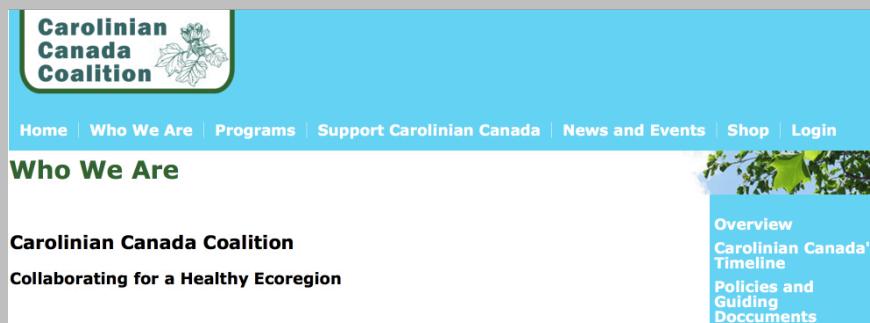
Other NGOs



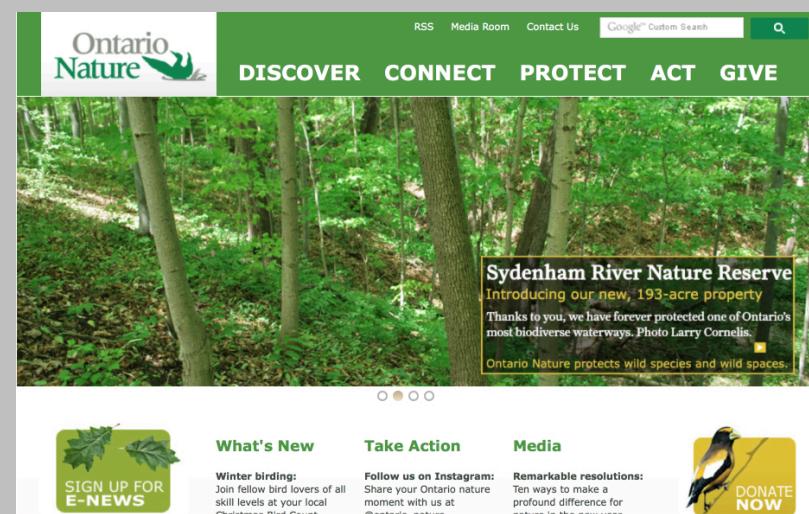
The Ducks Unlimited Canada website features a dark, moody background image of a wetland at sunset. In the top left corner is a white silhouette of a duck. The top navigation bar includes links for 'ABOUT US', 'RESOURCES', and 'FRANÇAIS', along with 'DONATE' and a search icon. The main headline reads: 'We conserve wetlands and other natural spaces for waterfowl, wildlife, and people.'



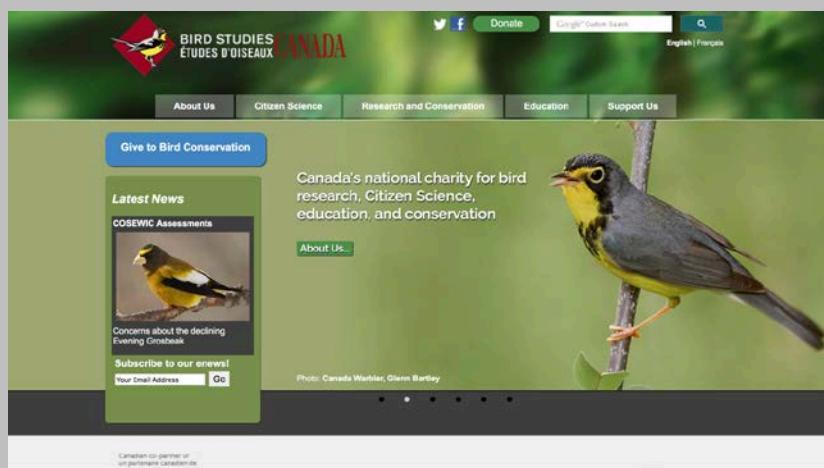
The Severn Sound Environmental Association website has a light blue header with the organization's logo and navigation links for 'About Us', 'Programs & Projects', 'Resources', and 'News'. The main content area features a large, scenic photograph of a lake surrounded by forest under a blue sky with white clouds. The text 'Severn Sound Environmental Association' and 'Celebrating 20 Years of Continued Success' is overlaid on the image.



The Carolinian Canada Coalition website has a light blue header with the organization's logo and navigation links for 'Home', 'Who We Are', 'Programs', 'Support Carolinian Canada', 'News and Events', 'Shop', and 'Login'. The 'Who We Are' section features a sub-section titled 'Carolinian Canada Coalition' with the tagline 'Collaborating for a Healthy Ecoregion'. To the right, there is a sidebar with links for 'Overview', 'Carolinian Canada's Timeline', and 'Policies and Guiding Documents'.



The Ontario Nature website has a green header with the organization's logo and navigation links for 'RSS', 'Media Room', 'Contact Us', and a search bar. The main content area features a large photograph of a forest. A sidebar on the right highlights 'Sydenham River Nature Reserve' with text about protecting 193 acres of land. The bottom of the page includes sections for 'What's New', 'Take Action', and 'Media'.



The Bird Studies Canada website has a green header with the organization's logo and navigation links for 'About Us', 'Citizen Science', 'Research and Conservation', 'Education', and 'Support Us'. The main content area features a large photograph of a Canada Warbler. A sidebar on the left provides 'Latest News' about COSEWIC Assessments and concerns for the declining Evening Grosbeak. There is also a 'Give to Bird Conservation' button and a sign-up form for e-news.



Above: New DUC wetland restoration project in Tiny Township

Cleaning up Lake Simcoe and Georgian Bay, one wetland at a time

DUC has teamed up with Severn Sound Environmental Association, Nottawasaga Valley Conservation Authority, and Lake Simcoe Region Conservation Authority to further wetland conservation throughout the region. What have we been up to?

The Collaborative has worked with more than 75 landowners across the region to restore wetlands, enhance wildlife habitat and raise awareness about wetland values. From installing nest boxes and livestock exclusion fencing, to full wetland restoration efforts, the program completed nine projects in its first year.

Now entering our second year, we're ready for another successful year putting wetlands back on the ground, and providing habitat for countless species. We still have funding available for interested landowners, so please contact us with your project ideas!

On top of getting our feet wet in the field, DUC has been busy on dry land talking to municipal councils, commenting on Official Plan reviews, and providing tools and resources to assist in planning. We've seen great examples of municipalities going above and beyond provincial policy to protect natural assets like wetlands (see Dufferin County's new Official Plan is good news for wetlands, on page 2), and we're looking forward to more in the coming year.

Our research program has also taken flight, with updated information on wetland loss in the Lake Simcoe and Georgian Bay region. Having a better understanding of what we've already lost and why will help efforts to protect and restore wetlands through municipal planning and conservation.

Conserving Georgian Bay's pristine wetlands

Did you know that Georgian Bay has some of the most pristine intact wetlands left in all the Great Lakes? It's true. However they are under increasing threat from a variety of pressures such as climate change, invasive species, changing water levels and development.

The Lake Simcoe Georgian Bay Wetland Collaborative is undertaking new research to better understand these emerging threats, map wetland loss and help to conserve these unique features for future generations. Stay tuned!



Contact Us

Do you have a great example of municipal leadership in natural heritage or just want to learn more? Contact us at:

Ducks Unlimited Canada
740 Huronia Road
Barrie, Ontario L4N 6C6
Phone: (705) 721-4444
Email: du_barrie@ducks.ca
ducks.ca/LSCB/WetlandCollaborative
facebook.com/LSCB/WetlandCollaborative



WITH GENEROUS SUPPORT FROM...

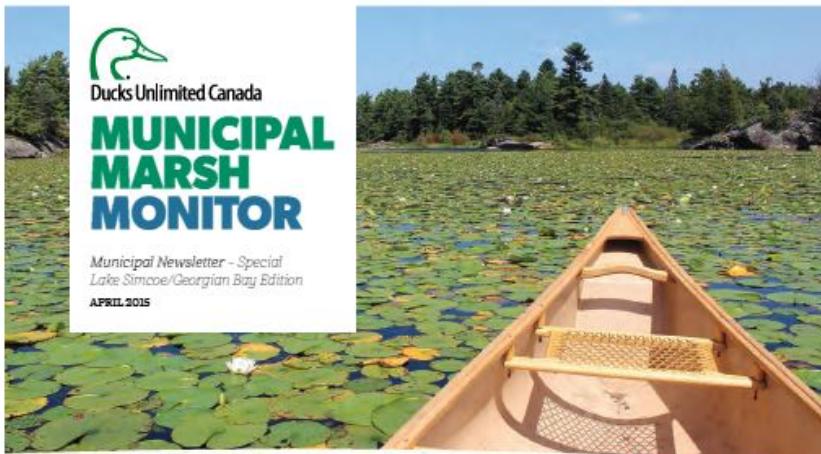


Lake Simcoe Region
conservation authority

 Environment Canada  Environnement Canada



26 A Publication of Ducks Unlimited Canada 27



Wetlands and municipalities

Land-use planning may be the single most important vehicle for the conservation of Ontario's natural areas. Municipalities with comprehensive and well-developed plans that include a balanced approach to development and conservation, are living proof that multiple stakeholders in a community can work together towards a sustainable future.

"We have not historically built infrastructure to take advantage of natural opportunities to mitigate against impacts of extreme weather... municipalities should be thinking about natural environments as part of their green infrastructure system."

- MAYOR JEFF LERMAN, CITY OF BARRIE

Going above and beyond

The Province of Ontario sets minimum standards for the protection of natural areas and their functions, but some municipalities implement innovative and practical solutions that go beyond the provincial 'call of duty'.

This newsletter celebrates municipalities leading the way on natural heritage, and provides tools, resources, and other key information to facilitate strong natural heritage planning.

Valuing nature

Conservation and restoration of natural heritage areas such as wetlands provides municipalities with services including cleaner water, drought prevention, flood impact reduction and benefits to the economy. They are also a key resource in adapting to a changing climate.

IN THIS ISSUE

The future of urban nature

What the 2014 PPS means for wetlands

Getting policy right, from the start

Conserving Georgian Bay's pristine wetlands

There are a tremendous number of resources available to provide background information and assist a municipality in development of a natural heritage system.

Don't discount the value of local and indigenous knowledge.



Photo: Michael Wynia

Citizen Science Tools

RSS Media Room Contact Us Google Custom Search

DISCOVER CONNECT PROTECT ACT GIVE

Home

Protect

Protect Wild Species and Wild Spaces

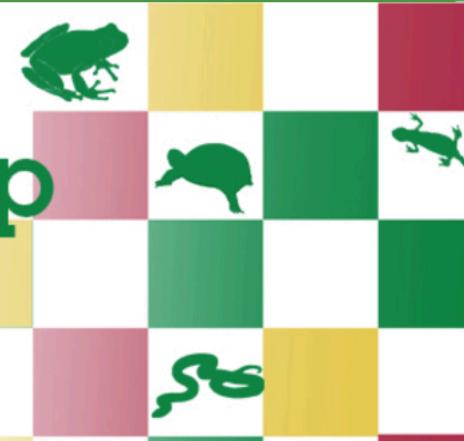
Habitat

Species

Ontario Reptile and Amphibian Atlas

- ▶ Species Listing
- ▶ Policies and Procedures
- ▶ Survey Guidelines
- ▶ Tips for Finding Reptiles and Amphibians
- ▶ Atlas FAQs
- ▶ Threats to Reptiles and Amphibians
- ▶ Legal Protection for Ontario's Reptiles and Amphibians
- ▶ Reptile and Amphibian Stewardship
- ▶ Non-native Species
- ▶ Backyard Frog Survey
- ▶ Atlas App
- ▶ Atlas Newsletter

Mind the Gap
#SubmitASighting



Home ▶ Protect ▶ Species ▶ Ontario Reptile and Amphibian Atlas

Ontario Reptile and Amphibian Atlas Program

The Ontario Reptile and Amphibian Atlas is a citizen-science project that tracks distributions and spatial trends of reptiles and amphibians across the province over time. The over-arching goal is to increase the collective knowledge base of reptiles and amphibians. Equally important, however, is the engagement of non-scientists of all ages and abilities, in all parts of the province, in nature study and conservation.

Reptiles and amphibians are experiencing global declines of 20 and 40 percent respectively. In Ontario, 75 percent of reptiles and 35 percent of amphibians are listed as nationally and provincially at-risk.

Report your sightings



Download our atlas app
(PDF, 2.9MB)

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DISCOVER CONNECT PROTECT ACT GIVE



Mind the Gap

#SubmitASighting

[Home](#) [Protect](#) [Species](#) [Ontario Reptile and Amphibian Atlas](#)

- Species Listing
- Policies and Procedures
- Survey Guidelines
- Tips for Finding Reptiles and Amphibians
- Atlas FAQs
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[Home](#) [Protect](#) [Species](#) [Ontario Reptile and Amphibian Atlas](#)

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(PDF - 2.6MB)

Report your sightings

We need volunteer citizen scientists of all levels to submit sightings of all reptile and amphibian species, not just the rare ones.



The app is currently not working. For the time being, please use our mobile-friendly [online form](#).

Required Information is in Red

Observer Full Name:

Observer Email:

Species: How many:

Photo: no file selected

Date of Observation: 24 Hour Time of Observation Hours Minutes

Location:
Either bring the red marker to where you made your observation OR enter in your coordinates in the top right corner of the map.

Accuracy (m):



Latitude: 45.46629592180436 Longitude: -63.20400474999997

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics | Terms of Use

[More info?](#) [Submit](#)

Reptiles and Amphibians of Ontario

[Turtles](#) | [Snakes](#) | [Lizard](#) | [Salamanders](#) | [Frogs and Toad](#)

Click on the picture or link to view a photo, range map and description of each species.

To view an interactive map of the known ranges of all reptile and amphibian species in Ontario, click [here](#).

Last updated June 2015

Turtles



Blanding's Turtle
(*Emydoidea blandingii*)



Eastern Box Turtle
(*Terrapene carolina*)



Eastern Musk Turtle
(*Sternotherus odoratus*)



Midland Painted Turtle
(*Chrysemys picta marginata*)

Earth Watch

ONTARIO REPTILE AND AMPHIBIAN ATLAS

Ontario Nature and partners initiated the atlas in 2009 to advance the study and conservation of Ontario's reptiles and amphibians.

Leopard frog



By the numbers

Number of submissions – more than **350,000** Number of observers – more than **3,000**



Number of observations for most reported species – **spring peeper**

65,052

Number of observers – more than **24**

The Ontario Nature reserve with the greatest number of reptile and amphibian species – Lost Bay

24

Number of observations for most reported species at risk – **snapping turtle**

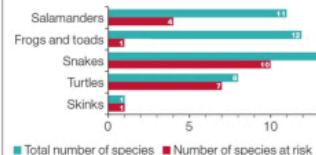
4,369

Number of observations for least reported species at risk – **Allegheny Mountain dusky salamander**

11

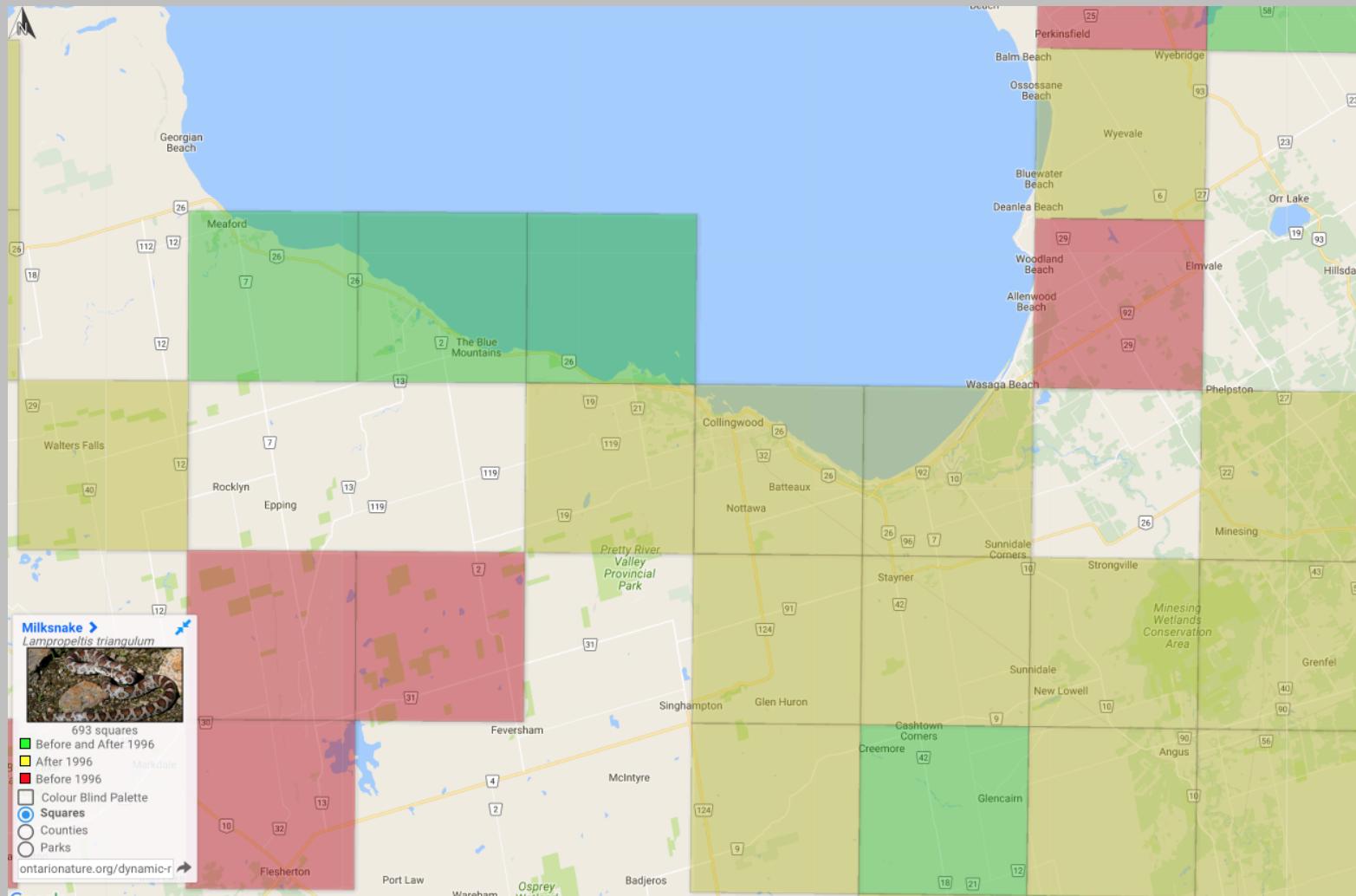


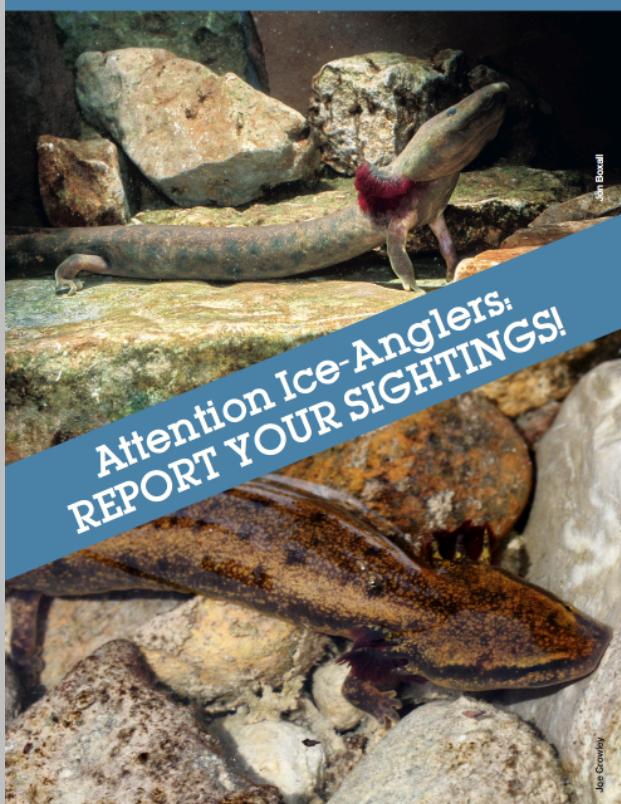
Who's at risk?



Eastern foxsnake

Ontario Nature relies on citizen scientists – people just like you – to submit observations. Get involved! ontariornature.org/atlas





**Does the “fish” you just caught have legs?
If so, it may be a mudpuppy - Ontario’s largest salamander.**

Report your sightings to the Ontario Reptile and Amphibian Atlas by taking a photo and sending it to atlas@ontarionature.org. Even better, download the atlas app at ontarionature.org/app to quickly and easily report all your species sightings.

Ontario Nature
A registered charity protecting Ontario’s
wild species and species since 1931
ontarionature.org

Directory of Ontario Citizen Science

Connecting great volunteers with great projects

Click to learn more



Search Projects

📍 1520 Queen St. East, Sault Ste. Marie, O...



✓ Kid Friendly!

\$ Free!

▢ No Commitment!

Algoma SwiftWatch

Help us conserve Chimney Swifts in Northern Ontario

Learn More

Get Involved

📍 Across Ontario



✓ Kid Friendly!

\$ Free!

▢ No Commitment!

Backyard Frogs

Report on the frogs calling in your neck of the woods

Learn More

Get Involved



Vernal Pool Search

"Help create a comprehensive map of Ontario's vernal pools"



Kid Friendly!



Free to Participate!



All Ontario!



No Commitment!

[Get Involved](#)

Project Timeline

Project	Has No Set Start Date
Project	Has No Set End Date
Project Expects	No Minimum Time Commitment

About the Project

This project attempts to do something nearly impossible: track the location of vernal pools, or large wet pools that fish don't inhabit, throughout Ontario. This information is important as it advises conservation efforts for several amphibian species in the province.

How You Can Help

Participants need simply to report the pools they find to the linked website. This project welcomes anyone regardless of their relevant knowledge or skills.



[Go Back](#)

[See More Projects by the same Organization](#)

[Get Involved](#)



Ontario Mammals

-  Kid Friendly!
-  Free to Participate!
-  No Commitment!

[Get Involved](#)

Project Timeline

Project	Has No Set Start Date
Project	Has No Set End Date
Project Expects	No Minimum Time Commitment

About the Project

This project is intended to document mammal observations across Ontario. The project includes a guide (Ontario Mammals) which is available on the iNaturalist.org web site. Information is open and shared through iNaturalist.org

How You Can Help

Participants can join the project and submit their observations through iNaturalist.org. This project welcomes anyone regardless of their relevant knowledge or skills.

[Go Back](#) [See More Projects by the same Organization](#) [Get Involved](#)



Ontario Fish

-  Kid Friendly!
-  Free to Participate!
-  All Ontario!
-  No Commitment!

[Get Involved](#)

Project Timeline

Project	Has No Set Start Date
Project	Has No Set End Date
Project Expects	No Minimum Time Commitment

About the Project

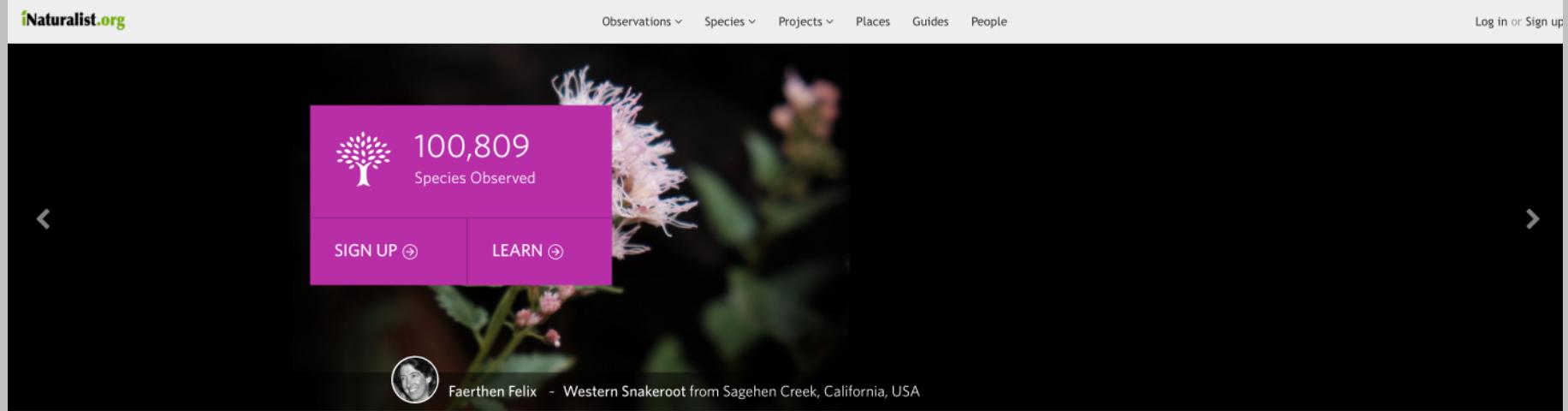
This is a project hosted at iNaturalist.org. It is intended to allow users to document the distribution of fish species throughout Ontario.

How You Can Help

Anyone can record their observations of fish throughout Ontario. The project also has a user species guide (Ontario Fish) which can be accessed the iNaturalist web site. This project welcomes anyone regardless of their relevant knowledge or skills.

[Go Back](#) [See More Projects by the same Organization](#) [Get Involved](#)

iNaturalist.org



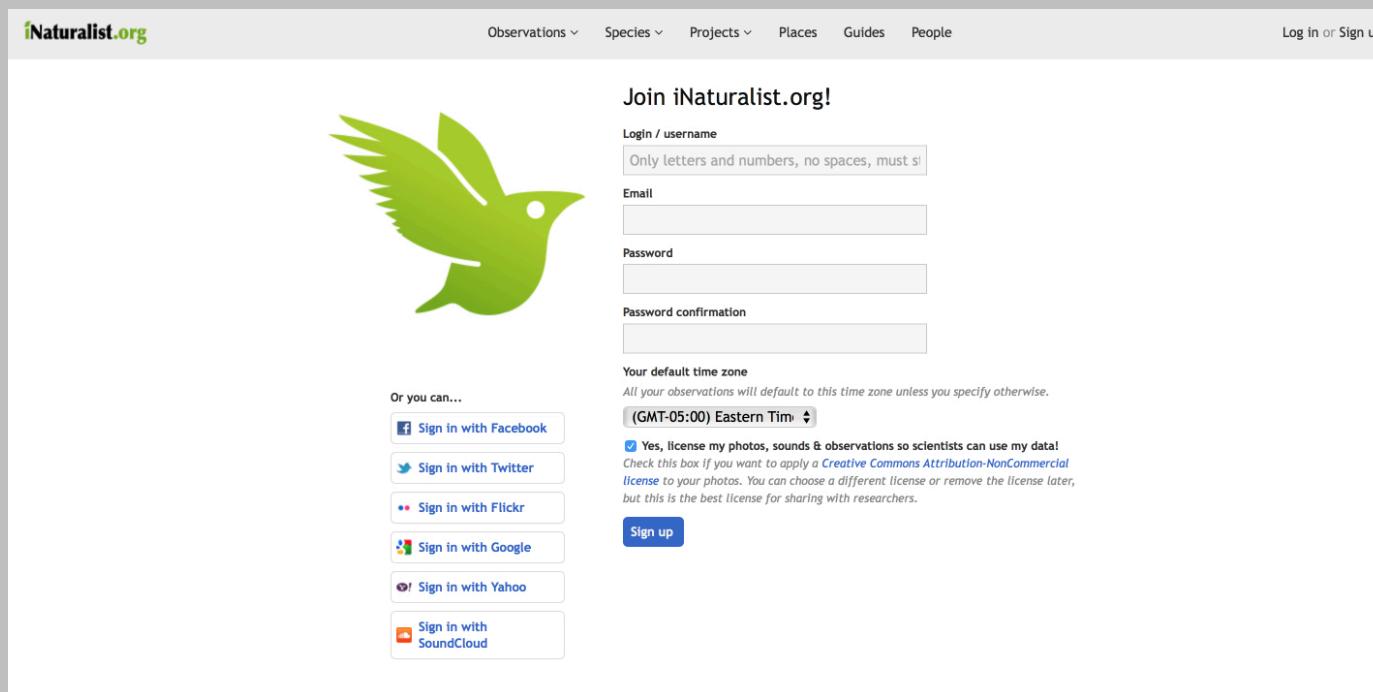
The screenshot shows the iNaturalist.org homepage. At the top, there is a navigation bar with links for Observations, Species, Projects, Places, Guides, and People. On the far right, there are 'Log in' and 'Sign up' buttons. The main content area features a large image of a plant with a pink overlay box in the upper left corner. The box contains a tree icon, the text '100,809 Species Observed', a 'SIGN UP' button, and a 'LEARN' button. Below the image, a user profile picture and the name 'Faerthen Felix' are shown, followed by the text 'Western Snakeroot from Sagehen Creek, California, USA'. Below this, a section titled 'How It Works' is displayed, showing three steps: 1. Record your observations (with a phone icon), 2. Share with fellow naturalists (with a group icon), and 3. Discuss your findings (with a butterfly icon in a speech bubble).

How It Works

- Record your observations
- Share with fellow naturalists
- Discuss your findings

To participate you need a membership at iNaturalist.org – it is free!

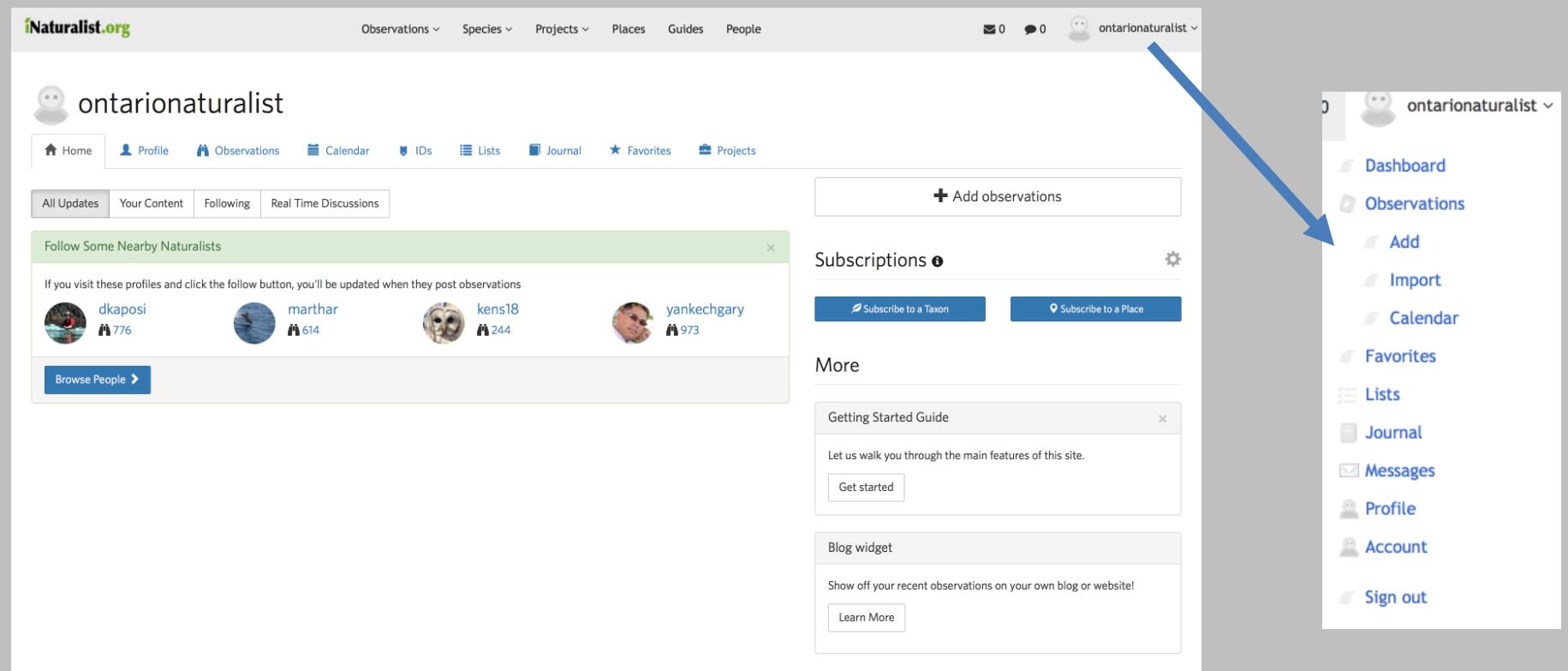
1. Go to iNaturalist.org

The image shows the sign-up page for iNaturalist.org. At the top, there is a navigation bar with links for 'Observations', 'Species', 'Projects', 'Places', 'Guides', 'People', 'Log in or Sign up', and a logo. Below the navigation bar, there is a large green bird logo. The main heading is 'Join iNaturalist.org!'. Below the heading are four input fields: 'Login / username' (with placeholder text 'Only letters and numbers, no spaces, must start with a letter'), 'Email' (with a placeholder text box), 'Password' (with a placeholder text box), and 'Password confirmation' (with a placeholder text box). There is also a dropdown menu for 'Your default time zone' set to '(GMT-05:00) Eastern Time'. Below these fields, there is a note about the default time zone and a checkbox for accepting the 'Yes, license my photos, sounds & observations so scientists can use my data!' terms. At the bottom of the page, there is a 'Sign up' button and a list of social media sign-in options: Facebook, Twitter, Flickr, Google, Yahoo, and SoundCloud.

2. Click Sign Up

3. This page will appear and now you can create your account.

Once you are a member, you have the option to do a wide range of things including modifying your profile, making lists, keeping a journal, following other members, assisting in species IDs, adding observations, and creating your own projects.



The image shows a screenshot of the iNaturalist.org website. At the top, there is a navigation bar with links for Observations, Species, Projects, Places, Guides, and People. On the right side of the top bar, there are icons for messages (0), notifications (0), and a user profile for 'ontarionaturalist'. A blue arrow points from the text above to the user profile icon.

The main content area shows the user's profile page for 'ontarionaturalist'. The profile picture is a placeholder. Below the profile picture, there are links for Home, Profile, Observations, Calendar, IDs, Lists, Journal, Favorites, and Projects. A 'Follow Some Nearby Naturalists' modal is open, listing profiles for dkaposi, marthar, kens18, and yankechgary, each with a count of 776, 614, 244, and 973 respectively. A 'Browse People' button is at the bottom of this modal.

On the right side of the page, there is a sidebar menu with the following items:

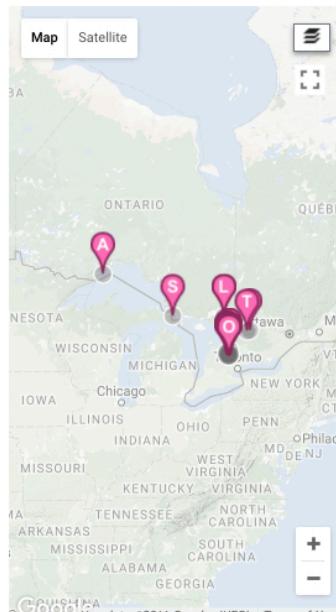
- Dashboard
- Observations
- Add
- Import
- Calendar
- Favorites
- Lists
- Journal
- Messages
- Profile
- Account
- Sign out



Your observations

[Home](#) [Observations](#) [Calendar](#) [Favorites](#) [Lists](#) [Journal](#) [IDs](#) [Projects](#) [Profile](#)[Add observations](#)[Batch edit](#)[Search](#)

Photos / Sounds	Species / Taxon Name	Date observed	Place	Date added	
 No photos or sounds	Red Fox <i>Vulpes vulpes</i>	September 19, 2015	48.3071..., -88.927... (Google, OSM)	November 01, 2015 09:48 AM EST	Edit View »
 No photos or sounds	Snowy Owl <i>Bubo scandiacus</i>	November 25, 2014	44.4069..., -80.059... (Google, OSM)	November 26, 2014 09:09 AM EST	Edit View »
 No photos or sounds	Central Mudminnow <i>Umbra limi</i>	May 5, 2012	46.2742..., -80.321... (Google, OSM)	November 15, 2014 07:13 PM EST	Edit View »
 No photos or sounds	Johnny Darter <i>Etheostoma nigrum</i>	April 29, 2012	44.4307..., -80.083... (Google, OSM)	November 15, 2014 07:09 PM EST	Edit View »
 No photos or sounds	Rainbow Darter <i>Etheostoma caeruleum</i>	August 31, 2012	44.3054..., -80.002... (Google, OSM)	November 15, 2014 07:08 PM EST	Edit View »
 No photos or sounds	Brook stickleback <i>Culaea inconstans</i>	April 28, 2012	44.3524..., -79.909... (Google, OSM)	November 15, 2014 07:04 PM EST	Edit View »
 No photos or sounds	banded killifish <i>Fundulus diaphanus</i>	May 3, 2012	44.4796..., -80.142... (Google, OSM)	November 15, 2014 07:03 PM	Edit View »

[Redo search in map area](#)



Your projects

[All Projects »](#)

Biodiversity Clearview

The purpose of this project is to document the biodiversity of Clearview Township. Residents and visitor...

[View your observations »](#)

Ontario Fish

The purpose of this project is to obtain information regarding fish populations and distribution in Ontario...

[View your observations »](#)

NVCA Shoreline Biodiversity Study

This project is intended to collect and share natural heritage information regarding the shoreline area of ...

[View your observations »](#)

Ontario Mammals

The purpose of this project is to collect current information regarding the distribution of mammal species ...

[View your observations »](#)[Manage your project invitations](#)

Projects you admin



Ontario Mammals

The purpose of this project is to collect current information regarding the distribution of mammal species ...



Ontario Fish

The purpose of this project is to obtain information regarding fish populations and distribution in Ontario...

[Start a project](#)



Stats

Totals
0 Observations »
0 Species »
0 People »

Most Observations
Unknown

Most Species
Unknown

Most Observed Species
Unknown

Map Satellite

» Members 2 members

[View all members »](#)

» Your membership 0 observations

» Add from your observations [Download template](#) for use in the bulk uploader

» Export observations [Atom](#) / [KML](#) / [CSV](#)

» Usage stats

About

This project is intended to collect and share



You can also create or search for existing Guides to assist users in identifying species or finding more information about species.

iNaturalist.org Observations ▾ Species ▾ Projects ▾ Places Guides People 0 0 ontariornaturalist ▾

Welcome to iNaturalist.org Guides!

Guides help you learn about biodiversity all around the world. Whether you're exploring the Serengeti or just your local park (which might be the Serengeti), Guides can help you make sense of our planet's stunning diversity of life.

Find a guide Search or Create a guide

By everyone By you

PLACES ALL

Back to all places

North America

México 25 Country

ORGANISMS ALL

Back to All life

Animals

Kingdom Animalia

Arthropods 6 Phylum Arthropoda

Caballitos de Nuevo León (Zygoptera)

Dentro del grupo de las libélulas (Odonata), uno de los grupos más interesantes, es el de los caballitos o caballitos del diablo (Zygoptera), en Nuevo León se han registrado mas de 40 especies! Si bien es un grupo complejo y su identificación no debe tomarse a la ligera, esta es una guía básica ...

Edited by [biolily](#) and [aztekium](#)

Anfibios de Nuevo León

Aun en un estado como Nuevo León con grandes extensiones desérticas y semidesérticas, podemos encontrar muchas especies de anfibios! Descubrelas con esta guía!

Edited by [manuelnevarez](#) and [aztekium](#)

Libélulas de Nuevo León

Dentro del grupo de los Odonatos

Aves del Parque Tezozomoc

App Sto

Here is an example of a Guide:

Ontario Mammals

A guide to the mammals of Ontario created to assist those participating in the Ontario Mammals project.

TAXONOMY

- Even-toed Ungulates (4)
Order Artiodactyla
- Carnivores (24)
Order Carnivora
- Whales, Dolphins, and Porpoises (5)
Order Cetacea
- Bats (8)
Order Chiroptera
- Opossums (1)
Order Didelphimorphia
- Rabbits, Hares, and Pikas (2)
Order Lagomorpha
- Rodents (24)
Order Rodentia
- Shrews and Relatives (9)
Order Soricomorpha

Search

77

Sort ▾ Grid Card

Species

- White-tailed Deer ¹
Odocoileus virginianus
- Moose ²
Alces americanus
- Elk ³
Cervus elaphus
- Caribou ⁴
Rangifer tarandus
- Black Bear ³
Ursus americanus
- Polar Bear ⁵
Ursus maritimus
- Canada Lynx ⁶
Lynx canadensis
- Bobcat ⁷
Lynx rufus
- Cougar ⁸
Puma concolor
- Arctic Fox ¹⁰
Urocyon cinereoargenteus

Find Guides

ontario mammals

Offline access enabled (Disable)

Ontario Mammals

A guide to the mammals of Ontario created to assist those participating in the Ontario Mammals project.
Edited by [ontariornaturalist](#)

Bobcat

Lynx rufus



Summary ²

The bobcat (*Lynx rufus*) is a North American mammal of the cat family Felidae, appearing during the Irvingtonian stage of around 1.8 million years ago (AEO). With 12 recognized subspecies, it ranges from southern Canada to northern Mexico, including most of the continental United States. The bobcat is an adaptable predator that inhabits wooded areas, as well as semidesert, urban edge, forest edges, and swampland environments. It persists in much of its original range, and populations...

Sources and Credits

1. (c) matt knot, some rights reserved (CC BY-NC-ND), <http://www.flickr.com/photos/18158503@N00/2936639211>
2. (c) Wikipedia, some rights reserved (CC BY-SA), http://en.wikipedia.org/wiki/Lynx_rufus

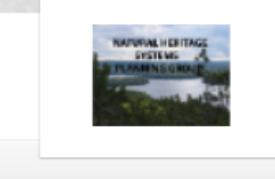
More Info



We have created a group on LinkedIn to share information, promote discussions etc.

We will be posting a link to a web page with additional resources. The web site will also have copies of the session presentations.

Join the Natural Heritage Systems Planning Group to participate.

 **Natural Heritage Systems Planning Group** 

[**Discussions**](#) [Promotions](#) [Jobs](#) [Members](#) [Search](#) [Manage](#)





Thank you for your time.

Michael Wynia, MCIP, RPP



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