

5 Species at Risk

5.1 What is a Species at Risk?

A “species at risk” is any naturally-occurring plant or animal in danger of extinction or of disappearing from the province. Species can become at risk due to a number of reasons. These include habitat fragmentation and loss, changing land use activities, persecution, as well as the spread of invasive species. For example, the creation of roads (as discussed in Section 2.4.3) along eastern Georgian Bay has resulted in habitat fragmentation and species mortality.

For the purposes of this report there are two acts that govern species at risk: 1) the federal Species at Risk Act (SARA); and 2) the provincial Endangered Species Act (ESA).

5.1.1 SARA

In 1992 the UN Conference on Environment and Development (the Earth Summit) was held in Rio de Janeiro, Brazil. The international community sought to address the problem of species loss and decline by passing the United Nations Convention on Biological Diversity (the “Rio Convention”). Article 8 of the Convention, which addresses “in situ” or “on the ground” conservation, includes the specific commitment to pass legislation for the protection of species at risk (Smallwood, 2003).

Although Canada was the first industrialized nation to ratify the Rio Convention, it took Canada nearly a decade to address this commitment. Bill C-5, the Species at Risk Act (“SARA”), was the government’s fourth attempt at passing endangered species legislation. SARA passed through the Senate without amendment on December 12, 2002 and received Royal Assent the same day (Smallwood, 2003).

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses the national status of wild species, subspecies, varieties, or other design designatable units that are considered to be at risk in Canada. COSEWIC comprises members from each provincial and territorial government wildlife agency, four federal agencies (Canadian Wildlife Service, Parks Canada Agency, Department of Fisheries and Oceans, and the Federal Biodiversity Information Partnership, chaired by the Canadian Museum of Nature), three non-government science members and the co-chairs of the species specialist and the Aboriginal Traditional Knowledge subcommittees (MNR, 2013b).

SARA is a law that is largely restricted to federal lands, aquatic species and migratory birds under the Migratory Birds Convention Act. The majority of species listed under the Act will only be protected if they are found on federal land – a mere 5% of Canada outside the territories. Therefore the jurisdiction of species at risk in Ontario is via the ESA administered by the Ministry of Natural Resources (Smallwood, 2003).

5.1.2 ESA

Ontario's original Endangered Species Act (ESA) was written back in 1971. Since then there have been changes in the province; changes in land and resource use, planning processes, and increasing threats to native species. Therefore it was deemed to be time for updated legislation and the new

Endangered Species Act was passed on May 16, 2007. The ESA is binding on everyone including individuals, businesses, municipal governments and the provincial government (MNR, 2013b).

The purposes of the ESA are to (MNR, 2013b):

- Identify species at risk based on the best available scientific information, including information obtained from community knowledge and Aboriginal traditional knowledge.
- Protect species that are at risk and their habitats, and promote the recovery of species that are at risk.
- Promote stewardship activities to assist in the protection and recovery of species that are at risk.

In Ontario, species that may be at risk are reviewed by a team of experts known as the Committee on the Status of Species at Risk in Ontario (COSSARO). COSSARO can be made up of people with expertise in certain scientific disciplines, or Aboriginal Traditional Knowledge. COSSARO has been around since 1995, but under the new ESA it is now a legally recognized committee. COSSARO is an independent body that can be made up of up to 11 members from both the public and private sectors. At least 5 members must be from outside of the Ontario Government. The Minister of Natural Resources may make recommendations on committee members, but the final decision on who can be a member is made by the Lieutenant Governor in Council. Once classified as "at risk", they are added to the Species at Risk in Ontario (SARO) list (MNR, 2013b).

The four categories, or classes, of "at risk" are (MNR, 2013b):

- Extirpated - a native species that no longer exists in the wild in Ontario, but still exists elsewhere (e.g. greater prairie chicken).
- Endangered - a native species facing extinction or extirpation (e.g. spotted turtle).
- Threatened - a native species at risk of becoming endangered in Ontario (e.g. massasauga rattlesnake).
- Special Concern - a native species that is sensitive to human activities or natural events which may cause it to become endangered or threatened (e.g. monarch butterfly).

If a species is listed on the SARO list as an extirpated, endangered or threatened species, it receives protection under section 9 of the ESA. If a species is listed as an endangered or threatened species, its habitat also receives protection under section 10 of the ESA (MNR, 2013b).

Recovery strategies identifying steps to protect and restore populations are developed within one year for endangered species and within two years for threatened species. A recovery strategy provides the best available scientific knowledge on what is required to achieve recovery of a species. A recovery strategy outlines the habitat needs and the threats to the survival and recovery of the species. It also makes recommendations on the objectives for protection and recovery, the approaches to achieve those objectives, and the area that should be considered in the development

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of a habitat regulation. Species-specific habitat regulations that describe an area to be protected are developed one year after the recovery strategy (MNR, 2013b).

5.2 What is at risk in eastern Georgian Bay?

There are over 200 species at risk in Ontario and one fifth of those species are found in Parry Sound and Muskoka. Eastern Georgian Bay supports a rich variety of wildlife. This is a reflection of the varied types and quality of habitats available on the shoreline. The combination of wetlands, lakes, rock barrens and mixed forests support many species of breeding birds, unique plants and the greatest diversity of viable reptile populations in Ontario. For example, eastern Georgian Bay is one of a few areas in North America where the threatened eastern foxsnake and massasauga rattlesnake find refuge. Furthermore, the entire Ontario population of a threatened plant called branched bartonia is found in local wetlands.

There are 43 species at risk in the *State of the Bay* report card area (the total is calculated using both COSSARO and COSEWIC listings). These species are listed in Table 13 and Figure 70 illustrates the breakdown of these species by taxonomic group.

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Table 13: Species at risk in the *State of the Bay* report card area

Taxonomic Group	Common Name	Latin Name	COSSARO	COSEWIC
Amphibians	Western Chorus Frog	<i>Psuedacris triseriata</i>	-	THR
Birds	Bald Eagle	<i>Haliaeetus leucocephalus</i>	SC	-
	Barn Swallow	<i>Hirundo rustica</i>	THR	THR
	Black Tern	<i>Chlidonias niger</i>	SC	-
	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	THR
	Canada Warbler	<i>Wilsonia Canadensis</i>	SC	THR
	Cerulean Warbler	<i>Dendroica cerulean</i>	THR	END
	Chimney Swift	<i>Chaetura pelagic</i>	THR	THR
	Common Nighthawk	<i>Chordeiles minor</i>	SC	THR
	Eastern Meadowlark	<i>Sturnella magna</i>	THR	THR
	Eastern Wood-Pewee	<i>Contopus virens</i>	-	SC
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	SC	THR
	Least Bittern	<i>Ixobrychus exilis</i>	THR	THR
	Olive-sided Flycatcher	<i>Contopus cooperi</i>	SC	THR
	Red-headed Woodpecker	<i>Melanerpes erythrocephaleus</i>	SC	THR
	Rusty Blackbird	<i>Euphagus carolinus</i>	-	SC
	Whip-poor-will	<i>Caprimulgus vociferus</i>	THR	THR
Wood Thrush	<i>Hylocichla mustelina</i>	-	THR	
Fish	Lake Sturgeon	<i>Acipenser fulvescens</i>	THR	THR
	Northern Brook Lamprey	<i>Ichthyomyzon fossor</i>	SC	SC
	Silver Lamprey	<i>Ichthyomyzon unicuspis</i>	-	SC
Insects	Monarch	<i>Danaus plexippus</i>	SC	SC
	West Virginia White Butterfly	<i>Pieris virginienis</i>	SC	-
Mammals	Eastern Wolf	<i>Canis lupus lycaon</i>	SC	SC
	Little Brown Myotis	<i>Myotis lucifugus</i>	END	END
	Northern Myotis	<i>Myotis septentrionalis</i>	END	END
	Tri-colored Bat	<i>Perimyotis subflavus</i>	-	END

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Taxonomic Group	Common Name	Latin Name	COSSARO	COSEWIC
Plants	Branched Bartonian	<i>Bartonia paniculata</i>	THR	THR
	Broad Beech Fern	<i>Phegopteris hexagonoptera</i>	SC	SC
	Butternut	<i>Juglans cinerea</i>	END	END
	Engelmann's Quillwort	<i>Isoetes engelmannii</i>	END	END
	Forked Three-awned Grass	<i>Aristida basiramea</i>	END	END
Reptiles	Blanding's Turtle	<i>Emydoidea blandingii</i>	THR	THR
	Common Map Turtle	<i>Graptemys geographica</i>	SC	SC
	Common Snapping Turtle	<i>Chelydra serpentine</i>	SC	SC
	Eastern Foxsnake	<i>Pantheropsis gloydi</i>	THR	END
	Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	THR	THR
	Eastern Milksnake	<i>Lampropeltis triangulum</i>	SC	SC
	Eastern Musk Turtle	<i>Sternotherus odoratur</i>	THR	SC
	Five-lined Skink	<i>Plestiodon fasciatus</i>	SC	SC
	Massasagua Rattlesnake	<i>Sistrurus catenatus</i>	THR	THR
	Northern Ribonsnake	<i>Thamnophis sauritus</i>	SC	SC
	Spotted Turtle	<i>Clemmys quattata</i>	END	END

END = Endangered, THR = Threatened, SC = Special Concern, - = Not listed

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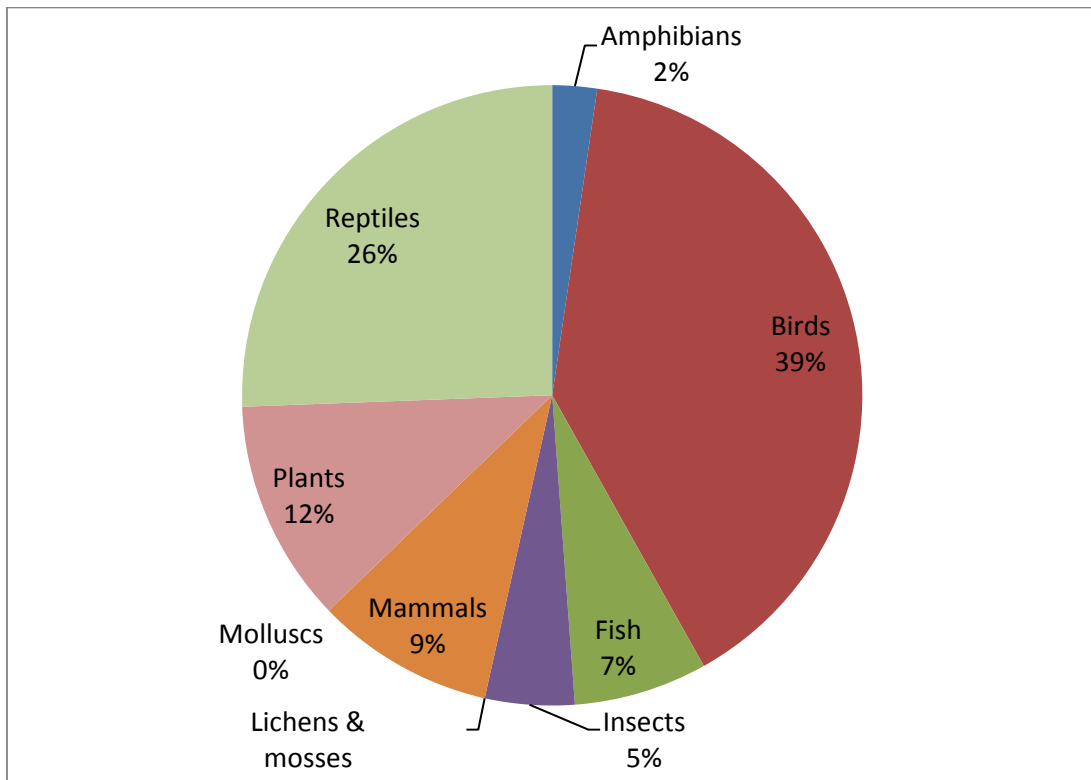


Figure 70: Breakdown of species at risk by taxonomic group

5.3 What can I do to help?

Here are a few ways you can help species at risk in Ontario:

- Learn more about SAR in eastern Georgian Bay.
 - www.gbbr.ca/our-environment/species-at-risk/
- Report your sightings of at-risk species to improve knowledge of species range.
 - www.gbbr.ca/our-environment/species-at-risk/report-a-sighting/
- Download Ontario Nature's Reptile & Amphibian Atlas App that identifies Ontario's reptiles and amphibians, lets you submit sightings to the Reptile and Amphibian Atlas, and also stores a record of your sightings.
 - www.ontarionature.org/protect/species/app.php
- Create habitat for wildlife on your property – plant a butterfly or wildflower garden with native plants and trees, maintain brush piles, let some grass grow uncut, or participate in a local habitat restoration project. Check out the *Life on the Bay Stewardship Guide* for more information on natural landscaping.
 - www.gbbr.ca/our-environment/life-on-the-bay-guide/
- Watch out for wildlife on roads and waterways. If safe to do so, please move a turtle off the road and try to place them in the direction they were traveling.
- Keep your cat indoors. Feral and domestic cats roaming outside kill more birds than any other human activity!
- Become knowledgeable of invasive species and act to limit their spread.
 - www.invadingspecies.com

5.4 Resources and Further Reading

- Species at Risk in the Georgian Bay Biosphere Reserve:
 - www.gbbrc.ca/our-environment/species-at-risk/
- Species at Risk (SARA) Public Registry:
 - www.sararegistry.gc.ca/default_e.cfm
- MNR's Ontario Species at Risk Program:
 - www.mnr.gov.on.ca/en/Business/Species/index.html
- DFO's Aquatic Species at Risk:
 - www.dfo-mpo.gc.ca/species-especies/index-eng.htm
- COSWEIC
 - www.cosewic.gc.ca/eng/sct5/index_e.cfm
- ROM's Ontario Species at Risk:
 - www.rom.on.ca/ontario/risk.php